

Identifying the Role of Policy Networks
in the
Implementation of Habitat Conservation Plans
by
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ABSTRACT

Conflict over management of natural resources may intensify as population growth, development, and climate change stress natural systems. In this dissertation, the role of policy networks implementing Habitat Conservation Plans (HCPs) is examined. As explored here, policy networks are groups that come together to develop and implement terms of HCPs. HCPs are necessary for private landowners to receive Incidental Take Permits (ITPs) from the U.S. Fish and Wildlife Service (USFWS) if approved development activities may result in take of threatened or endangered species. ITPs may last up to 100 years or more and be issued to individual or multiple landowners to accomplish development and habitat conservation goals within a region.

Theoretical factors in the implementation and policy network literatures relevant to successful implementation of environmental agreements are reviewed and used to examine HCP implementation. Phase I uses the USFWS Environmental Conservation Online System (ECOS) database to identify characteristics of policy networks formed to implement HCPs within the State of California, and how those networks changed since the creation of HCPs in 1982 by amendment of the 1973 Endangered Species Act. Phase II presents a single, complex, multiple-party HCP case selected from Phase I to examine the policy network formed, the role of actors in this network, and network successes and implementation barriers.

This research builds upon the implementation literature by demonstrating that implementation occurs in stages, not all of which are sequential, and that how implementation processes are structured and executed has a direct impact on perceptions of success.

It builds upon the policy network literature by demonstrating ways that participation by non-agency actors can enhance implementation; complex problems may better achieve conflicting goals by creating organizational structures made up of local, state, federal and non-governmental entities to better manage changing political, financial, and social conditions; if participants believe the transaction costs of maintaining a network outweigh the benefits, ongoing support may decline; what one perceives as success largely depends upon their role (or lack of a role) within the policy network; and conflict management processes perceived as fair and equitable significantly contribute to perceptions of policy effectiveness.

DEDICATION

This is dedicated to my family. Thank you to my parents for modeling the importance of life-long learning. Thank you Eddie for supporting the idea of graduate school after many years in the work place. Thank you to my children for being accepting of an environment where we all worked on our homework together, for being openly supportive of my efforts for what seemed like most of your lifetime, and for teaching me more than I can ever hope to teach you. For Walter for coming into my life at the right time, taking care of all the things that need to be done while I write, and for frequently and politely asking things like “Aren’t you done yet?” And most especially, for my granddaughter, who experiences the world from a different perspective that will allow her to solve problems in unique and creative ways.

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GLOSSARY OF ACRONYMS

BMP	Best Management Practice
CBNRM	Community-based Natural Resource Management
CDFW	California Department of Fish and Wildlife
CE	Categorical Exclusion
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CETAP	Community and Environmental Transportation Authority
CBNRM	Community Based Natural Resource Management
EA	Environmental Assessment
ECOS	Environmental Conservation Online System Database
EIS	Environmental Impact Statement
ESA	Endangered Species Act
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCP	Habitat Conservation Plan
IAGC	Implementation and Administration Guidelines Committee
IRB	Institutional Review Board
ITP	Incidental Take Permit
NCCP	Natural Community Conservation Program of California
NEP	EPA's National Estuary Program
NEPA	National Environmental Policy Act
RCA	Regional Conservation Authority of Riverside County

RCIP	Riverside County Integrated Plan
RCHCA	Riverside County Habitat Conservation Agency
RCTC	Riverside County Transportation Commission
RMOC	Reserve Management Oversight Committee
SKR	Stephens' Kangaroo Rat
USFWS	US Fish and Wildlife Service
WRMSHCP	Western Riverside Multiple Species Habitat Conservation Plan

Chapter 1

Introduction

Thoughtful policy for management of natural resources continues to become more critical as these collective goods are affected by stressors like economic development and climate change. This dissertation examines the implementation of Habitat Conservation Plans (HCPs) issued by the US Fish and Wildlife Service (USFWS) for the protection of threatened and endangered species. HCPs are necessary in order to receive an incidental take permit (ITP) allowing a private landowner to initiate approved activities for development and other purposes when endangered or threatened species are at risk. This dissertation begins by exploring policy issues relevant to HCPs. Theoretical factors in the literature relevant to the role of policy networks in successful implementation of environmental agreements are reviewed. These factors are then used to more closely examine HCP implementation.

This research seeks to identify general characteristics of HCPs related to the networks of actors that come together to create legally binding commitments with the USFWS for conservation of species habitat. The first phase of this research uses the USFWS Environmental Conservation Online System (ECOS) database to identify general characteristics about the policy networks that form to implement HCPs. This is intended to build upon data generated in the evaluation of the USFWS Habitat Conservation Program (Callihan, Kleiman, and Tirnauer, 2009), albeit on a smaller scale. The second phase of this research presents a single HCP case study based on its associated documentation, journal articles, websites and other published materials to answer questions related to the policy network formed, the role the actors in this network

play in implementation progress, and to identify network successes as well as barriers to HCP success. Follow-up interviews with HCP participants and stakeholders are conducted to clarify and better understand these issues.

Relevance and Contribution

According to authors like Vig and Kraft, elevated political conflict over environmental protection underscores the important role government plays in devising solutions to environmental problems associated with collective goods. Fulfilling this responsibility often requires planning and coordination efforts among multiple levels of government, various stakeholders, and citizens, and involves significant investment of both time and money on the part of all participants (Kraft and Vig, 2006).

Various participatory techniques have been used in recent years to develop natural resource management policy in general, and strategies to resolve local environmental issues specifically. Many multi-party agreements have been created either through extensive negotiation processes like environmental conflict resolution, or through more collaborative processes to develop natural resource management policy in hopes of reaching better solutions than litigation may offer. Weber notes that the promise of collaboration is a pragmatic attempt by participants to come up with improved efficiency of government at lower transaction costs (1998). Many policy processes are often considered a success once agreements are negotiated. However, less is known about the success rate of these agreements as parties move forward with their implementation (Beierle and Cayford, 2002; Bingham, 2003; National Research Council, 2008; and Thomson, Perry, and Miller, 2008).

History of the Endangered Species Act and the Evolution of Habitat Conservation Plans

The protection and recovery of endangered species is a particularly contentious area of environmental policy. The Endangered Species Act (ESA) was passed in 1973 to provide a means to protect threatened and endangered species and to conserve the ecosystems species depend on (US Fish and Wildlife Service, 1973). Hailed as a victory by environmentalists, the ESA distressed private landowners because protecting species also means protecting habitat (Beierle and Cayford, 2002; Peterson, Allison, Peterson, Peterson, and Lopez, 2004). The 1982 amendment to the ESA allows the development of HCPs to encourage landowners to engage in proactive conservation practices, and minimize and mitigate the effects of permitted actions in conjunction with the issuance of ITPs. These permits grant relief from sanction to landowners who accidentally “take” an endangered or threatened species while conducting otherwise lawful activities (Beierle and Cayford, 2002; US Fish and Wildlife Service, 2008a). HCPs outline ways of maintaining, enhancing, and protecting habitat to protect species and may include provisions for permanently protecting land, restoring habitat, relocating plants or animals to another area, and must be approved by the USFWS prior to an ITP being issued (US Fish and Wildlife Service, 2008b). Permits may be issued for shorter terms, like 5 years, or many years, in some cases, 30- or 50-years or more (US Fish and Wildlife Service, 2009). The controversial “No Surprises” policy announced in 1994 provides regulatory assurances to the holder of an ITP that no additional land use restrictions or financial compensation will be required of the permit holder as long as they are acting in good faith to implement an HCP (US Fish and Wildlife Service, 1998; US Fish and Wildlife Service, 2008a). The USFWS, however, can revoke incidental take permits if

landowners violate conditions of the permit (Electronic Code of Federal Regulations, 2009). The Final Addendum to the Handbook for Habitat Conservation Planning and Incidental Take Permitting effective in 2000 addresses the USFWS General Five Point Policy clarifying permit duration, public participation, adaptive management, monitoring provisions, and biological goals (National Archives and Records Administration, 2000).

According to Hoffman and Bazerman, HCPs are a mechanism to encourage creative solutions that balance conservation and economic imperatives, to break the mold of coercive command and control regulation, to form creative public-private partnerships, enhance long-term regulatory predictability and species protection, improve conservation science and technology, and avoid perverse incentives to conceal or destroy evidence of listed species on private lands (Hoffman and Bazerman, 2005). Habitat conservation planning can be a lengthy and complex process depending on whether a plan addresses mitigation activities for a single or for multiple species, whether there is a single permit applicant or multiple applicants, and the range of differing stakeholder interests involved. Table 1.1 provides information on processing times found by Callihan, Kleiman, and Tirnauer (Callihan et al., 2009). Categorical Exclusions (CE) to the National Environmental Policy Act (NEPA) compliance process are required for plans determined to be low-effect, Environmental Assessments (EA) briefly determine the significance of plan impacts and whether an Environmental Impact Statement (EIS) is necessary, and EIS's are necessary for plans with significant environmental impact where a detailed analysis of the impacts of all alternative actions are considered (Callihan et al., 2009). Callihan, et al., determined the HCP process is inefficient for several reasons including

their observation that it is not well defined and there are no mechanisms to resolve differences between permittees and the USFWS.

Policy Networks as a Tool for Implementation

This dissertation theorizes that policy networks may help in filling this void between planning and implementation, and seeks to better articulate reasons why this may be so. Implementation of HCPs takes place over the life of the related permits issued for specific plans. Because permit life may extend up to 100 years or more, for purposes of this research, implementation is considered a process or journey more than a destination.

Table 1.1. *Time Required to Process and Approve HCPs* (Reprinted from Callihan et al., 2009)

	Categorical Exclusion	Environmental Assessment	Environmental Impact Statement
Total Time for HCP Development and ITP Approval (from when assistance was initiated until permit issued) - pre- and post-2006*	20.9 months	17.1 months	54.9 months
FWS Suggested Approval Time (per FWS 2000 HCP Handbook)	Up to 3 months	4-6 months	Up to 12 months
FWS Approval Time (from when completed package was received by the Regional Office until permit was awarded) - post-2006*	3.3 months	22 months	12.7Months

*In 2006, USFWS field offices received delegation to approve low-effect/Categorical Exclusion ITPs.

Common critiques of planning for HCPs are the tension between private property rights and public good associated with land management for conservation purposes, questions about whether the HCP approach protects species by adequately incorporating science, and whether the public is appropriately involved in the planning process. Inherent in the property rights question is the question of whether HCPs are truly voluntary. If the alternative is foregoing use of private property, an argument can be made that the process is more closely related to coercive command and control.

HCP Implementation Issues

Thomas notes that we should not assume that any HCP is fully implemented. He refers specifically to one study on implementation done in 1999. The focus of that study was on the adequacy of science included in HCPs. As a result, the USFWS modified their plan preparation guidance to formally include adaptive management as a plan element (Thomas, 2001). Subsequent dissertation work by Smith investigates HCP landowner compliance and progress within the parameters of the “No Surprises” policy. Smith finds what she calls “second generation HCPs,” those completed after the “No Surprises” policy was put into effect, are not adequately implementing adaptive management strategies. She states that the policy constrains learning and that political accommodation of the policy may be sacrificing protection of species and habitat (Smith, 2005). Thomas speculates HCPs may be partially implemented based on the threats of revoked permits and legal action by environmental interests, and economic incentives introduced by the “No Surprises” policy. The USFWS requires permittees to identify funding availability, and in some cases, enter into implementation agreements with multiple parties to establish accountability before issuing permits. In the Coachella Valley Multiple Species HCP as an example, even after many years of good-faith efforts, the plan is still not completely implemented (Thomas, 2001). He states that there are too few empirical studies of HCP implementation to make broad claims about the extent to which HCPs are translated into action (Thomas, 2003).

Research into the implementation of HCPs is important because of the increasing number of species being negatively affected by a variety of factors including degradation or elimination of habitat for various reasons including economic development and

potential impacts of climate change. Costs associated with implementing individual plans are often millions of dollars and are paid for by both public and private entities. In fiscal year 2013, Federal and state endangered species expenditures for that year alone exceeded \$1.2 billion in Federal costs and over \$50 million in states costs excluding land acquisitions. Land acquisition costs for 2013 are estimated to be \$399 million in Federal costs and \$25 million for states (US Fish and Wildlife Service, 2013). What is not quantified is how much is spent by private landowners, non-governmental organizations and others involved in habitat conservation efforts.

According to Vig and Kraft, HCP planning has had some success in protecting biological diversity, yet only a few species have fully recovered (Kraft & Vig, 2006). Some argue that the measure of success for HCPs should be the number of extinctions prevented (personal communication, Alexander Smith, June 30, 2015). The USFWS website identifies 1,570 listed domestic threatened and endangered plant and animal species, 704 species with critical habitat designations, 696 approved HCPs resulting in 822 approved and active incidental take permits, and 1,155 active recovery plans (US Fish and Wildlife Service, 2015b; US Fish and Wildlife Service, a; US Fish and Wildlife Service, b). However, even with all of the multi-party efforts to date, 29 species are considered recovered, and 10 are extinct (US Fish and Wildlife Service, 2015a). Clearly, work remains for implementation of HCPs and species recovery.

Research Questions

HCPs provide for partnerships between the USFWS and non-Federal parties to conserve the ecosystems upon which listed and threatened species depend, ultimately contributing to their recovery (US Fish and Wildlife Service, April 2011). The broader

question for any policy strategy is whether or not required actions lead to desired outcomes. Because there are so many variables that factor into that question for HCPs, this proposal seeks to lay the groundwork for larger policy examination by first asking “What factors play a role in successful HCP implementation?” Recognizing there are several perspectives in the literature related to that question, the next question asks “How is success defined and measured in the HCP implementation process by the USFWS and by permittees?” Another question asks “How might the presence of various policy actors and the roles they play in a network that comes together to implement a multi-party HCP affect the likelihood of successful implementation?” From a broader perspective, “Why does success matter? Does policy network success relate to more successful HCP implementation?”

This dissertation provides background information to assist in an overall analysis of the factors that may be associated with successful implementation of HCPs and the role of policy networks in implementing these agreements. Implementation in this study is defined as the process following approval of an HCP by the USFWS through expiration of the ITPs issued as part of that plan. Because the costs associated with formulation and implementation of HCPs can be high for both public and private entities, a better understanding of the elements that contribute to successful HCPs will allow for improved plan development and execution with the potential for greater benefits and reduced costs. Understanding network-related barriers to implementation will allow provisions to be included or modified to improve the likelihood of full plan implementation.

Chapter 2 begins this process of discovery by exploring literature related to implementation of negotiated agreements, environmental planning in particular. It follows the process by taking a brief detour through the nature of relationships between Federal agencies and others in the environmental protection realm, and then it picks up by identifying concepts in the policy network literature relevant to the actors implementing HCPs.

Chapter 3 describes the research methodology through the two phases of this dissertation. Phase I explores the USFWS ECOS database and develops some trends related to how changes in HCP policy development affected the utilization rate of HCPs, the nature of the implementation included in each generation of HCP, and general findings with respect to how that affected the frequency of HCPs associated with multiple permittees for multiple land uses. Following that is a discussion about how this data was used to identify a case for further study.

Phase II describes key elements of the case study selected for further examination of implementation progress and details about how the study was conducted. The Western Riverside Multiple Species Habitat Conservation Plan in California was selected for this effort.

Chapter 4 discusses the findings from each of the two phases of research described above and what the implications of those findings may suggest.

Chapter 5 summarizes the overall dissertation findings, describes implications for policy makers and practitioners, and suggests additional research that may be helpful in further understanding how networks of individuals within various policy networks and

governance infrastructure come together to meet both the needs of individuals and the greater public good to implement negotiated environmental agreements.

Chapter 2

LITERATURE REVIEW

Several theoretical factors are suggested by the literature relevant to successful implementation of negotiated environmental agreements like HCPs. Since these agreements often depend on the long-term cooperation of multiple actors, policy network theory, without an in-depth network analysis, is used as a framework for seeking insight into these factors. Implementation studies, policy network theory, and other examples of environmentally-based network research literature are reviewed to identify specific factors for investigation. Interviews with both USFWS personnel and other participants in the HCP process are conducted to supplement the literature as well as to clarify questions related to the USFWS data and case study documents discussed below.

Implementation Literature

Numerous authors have approached the study of implementation of public policy. One assessment that touches on many of the key ideas seen in more recent literature is the conceptual framework laid out by Sabatier and Mazmanian in 1980. They define implementation as “the carrying out of a basic policy decision” that identifies a problem to be addressed, the objectives to be pursued, and may structure the implementation process in a variety of ways, often by statute (P. Sabatier & Mazmanian, 1980). The basis of their framework analyzes the manageability of the problem to be solved, and statutory and non-statutory variables that may affect subsequent implementation. They also recognize that various stages of the implementation process exist.

For a problem to be managed, Sabatier and Mazmanian assume that there is some theory and technology available to improve the situation. The ability to use that

technology is impacted by the diversity of the group whose behavior is targeted, the target group percentage of the overall population, and the extent of the behavioral changes required. From there, they make the assumption that implementing policy objectives is enhanced when a statute 1) has the capacity to structure implementation via institutions, 2) provides legal and financial resources, 3) is looked upon favorably by agency officials, and 4) includes opportunities for participation by non-agency actors. Elements considered as enhancing the likelihood of success include things like clear precision and ranking of statutory objectives, and the extent of hierarchical integration within and among implementing institutions based on the number of veto/clearance points. They state that a direct route to a statutory objective is preferred over a complex program administered by numerous semi-autonomous bureaucracies. From a non-statutory perspective, they say implementation of any program seeking to change behavior needs periodic infusions of political support to weather continuous socio-economic and technical changes (Sabatier & Mazmanian, 1980).

Pressman and Wildavsky (1984) are well-known for their extensive study on the implementation of the Oakland Project in California in the late 1960's, and identify factors deemed important in implementing and evaluating policies that may be useful when implementing HCPs. Similar to Sabatier and Mazmanian, they note the necessity for objectives and resources as elements for implementation of any policy. In most policies of interest, they find that objectives are multiple, vague, and conflicting. They conclude that if the objectives are not unique, neither are the modes of implementation. Similar thinking applies to constraints. "We can discover and then incorporate them into our plans only as the implementation process unfolds" (Pressman & Wildavsky, 1984).

Pressman & Wildavsky state that policy content shapes implementation by defining the arena in which the process takes place, identifying the role of principal actors, determining the range of permissible tools for action, and by supplying resources (Pressman & Wildavsky, 1984).

Pressman and Wildavsky state that policy implementers cannot foresee all of the difficulties of implementation because there are always unknowns in the implementation process (1984). They also note the effects of both vertical and horizontal decision making structures. Pressman and Wildavsky refer to Williams who divides the “long federal governance process from Congress to local service project operators” into three domains: the big picture decision domain; the administrative and support domain ranging from middle-federal to local administrative levels; and the operators domain in which social service delivery organizations are dealing directly with project participants. The greater the distance from the top of the decision domain to the bottom of the operators’ domain, the more opportunities exist for unanticipated consequences to occur (Pressman & Wildavsky, 1984). Pressman and Wildavsky also refer to Mayntz’ analysis of environmental policy in Germany which found that the policy structure of environmental protection consists of a high degree of horizontal differentiation that causes coordination problems. This horizontal structure increases the number of decision points, decreases the possibilities for consensus, and causes unexpected shortcomings in environmental protection (Pressman & Wildavsky, 1984). One conclusion Pressman and Wildavsky draw is that instead of mandating certain outcomes, public policy may leave outcomes to be determined by bargaining among the immediately affected parties (1984).

Pressman and Wildavsky ultimately conclude that implementation is a dynamic process where policies are designed in advance so they are less likely to fail, and at the same time, the process provides mechanisms to cope after things break down.

Combining these two conditions to allow mutual adaptation between programs and experience is a compromise, but promises better results than either alone (1984). The evolution of USFWS guidance on developing HCPs reflects both of these conditions.

Bardach (1977) suggests that the implementation problem is really a control problem. One person's problem asserting control is another person's problem escaping it. When analyzing implementation, he suggests that we cannot be neutral in our analysis; we must choose a point of view to analyze and ask whose problem we want to solve. He suggests choosing two subgroups in a sponsoring coalition: the idealistic group and the other interested in selfish or non-programmatic benefits. Standards of success for implementation should be defined from sponsors' points of view and the sponsors must be participants in the process of program or policy modification. "The scholarly observer must be able to note their actions and reactions" (Bardach, 1977). The case study that follows focuses on the USFWS as the idealistic coalition, and the network of permittees as the coalition seeking non-programmatic benefits.

Beierle and Cayford (2002) examine policy implementation based on public participation and note that one of the assumptions for use of public involvement is that it leads to more effective and timely implementation of plans later. Their implementation study focuses on an extensive review of more than 200 cases of public participation in environmental decision making since the 1970s. Their findings may be useful in considering implementation of HCPs since the cases they studied involve public

participation and resources to resolve environmental issues, often involve the participation of private landowners, and have either an identifiable lead agency or one for which the output would be immediately relevant. Their study focuses on the social value of public participation and what makes some processes successful and others not. They identify success as the extent to which public participation efforts achieve social goals. The social goals they focus on include incorporating public values into decisions, improving the substantive quality of decisions, resolving conflict among competing interests, building trust in institutions, and educating and informing the public (Beierle & Cayford, 2002). They evaluate each case they study by considering its unique context, process, and results attributes. They scored likelihood of implementation of a particular case as low (stalled or unlikely), medium (moderately likely), or high (completed or very likely). Their findings suggest that the record of implementation looks good at one level with 70% of the cases receiving high scores, 15% medium scores, and 15% low scores. However, it worsens as the stage of implementation moves from Stage 3, changes in law, regulation and policy, to Stage 4, actions taken on the ground. By Stage 4, cases receiving high scores dropped to 49%, medium scores dropped to 30%, and 21% received low scores (p. 57). Beierle and Cayford conclude that successful implementation depends on a host of political, social, and legal influences, and is largely due to the process of participation, rather than its context, for the success or failure of public participation. They note that implementation activities reported may or may not be reported accurately due to authors often referring to the likelihood of implementation as opposed to actual implementation. They also speculate that authors may report success on easy problems but not mention difficult problems. When Beierle and Cayford attempt

to take author bias into account, their findings cast serious doubt on a connection between good public participation and good implementation. With respect to methodology for future research, they suggest that broad trends drawn from meta-analytical approaches such as theirs should be tested and refined by evaluating carefully chosen case studies (Beierle & Cayford, 2002).

As touched on in the previous paragraph, Beierle and Cayford identify five stages of implementation: output from a public process such as recommendations or an agreement; a decision or commitment on the part of a lead agency; changes in law, regulation, or policy; actions taken on the ground; and finally, changes in environmental quality. They note, however, that many cases they reviewed do not reflect changes in environmental quality due to impacts being too far in the future to determine at the time of analysis. This may well be the case for longer-term HCPs. One of the differences between HCPs and other environmental policies is that HCPs tend to focus on minimizing and mitigating the effects of proposed activities rather than by focusing directly on improving ecosystems. In this context, success may result from no change in habitat, or from a reduced rate of decline in environmental quality. As part of their study, Beierle and Cayford identify five forces that influence the stages of implementation of environmental plans. The first is disagreements among participants and lead agencies after agreement on initial plans that may lead to court actions or abandoned efforts. The second involves parties or issues excluded from initial planning that later must be dealt with as part of project implementation. The third is political intervention where politicians bring power to bear on what might normally be handled administratively. The fourth force affecting implementation they discuss is changing circumstances making

continued implementation undesirable. So much time may pass between a decision and its implementation that actions previously agreed upon may no longer make sense. The fifth force they discuss is the regulatory program itself, where public participation is no substitute for regulatory power, political will, and money in implementation (Beierle & Cayford, 2002). This conceptual model will aid in contextualizing the case selected for study in Phase II.

Brodgen (2003) developed an implementation checklist for evaluating outcomes of environmental agreements that might be helpful in considering HCP implementation. To improve the certainty of implementation, he suggests one should recognize the time required to accomplish goals and objectives, ask whether the management approach is feasible over the long-term, ask whether it is supported by political stakeholders who guarantee resources and support necessary for implementation, determine whether the agreement provides enough flexibility for local managers to manage, ask whether other members of the public can participate easily and effectively, note whether the agreement recognizes and addresses how stakeholders may change over time, ask whether the agreement is operationally and economically practical, and assure signatories to the agreement have the legal and decision-making authority necessary to implement provisions (2003). HCP Implementing Agreements, which are encouraged by the USFWS and in some cases are required for ITP issuance, are intended to assure these questions are considered and addressed during HCP development. Each of these elements is examined and discussed in the following Phase II case study.

Scheberle (2004) explores the idea of implementation of environmental policy from a federalist perspective between Federal and state governments. Her first premise is

that intergovernmental implementation of environmental programs needs a national base level of protection. Within that framework of Federal oversight, however, opportunities for collaborative working relationships at other levels exist. Her second premise is that implementation of environmental policy is a game of high stakes politics that can best be understood by examining national and state level political forces, statutory and regulatory language, court decisions, and the nature of the group targeted for behavioral change. She states that the cast of characters and the strategies they employ to implement environmental policy are equally important, especially those “implementation energizers” within a group who continue to fight for effective and efficient environmental programs. Similar to Pressman and Wildavsky, she acknowledges that implementation may change based on refocusing events requiring new strategies. She argues that intergovernmental cooperation can be an integral part of the context of policy implementation. She discusses several ways Federal-state interactions are defined, but notes that at least as important is the nature of relationships between Federal and state personnel in policy implementation (Scheberle, 2004). An analogy she uses describes a cross-country trip where four passengers are given a road atlas, a credit card, and 7 days to travel from Maine to California. She notes that it is unlikely all groups of people given this scenario would chose to travel by the same mode of transportation, take the same route, stay at the same motels, or arrive in California at the same time. This example also clearly shows how each subsequent decision along the way can affect the travel experience (Scheberle, 2004). It is a simple and useful example to conceptualize the idea of implementation as a journey. Anyone that has ever been on a family vacation as opposed to a trip with friends or on a business trip with others can immediately appreciate the various scenarios

travelers might find themselves in. It also highlights that the relationship between the travelers may have a significant impact on the perceptions of how successfully the trip was completed.

Scheberle states that the role orientations of Federal actors can dramatically affect working relationships and implementation patterns. She seeks to identify conditions that facilitate working relationships that “pull together,” note which relationships “come apart,” and determine whether it is possible to predict when relationships are more likely to be positive between individuals working together. She develops a typology of working relationships based on mutual trust and the extent of involvement by oversight personnel shown in Table 2.1 (Scheberle, 2004).

Table 2.1. *Scheberle’s Typology of Federal and State Working Relationships* (Reprinted from Scheberle, 2004)

	Low Involvement	High Involvement
High Trust	Cooperative but autonomous	Pulling together and synergistic
Low Trust	Coming apart with avoidance	Coming apart and contentious

When both characteristics are high, the strongest kind of working relationship results where participants are “pulling together.” The result is synergistic for both participants and results in mutual trust between officials in multiple levels of government. She argues this type of relationship is possible when participants share a commitment to policy objectives and a common recognition of the nature of the problem to be solved. Interactions include knowledge sharing, seeking advice and input, avoiding knee-jerk reactions to participant behaviors, and acknowledging positive activities that result in

increased mutual trust. Because each actor must please different constituents and stakeholders, she states that “bliss is unlikely.” However, concerted efforts between Federal and state actors can achieve programmatic success (Scheberle, 2004). She concludes that actors must work harder to get the kind of relationship they want. She describes the above as intrinsic factors affecting implementation. As other authors have described above, Scheberle also identifies extrinsic factors affecting implementation of environmental policy including legal relationships, human and fiscal resources, and a political, social, and economic arena for program implementation (Scheberle, 2004).

Scheberle’s work can be seen as a bridge between implementation theory and policy network theory, and while she specifically discusses Federal-state relationships, it seems reasonable to consider these ideas when exploring implementation of HCPs as plans approved by the USFWS at the Federal level, and relying on implementation by private landowners, states, local governments, tribes, non-governmental organizations, and other stakeholders. Her typology is utilized within the context of the Phase II case study to discern whether the nature of the relationships between key players results in the desired outcomes. The presence of implementation energizers and refocusing events are also addressed.

Policy Network Theory Literature

The nature of HCPs suggests that most planning and implementation will be accomplished by a variety of participants in addition to the single or multiple ITP applicants. USFWS is required to approve both the plans and issue the permits. A host of other public and private entities, interest groups, and stakeholders may participate as well. Since the nature of the actors, their resources, and their interests is expected to

profoundly influence the implementation of HCPs, policy network theory seems an appropriate lens through which to view plan implementation progress. This section reviews various aspects of the literature which may help to understand the processes associated with group interaction through policy networks and better articulate how these formal and informal institutions are formed in the implementation of natural resource management plans.

Individuals within policy networks are “not well specified” according to Adam and Kriesi (2007). They state that policy subsystems or networks consist of a large number of actors dealing with specific policy issues. Political processes in these networks are characterized by the interactions of public and private actors dependent on each other for resources to achieve their goals. The distribution of capabilities over the set of actors in collective action is significant. Adam and Kriesi (2007) also refer to a large number of authors who use the term “policy networks” in very different ways, some of which we explore in more detail below.

Common-pool resource theory demonstrates that different institutional arrangements powerfully affect the policy decision making process, and that policy or institutional change is an incremental process (Schlager, 2007). Ostrom proposes a framework for analyzing institutional choice viewed from the perspective of individuals making choices about future operational rules to manage those resources (1990). Problem solving is constrained and guided by norms of behavior that affect the way alternatives are perceived and weighed and that limit opportunistic behavior. Schlager quotes Ostrom as saying that preferences may become more complete over time as individuals gain a better understanding of their situation based on the context of the

situation and the information available. Since uncertainty can be high about the structure and dynamics of the common-pool resource as well as the actions of users in relation to the resource and each other, appropriators spend a lot of time learning by trial and error (Schlager, 2007). The management of natural resources through implementation of HCPs certainly fits within these findings, both with respect to the groups of individual actors that join together to form management institutions as well as the trial and error aspects of implementation. Agreed upon rules and behavioral norms are often institutionalized within HCPs, particularly those with Implementation Agreements.

Berry et al. attempt to sort out the “Babylonian conceptual chaos” of three network approaches to policy (Adam & Kriesi, 2007) in greater historical detail. Berry, Brower, Choi, Goa, Jang, Kwon, and Word identify and compare (1) social network analysis, (2) public management networks, and (3) policy change and the impact of networks on policy outcomes in their work exploring the traditions of network research (Berry et al., 2004). Note that they collectively refer to the ideas in item (3) as policy networks. That terminology is used throughout the remainder of this document.

Within social network analysis, Berry et al. identify sociometric studies rooted in Gestalt psychology, the Manchester anthropologists, and the Harvard structuralists. The authors note that what these traditions have in common is the idea that network configurations demonstrate individuals, their relationships to each other, and their effect on group relations (Berry et al., 2004). Social network analysis seeks answers about the intentions of participants and how socialization and social context provide norms, ideas, and structures that facilitate and constrain individual behaviors, while shaping the ways behaviors are received by the environment. With respect to principal research questions,

social network analysis extensively explores reciprocal relationships between structure and behavior and the dynamics within a network as well as links between micro and macro consequences of network structure (Berry et al., 2004).

From the public management tradition, Berry et al. focus on public management network structures that have grown primarily out of research in intergovernmental relations. This methodology is seen as a way to examine horizontal and vertical relationships to deliver intergovernmental programs. Most of the work in this tradition is based on field work and in-depth case studies to understand whether networks exist, how people function in networks as managers, and the impact of network management on decision making, policy outputs and outcomes, and democratic values of governance (Berry et al., 2004). In public management networks, the authors state that the focus is on whether network management helps implement programs and policy more effectively and how managers' actions affect individual networks and their performance (Berry et al., 2004).

From the political science tradition, Berry et al. examine networks with respect to policy change and the impact of networks on policy outcomes. They group these ideas together and call them policy networks. These include the topics of policy innovation, policy change and agenda setting, and neo-institutional economic theory to assess how networks affect collective action and policy outcomes. Local, regional and national networks play an important role in policy diffusion and innovation where individuals are embedded in sets of social relationships and institutional structures that affect behavior (Berry et al., 2004). Policy change and agenda setting investigates how interest group and community power plays a role in issue networks affected by groups who influence

policy by functional areas. The focus is on the interaction of actors sharing policy beliefs as advocacy coalitions within a policy subsystem (Sabatier, 2007). Policy networks in this context have communications networks among association and interest group members, policy specialists, and elected officials and staff with specific policy interests who actively influence policy processes and are considered rational satisficers (Sabatier, 2007). Research in the policy network realm most often seeks to answer how policy actors achieve desired policies, and how actors' network roles influence policy outcomes, typically through the use of case studies although empirical examples follow this discussion as well.

As noted above, the policy network tradition includes neo-institutional economic theory with a basis in Ostrom's institutional choice and North and Williamson's transaction-cost frameworks. Williamson states that understanding transaction costs is central to understanding how individuals interact to find the most economical governance structure for transactions, especially those involving uncertainty where continued relationships are valued. He defines the governance structure as the institutional matrix within which the integrity of a transaction is decided (Williamson, 1979). North states that transaction cost theory is built on the assumptions of a costly environment, of subjective models on the part of actors to explain their environment, and of imperfect enforcement of agreements. He notes that actors in a political market often have an imperfect understanding of the issues affecting them, and the high costs of transacting prevents achievement of efficient solutions. He defines transaction costs as the costs of measuring and enforcing agreements. Groups come together and create rules for

interacting in ways that reduce transaction costs and uncertainty in exchange for reduced institutional efficiencies (North, 1990).

Berry et al. note that current research efforts seek to expand the policy network approach from the adoption level to include collaborative behavior. They refer to the work of Scholz, Lubell, Schneider, and others who empirically assess network forms of organizations on collective action problems. Their work assumes there are always collective action constraints for organizations to achieve cooperative relationships in managing local common resources. There is also an assumption that networks can stimulate collaboration and cooperation through information and reputation effects that encourage the development of common perspectives on environmental policy issues and norms of cooperation and trust. Berry et al. state that multi-actor partnerships emerge through interagency cooperation, intergovernmental program management structures, complex contracting arrays, and public and private partnerships. Local networks are public goods undersupplied because of the cost of creation and maintenance. The flow of benefits to individual network participants and the policy community is constrained by the costs of developing and maintaining contracts. As supported by Williamson and North, partnerships are most likely to emerge when potential benefits are high and transaction costs are relatively low (Berry et al., 2004).

The examples that follow are based on the works of Lubell, Sabatier, Weible, and others associated with collective action in various environmental management efforts. Most of the literature exploring how HCP partnership networks form is based on individual case studies. It seems useful to examine other sorts of natural resource management partnerships for additional insight when seeking a more empirical approach

to the study of HCPs. In general, each of the following examples relates to natural resource collective action where the actors are dependent upon continued relationships with each other to resolve issues. Other similarities between HCPs and the examples that follow are that each involves private property rights vs. common benefit, participation in the processes is voluntary, the technical issues may be uncertain, and the impacts of policy decisions accumulate and become more visible over time.

Examples of Environmentally-based Network Research

Several empirical studies suggest factors that may be relevant to networks implementing HCPs. For environmental interests, partnerships address problems such as habitat destruction and nonpoint source pollution. For economic interests, partnerships allow the development of flexible policy tools to address environmental impacts in a cost-effective manner while reducing the threat of more stringent regulatory policies (Lubell, Schneider, Scholz, & Mete, 2002). Lubell et al. (2002) echo the work of Ostrom, Williamson, North and others viewing partnerships as political contracts developed by actors seeking to minimize the first-order collective action problems of free-riding associated with use of local common-pool resources. They suggest that, regardless of the benefits, partnerships will only emerge if they can overcome the second-order collective-action problems inherent in institutional supply, that is, if they can create new rules with incentives to organize (Ostrom, 1990).

One of the research efforts that may be helpful in understanding how networks form to create HCPs is the work of Lubell et al. who identify how watershed partnerships form to deal with collective action issues at the ecosystem scale (2002). They refer to Kenney et al. who define a watershed partnership as

A primarily self-directed and locally focused collection of private and intergovernmental representatives organized to address water-related issues at a watershed level, operating outside traditional governmental processes or forums, and reliant on collaborative mechanisms of group interaction characterized by open debate, creativity in problem and solution definition, consensus decision making, and voluntary action (Kenney, McAllister, Caile, & Peckham, 2000).

The theoretical advantages of partnerships are similar to successful common-pool resource management institutions analyzed by Ostrom.

Lubell et al.'s study examines the emergence of watershed partnerships over a 12-year period by evaluating both the number of partnerships in a watershed, and the number of activities of each partnership across all partnerships in a watershed. They identify factors affecting benefits and transaction costs based on Ostrom's institutional analysis and development framework. They define watersheds as the action arena. Within that arena, the action situation and characteristics of actors jointly determine the benefit and transaction costs of partnership development. The action situation includes the nature and distribution of resources, existing institutional arrangements, and action-outcome links. Actors are defined in terms of the resources they bring, their preferences, their knowledge and their information-processing capabilities. Collective outcomes are a result of actors making decisions within the structure of the action situation that determines the payoffs for various strategies (Lubell et al., 2002). The authors identify factors like problem severity, institutional opportunities, and political incentives (by sector) as features of watersheds affecting benefits. Problem severity relates to issues like potential damage to water quality from agricultural and urban runoff, increasing

population density, etc. Institutional opportunities available determine a relative gain or loss in benefits over the status quo and may include things like innovative state environmental programs. They also look at the impacts of the presence or absence of political incentives to the agricultural, mining, and farming communities. Transaction costs are affected by the size of the watershed, institutional support, and actor characteristics like income, education, race, and whether or not actors are area natives (Lubell et al., 2002).

Lubell et al.'s findings suggest that all the components of problem severity tested contribute to the development of partnerships. Within the institutional opportunities category, the number of partnerships tends to increase with the level of infrastructure debt, and decrease with the level of water quality enforcement, although questions exist about the relationship between enforcement and the number of partnerships based on the details of their analysis. The receipt of federal and state funding significantly increases the number of partnerships, although receipt of local funding does not. Support provided by prior partnerships significantly enhances the number of partnerships and their level of activity. With respect to political incentives, the opposition of dominant agricultural interests decreases the rate of partnership incidence. With respect to actors, an increase in per capita income had the highest increase in creation of partnerships. An increase in blacks and Hispanics decreases the partnership incidence rate (Lubell et al., 2002).

Lubell et al. conclude that partnerships do increase in response to environmental problems in watersheds and the corresponding weakness of existing institutions to manage those problems. Partnerships do not emerge automatically in response to potential benefits, but will increase in homogeneous watersheds with human, social, and

financial capital necessary to overcome the transaction costs of building a new institution. They state that there are both advantages and disadvantages inherent in cooperative institutions, and watershed partnerships are not a magic bullet for solving all environmental problems. Partnerships are more likely to emerge in watersheds with dispersed pollution problems difficult to solve through command and control policies, especially if the overall agricultural community does not resist new environmental policies. The authors suggest, however, that if cooperation doesn't produce positive outcomes and clear benefits for all major participants, partnerships may have a short life (Lubell et al., 2002). The findings from this study suggest that problem severity, institutional support, and actor characteristic variables may play a significant role in successful implementation of HCPs.

In another study, Lubell and Fulton analyze the role of local policy networks for implementation of agricultural watershed management by adopting environmental best management practices (BMPs). They define policy networks as interconnected actors in a policy subsystem that communicate information about policy through some social connection. They state that successful implementation of natural resource management requires widespread cooperation. This study focuses on a case study of the Sacramento Valley Water Quality Coalition (Coalition). The Coalition consists of 10 sub-watershed groups in charge of on-the-ground implementation of BMPs. BMP adoption (in this case, installation of vegetative filter strips to control irrigation and stormwater runoff into waterways by orchard growers) is a challenging problem in cooperation. Individual producers cannot make a large difference in overall water quality and nonpoint source pollution is costly to monitor, so there are incentives to free ride on the BMP efforts of

others. The authors investigate the link between BMP implementation and policy networks because BMPs are an important part of watershed management programs, and these programs are an important example of collaborative policy designed to encourage cooperation among multiple stakeholders (Lubell & Fulton, 2007).

The Coalition was formed after a change in California water quality policy. Under the new plan, agricultural producers either had to join water management coalitions to monitor water quality and implement quality improvement plans, or obtain an individual permit from the local Regional Board responsible for implementing the states' water quality program. The subwatershed groups are headquartered within local organizations, they collaborate with many other local stakeholders, and the structure of partnerships is different in each subwatershed. The regional groups coordinate among the subwatershed groups (Lubell & Fulton, 2007).

Lubell and Fulton distributed surveys to orchard growers in seven counties asking about crop information, groups growers belonged to, annual sales revenue, demographic data and asked specific questions related to BMPs. The dependent variable in this study is the number of specific practices a grower uses within each of three categories. Independent variables include the number of policy network contacts (the number of contacts made by producers regarding water quality issues to agricultural and non-profit agencies), and the number of water quality management activities in which the grower participated. There was also an awareness variable for each category. With respect to farm structure, the survey measured crop size/patterns by area and income (Lubell & Fulton, 2007).

Lubell and Fulton's findings suggest that policy networks play an integral role in implementation of BMPs and without the active cooperation of local policy networks, policies would fail especially if they rely on voluntary compliance. They state that even in cases where regulators have strong punishments for non-compliance, supportive policy networks will reduce costs of monitoring and enforcement. The key lesson is that the decisions of public managers at the state and federal levels can directly affect the strength of local policy networks. As an example, a reduction in investments in local networks in the face of budget cuts has direct effects on the effective implementation of policies like agricultural watershed management which depends on the interactions between agency officials, non-profit organizations, and farmers or other business interests. They close by stating that local policy networks are crucial to the social process of implementation of any type of policy attempting to solve collective action problems through widespread change at the individual level, although the function of networks may be different for large-scale and small-scale programs (Lubell & Fulton, 2007). The relevance of this study to the proposed examination of HCP cases suggests that networks as an institutional structure contribute to the diffusion of innovative practices, build social capital by developing relationships among actors, and create cultural acceptance of new behaviors and norms.

Perceived effectiveness of a particular policy action is another variable tested by several authors that may be important in considering HCP policy networks. A study by Lubell that merits discussion here is an attempt to explain actor perceptions of the effectiveness of public policies targeting common-pool resource dilemmas in coastal watersheds. Using a combination of the institutional rational choice approach in

conjunction with the advocacy coalition framework, he shows how policy beliefs related to the benefits and transaction costs of collective action affect beliefs about policy effectiveness. He defines perceived effectiveness as a belief on the part of individual actors that public policies are achieving their set goals. He also defines effectiveness as benefits outweighing transaction costs of rational actors (Lubell, 2003). Lubell surveyed respondents from the Environmental Protection Agency's National Estuary Program (NEP) and non-NEP program estuaries and their stakeholders where NEP programs are an example of a collaborative institution. His dependent variable is perceived effectiveness. Similar to his previous work, independent variables include problem characteristics (severity, dispersion, and scientific knowledge), institutional processes (conflict resolution, external decisions, procedural fairness, business domination, expert domination), beliefs about others (trust, number of allies, entrepreneurs), policy-core beliefs (conservatism, environmentalism, inclusiveness), institutional factors (NEP estuary, government actor) and various interactions between these variables (Lubell, 2003).

Lubell finds that the effects of policy-core beliefs and institutional structure on perceived effectiveness are interdependent. Specifically, governance institutions, or the collective-choice rules used by actors, have a favorable effect on perceived policy effectiveness among political actors whose policy-core beliefs are congruent with the structure of the institution (Lubell, 2003). He also demonstrates that stakeholder beliefs in the adequacy of scientific knowledge about estuary problems are also associated with beliefs about policy effectiveness (Lubell, 2003). Other findings include that NEP stakeholders who believe estuary problems are spatially dispersed are more likely to think

policies are effective, while the opposite is true for non-NEP estuary stakeholders. He suggests this difference may reflect the comparative advantage of collaborative institutions for reducing the transaction costs of contracting for complex problems facing ecosystems. Institutions that successfully resolve conflict improve beliefs about effectiveness, as do stakeholders who believe their interests are fairly represented and trust in other stakeholders (Lubell, 2003).

In a similar vein, Weible and Sabatier compare adversarial and collaborative policy subsystems belief convergence regarding water quality problems and agreement with policy proposals, and the relative use of empirical vs. normative beliefs in supporting policy proposals. They use the term policy participants to describe actors who directly or indirectly attempt to influence subsystem affairs, in this case water quality within the Lake Tahoe Basin. They include participants from local, state, and federal governments, interest group leaders, scientists, consultants, citizens, and the media. They assume actors are generally self-interested, boundedly rational, and likely to use preexisting beliefs to simplify their view of the world. They also state actors beliefs are embedded in a 3-level belief system: deep core beliefs (e.g., the welfare of present vs. future generations); both empirical and normative policy core beliefs (e.g., seriousness of water quality degradation, and the relative priority of environmental quality vs. economic development, respectively); and secondary beliefs (e.g., preference to restrict development in urbanized areas.) Weible and Sabatier characterize adversarial policy subsystems as competitive coalitions with polarized beliefs and minimal cross-coalition coordination, fragmented governmental authority, extensive venue shopping, and policy designs with clear winners and losers. They describe collaborative systems as

cooperative coalitions with some level of belief convergence and cross-coalition coordination, shared access to decision making authority, the use of consensus-based institutions and win-win policy designs (Weible & Sabatier, 2009).

Weible and Sabatier were able to test the same policy subsystem by questionnaire over two different time periods. The initial period was more adversarial, the latter period more collaborative. They examined nine variables across the three belief categories. Like Lubell and others, they find that beliefs converge between coalitions; however, coalitions still remain distinct in their beliefs. The authors conclude that collaborative policy subsystems can help mitigate but not eliminate disagreements between coalitions. They did not find any support that actors will rely more on empirical beliefs and less on normative beliefs in collaborative policy subsystems. While consensus-based procedures may lead to more agreement on the issues, actors still stick to their value-based policy positions. They also found that environmental conflicts arise more from value differences than scientific or technical deficiencies so there may be a limit to how much science can be used in consensus-based institutional decision making (Weible & Sabatier, 2009).

Gruber (2010) describes community-based natural resource management (CBNRM) as an increasingly popular emerging international resource management model that promises to address both social justice and environmental protection. This model is being developed in response to many cited cases of dissatisfaction with more traditional systems of sanctions and top-down decrees. He states that CBNRM initiatives support the idea of participatory democracy and of building networks and linkages among different constituency groups, interdisciplinary groups, levels of governments, and

economic sectors. Critics of CBNRM say the implementation of CBNRM often falls short of the concept. Gruber refers to a 2006 Millennium Ecosystem Assessment evaluation of CBNRM that concluded there are three necessary conditions in these efforts that are not always met: recognition of social values, market values, and nonmarket values. Specifically, nonmarket values include the ability of local people to capture payments for environmental services received by others. Gruber conducted an analysis and synthesis of 47 papers found searching on the terms community-based, natural resources, environmental, conservation, and management. The 47 cases selected were considered effective in using CBNRM. Gruber performed an analysis of characteristics attributed to CBNRM in case studies selected from around the world. This effort resulted in identifying 12 key principles commonly found in CBNRM and quantifying the relative emphasis of these principles' contributions to success by both researchers and practitioners who participated in the study (Gruber, 2010).

For use in this dissertation effort, the CBNRM principles Gruber identified with a combined total average of 49% or greater based on the rankings of both researchers and practitioners were initially chosen for consideration. Of the 12 Gruber identified, the ones selected for further investigation in the case study effort in Phase II are 1) social capital and collaborative partnerships, 2) adaptive leadership and co-management, 3) participatory decision making, 4) devolution and empowerment, and 5) resources and equity. Gruber describes key characteristics associated with each principle and suggests they provide a basis for developing specific indicators for monitoring progress toward stated organizational goals and objectives. He follows up by stating that the principals and their characteristics may be helpful in identifying “what to do” but fall short of

explaining “how to” accomplish goals (Gruber, 2010). That being said, the five principals noted above and the associated characteristics described by Gruber appear to be a useful way to describe various network arrangements and are consequently factored into the case study analysis in Phase II.

The Use of Science and Other Expert Information

Weible and Sabatier’s findings bring up another aspect of HCPs that is often debated: the use of scientific information in their development and implementation. One of the primary criticisms of habitat conservation has been the uncertainty associated with the biology of one species or another and how that may affect the likelihood of success of any habitat policy strategy. The burgeoning field of adaptive management literature reflects this discussion. This dissertation does not attempt to focus on the results of adaptive management and its effects on implementation; however, it seems important to note how the availability and use of scientific information may affect the policy network aspects of HCP implementation.

Thomas (2001) refers to an HCP study related to the availability of science performed in 1999 by Kareiva et al. They review approved HCPs to evaluate the extent to which scientific data and methods are used in developing and justifying them. They are concerned that even if HCPs meet the legal requirement of using the best available science, they are scientifically inadequate if the data are insufficient to support actions outlined in the plans (Kareiva, Andelman, Elderd, Groom, Hoekstra, Hood, Lamoreaux, Lebuhn, McCullough, Regetz, Savage, Ruckelshaus, Skelly, Zamudio, NCEAS Working Group, 1999). Two-hundred eight HCPs were evaluated to gain basic descriptive information about plans. They then conducted a more comprehensive analysis of 43

plans, generating a detailed profile of each plan and documenting the use of scientific data and tools. They find that, in many cases, crucial, yet basic, information on species is unavailable for preparers of HCPs so questions remain about the status of species, estimated take under HCPs, and the impact of that take on the species. Progressive analyses needed to assess take, impact, mitigation, and monitoring are poorly done or lacking altogether. Shorter-duration plans have better estimates of the amount of take, but longer-duration plans have better analysis of the status of species and mitigation measures imposed. Three recommendations from their work suggest that (1) greater attention be paid to explicit scientific standards for HCPs, (2) that HCPs with potentially large impact include an explicit summary of available data on covered species, an acknowledgement of risks, and planning flexibility based on monitoring results, and (3) that information about listed species be maintained in accessible, centralized locations. They also suggest permits be withheld until sufficient information is obtained, and that a scientific advisory committee with peer review be part of the planning (Kareiva et al., 1999). As a result of this study, USFWS issued addendums to the HCP Handbook to establish measurable biological goals and objectives, incorporate adaptive management when there are significant biological data gaps or uncertainty, develop better monitoring strategies, increase public participation in the HCP process and associated NEPA work, and provide guidance on factors to consider in establishing the duration of ITPs. However, the USFWS disagrees with Kareiva et al.'s conclusion that the USFWS lacks adequate scientific data and analysis to support many of the approved HCPs. USFWS believes that the 233 HCPs in place at the time of review are based on sound science. "If we lack critical information regarding the biological needs of a species proposed to be

covered under an HCP, we will not approve the plan until such information is obtained or an acceptable adaptive management clause is added to the HCP” (US Fish and Wildlife Service, 2008d).

Weible explores the implications of expert-based information like biological science on policy subsystems. He reviews the different uses of expert information in the multiple streams theory, punctuated equilibrium theory, the social construction theory, and the advocacy coalition framework. He defines three uses of expert-based information; learning, political, and instrumental. The learning use he describes results from the accumulation of information over time that results in slowly changing belief systems of actors seen in each of the theories and the framework noted above. The political use of expert-based information is primarily to legitimize previously made policy decisions. And the instrumental use of expert-based information is what is typically assumed using a rational, ideal approach to problem solving where a problem is identified, research is conducted, and a policy decision follows the research findings (Weible, 2008).

Weible argues that the way information is used depends on the characteristics of a network utilizing that information. He frames his discussion of knowledge use within three policy subsystem types: unitary subsystems, collaborative subsystems, and adversarial policy subsystems. He suggests that the coordination within each of these subsystems varies depending on whether the coordination patterns occur between coalitions or within coalitions. Unitary and adversarial subsystems are based on coordination patterns among allies within coalitions. Cross-coalition communication patterns and interactions, or those through a broker connecting opposing coalitions, are

more often seen in collaborative policy networks (Weible, 2008). He also states that decision making authority can be fragmented as a result of 1) the degree of centralization within a subsystem and 2) the degree of interdependence with other policy subsystems. For example, as decentralization increases within a policy subsystem, authority may shift from federal government agencies toward state and local governments, and may reverse if centralization occurs. The extent to which that helps or hurts a coalition depends on whether the authority rests with agencies sympathetic to their objectives, or whether it is divided with other agencies whose objectives run counter to a given coalition's objectives. The implication from this according to Weible is that as some coalitions gain, others lose. Coalitions also pay attention to policy subsystems that overlap. Events in one subsystem may allow a coalition to secure political gains. The gains in one subsystem may be transferred to an overlapping subsystem (Weible, 2008). This pattern may be seen within the context of HCPs. While collaborative subsystems come together to negotiate terms of an HCP, during the course of implementation, the process may become more unitary or even adversarial depending on how implementation unfolds.

HCP's are often described as a negotiated output from multiple interest groups identifying agreement on land and natural resource management decisions. This suggests an instrumental use of species-specific scientific information. In reality, there is a great deal of uncertainty at times about specific conditions or actions that may improve habitat management and the resulting effects on species.

Key questions remain then about who chooses to participate in HCP networks and why. Maybe even more significant is how individual actors participate in HCP networks.

Chapter 3 will build upon consistent themes noted above in both the implementation and policy network theory in an attempt to inform the research questions posed here.

Chapter 3

METHODOLOGY/METHODS

The methodological approach used for this research effort involves a mixed methods analysis. Per Yin (2009), mixed methods research requires each method share the same research questions to collect complementary data, and to conduct counterpart analyses. This can allow investigators to address more complicated questions and collect a richer and stronger array of data than by using any single method. The unit of analysis for this effort is individual HCPs. The first phase of this analysis utilizes descriptive variables on HCPs in secondary data collected by the USFWS. The second phase consists of a case study of a single, complex HCP selected based on criteria derived from the first phase analysis.

The research questions once again are: what factors contribute to successful HCP implementation; how is success defined and measured and does that matter in the HCP implementation process; how does the presence of various policy actors and the roles they play affect implementation; and what are barriers to implementation? Beyond HCPs specifically, is there something that can be learned from the case study here that adds value to other environmental management efforts?

None of these questions can be answered without specific information about individual HCPs and the actors, resources, and institutional arrangements identified within each. Collecting the type of in-depth information needed from multiple HCPs may take years and is well beyond the scope of this effort. Instead, this dissertation develops a strategy to gather general information about HCPs in a region, and then based

on policy-network related characteristics that are known, gathers specific information related to one complex HCP for further study to address the research questions.

Phase I Data and Methods

The most comprehensive source of information about individual HCPs is collected and managed by the USFWS. Phase I of this study is an exploration of descriptive variables in this secondary data provided by the USFWS. The ECOS database provides access to species related information from the USFWS and other governmental data sources. It includes information on Habitat Conservation Plans, Safe Harbor Plans, Candidate Conservation Agreements, and Candidate Conservation Agreements with Assurances. The data for the HCPs is categorized by the USFWS region within which each plan is permitted. The database may be accessed online at <http://ecos.fws.gov/ecos/home.action> and provides a variety of reports on threatened and endangered species targeted by these plans. Geospatial data related to fisheries and critical habitat is also available.

With respect to HCPs, the dataset includes information on individual plans and related ITPs, and makes it publicly available. Reports may be run online. However, based on the format of the online reports, it is very difficult to do any type of analysis with multiple individual HCP records. At the beginning of this research effort, the USFWS was contacted about availability of this information in other formats. They subsequently provided an Excel spreadsheet of publically available information on all the permitted HCPs in the United States at that time. This information is necessary in order to identify specific plans that may be appropriate for a policy network case study. Sufficient information was needed about each plan in order to select a case that is either

ongoing or expired, and is considered complex from a policy network perspective as discussed further below. The USFWS ECOS data includes information like HCP name, permit number(s), permit and expiration dates, type of NEPA process required for each ITP, general location and acreage managed, the types of threatened, endangered, and non-listed species whose habitat is being protected, and the types of permit applicant(s), intended land use(s), and duration for each individual HCP.

HCP records in the USFWS ECOS database are used here to generate historical trends of HCP use in one region and are a starting point for quantitative analysis of the types of permittees implementing HCPs, and the complexity of these plans to enable selection of the case study in Phase II.

The ECOS data received from the USFWS is the population of all current and expired HCPs with ITPs as of May 10, 2011. USFWS considers HCPs fully implemented once the permits have expired. According to an interview with the USFWS National Coordinator for HCPs, the ECOS data represent the most complete record of HCPs the USFWS has readily accessible (Personal communication, Cole, April 26, 2011).

Many records in the ECOS database have less than complete information. Some of this missing information is available from independent sources publicly available online. Many of the larger, more complex HCPs have their own websites. Data in the fields of interest in the State of California data set are generally complete in the fields of interest so it wasn't necessary to fill in missing information. That may not be the case for data from other parts of the country. A report by Callihan et al. (2009) under contract to the USFWS confirms that many of the ECOS individual records for applicants are

incomplete, the database does not include records for applicants who later withdrew their ITP applications, and performance data are not tracked. Since this study focuses on implementation of permitted HCPs, absence of withdrawn applications is not expected to be a significant source of bias. The absence of performance data tracking within the ECOS system requires that information regarding progress of individual plans be obtained from other sources as is done in the Phase II case study.

A preliminary review of the nationwide ECOS data suggests the plans are often clustered together in various regions, especially along both the east and west coasts of the US. As an example, currently there are significantly more HCPs in Regions 8 (California and Nevada), and Region 3 (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and the Puerto Rico and the Virgin Islands) than in any of the other regions. More than half of all the HCPs in the country are currently found in Region 3.

While it is more likely that the development of plans is associated with particular habitat for vulnerable species in these areas, it is possible that HCPs may be more frequently considered as a management strategy within a state or USFWS region by participants already familiar with HCP development and implementation processes. Is the frequency of HCPs in an area due to the number of threatened and endangered species present in a region (and a follow-on question asks why more species may be threatened or endangered in one region over another), or is it due to HCPs being a favored environmental management strategy by state and local governments and other actors within a region? Future research may seek to distinguish the reasons why HCPs are more commonly used in some areas of the country versus others.

Before comparing and contrasting characteristics of HCPs, it is important to understand how the USFWS rules regarding plan formulation have changed over time. The first generation HCPs were prepared between 1982, when HCPs were added to the ESA, and 1994. Second generation plans include those created following enactment of the “No Surprises” policy between 1994 and 2001 which provides assurances to ITP holders that no additional land use restrictions or financial compensation are required after issuance of a permit, even if circumstances indicate a need for additional mitigation. Third generation plans are those created after 2001 and are based on USFWS’ Five Point Policy guidance which includes adaptive management strategies, biological goals and objectives, guidelines for permit duration, public participation, and greater monitoring of plan details to encompass compliance, effects and effectiveness considerations (National Archives and Records Administration, 2000). The USFWS Guidance for HCP preparation changed as a result of the program changes within each generation. In order to better compare the characteristics of one HCP with another, it is important to know under which set of USFWS guidance each was prepared. Identifying which generation each HCP belongs to as noted above assists in that apples-to-apples comparison. Note that for purposes of this analysis, while the Five Point Policy was published in the Federal Register in mid-2000, based on the average length of time to permit HCPs as reported by Callihan, et al., it is assumed that permitted HCP’s likely did not include the elements described in the Five Point Policy until after 2001.

In order to more closely examine the records in a manageable way for this research and choose a case study for Phase II, various descriptive statistics were generated for the HCPs within the State of California. These statistics helped in

examination of the Phase II records in several ways. The most significant step was to identify under which generation of HCP guidance each HCP was prepared. Changes in network-related characteristics and complexity are then compared within each of the three generations noted above. The specifics of these comparisons are discussed in more detail below, and the findings of each are discussed in Chapter 4. For purposes of this research, complex HCPs are third generation plans which include multiple permittees, multiple land uses, multiple species, and require an EIS to fulfill the NEPA requirements.

The steps described below enabled selection of a Phase II case from amongst these complex plans with a duration lasting 30 years or longer where policy networks may be effective in improving the likelihood of plan implementation.

Originally, the Phase II case study was to be selected from USFWS Region 2, the Southwest Region, including the states of Arizona, New Mexico, Texas, and Oklahoma, based on proximity to the researcher and access to data. However, after a preliminary evaluation of the ECOS data in Phase I of this research for Region 2, it was determined that the number of multi-party, multi-species, multi-land use HCPs in this region is extremely limited. Instead, USFWS Region 8, adjacent to Region 2, was selected including the states of Nevada and California. California has implemented its own Natural Community Conservation Program (NCCP) to work in conjunction with HCPs. Nevada does not have a similar program. Due to the variety of HCPs available for consideration in California, and the desire to minimize potential sources of bias and threats to validity due to variations in state law, geographical differences in HCPs, and differing socio-economic and political environments, the ECOS data was utilized to select a case from within the State of California. One of the trade-offs of this choice,

however, is that it may have an effect on the analysis of policy network relationships since the same individuals may be involved on the part of the USFWS on multiple HCPs within a state and region. Strategies for implementation may be largely influenced by a few USFWS employees across multiple plans so it may be difficult to discern whether success is more affected by how the plan is implemented, or by specific elements included in individual plans, without closely examining multiple plans. However, the same concern exists in all the USFWS regions. Future research may be needed to examine this question more closely as well.

As noted above, changes in the variables within the ECOS database are examined by generation to discern possible network-related trends over time in the State of California. For example, is there a trend in increasing or decreasing numbers of HCPs as USFWS guidance evolved? Do individual third generation plans tend to have more permittees than first generation plans? The types of descriptive information gathered by generation include the number of agreements with single vs. multiple permittees and the most common types of permit applicants. When considering species, the number of agreements addressing single vs. multiple species habitat is considered. Multiple land uses may affect the complexity of an HCP so the number of HCPs with single vs. multiple land uses is also examined, as well as whether shifts are noted in the types of land use utilizing HCPs over time. The type of NEPA assessment required for plan formulation is considered an indicator of complexity and is also examined. Individual plans may require an EIS or an EA or a CE. An EIS is considered the most complex and a CE is considered the least complex.

There is a question of whether different types of land uses are more likely to rely on HCPs. Callihan et al. discuss three basic types of HCPs: those granted to individuals for non-commercial purposes, those granted to companies to cover development or business activities, and area-wide HCPs to mitigate development affecting one or more species (Callihan et al., 2009). Instead of categorizing the ECOS data as they did, this research effort quantifies land uses by directly identifying combinations of multiple uses by the land use descriptors utilized by USFWS in the ECOS database.

One additional descriptive statistical measure examined is the duration of HCPs. This may be considered an additional element of complexity if the duration extends over multiple generations. Varying ecological impacts may result from proposed HCP activities, and the nature or scope of the permitted activity accounts for variations in duration. Duration also helps to describe the context within which a particular HCP is being implemented. In general, very long plan durations make it even more important to clearly outline program objectives, provide for long-term political and financial support, and accommodate changes in leadership over time. In addition, traditional program evaluation techniques may not be adequate to determine the effectiveness of HCPs with respect to endangered species management over a long period of time.

Preliminary Data Inspection and Preparation

In reviewing the ECOS data for all the regions, it is clear that entries to the database are made by multiple USFWS employees in each region. As previously noted, the fields for some plans are filled in thoroughly. Other entries include information in only a few fields like the general description, permit number(s), species, and duration. Some had no information related to the acreage associated with specific plans, etc. Due to

inconsistent entry of information, significant further inspection and cleanup of the data was necessary.

The first step taken in the Phase I analysis was to do a search on all records of HCPs in the ECOS database (provided in Excel format provided by USFWS) in USFWS Region 2 and import those records into SPSS software for analysis. All of the data cleansing, validating, and standardizing steps described below were taken for the Region 2 data. After that data were analyzed and it was determined that the Region 2 cases would not provide sufficient multi-party HCPs for consideration as a case study for policy networks, the same steps were taken for the Region 8 data which was later narrowed to only those in California.

There are approximately 1100 records in the ECOS dataset provided by USFWS in Excel format. There are 177 records for the State of California. Initial visual inspection of the data showed that in some cases, multiple permits were issued for several HCPs so that there are actually fewer plans than the number of records suggests. Some entries include multiple amendments and their associated permits in a single record. In other cases, HCP amendments and additional permits were listed as separate entries into the database. The California data set was reviewed record by record to determine which permit was the initial permit issued for an HCP, and which permits amended an existing plan. An additional variable was created in the data set to track these records (Amended Permit = either 0 or 1 where those coded with a 0 were identified as initial permits for an HCP, and those coded 1 were identified as amended permits) to ultimately identify the number of actual HCPs permitted vs. the total number of permits issued. Using this

method, it was determined that, of the 177 permits issued in the State of California, 164 of these were different HCPs.

All of the California records are included in the quantitative analysis discussed in Chapter 4. Sufficient data were available in the fields associated with the issuance of the permits: date the ITP was issued, the NEPA type, whether a plan was for single or multiple threatened and endangered species, whether a permit was issued to single or multiple permittees and their types, and whether a plan was for a single or multiple land use and the specific land use types. Because several of the fields were text fields with entries coded in different ways, several additional variables were created and coded to represent the presence or absence of certain conditions to allow analysis. For example, a NEPA Code variable was added where 0 represents the text string “No Information”, 1 represents a Categorical Exclusion, 2 represents an Environmental Assessment, 3 represents an Environmental Impact Statement, and 4 indicates the field was left blank. Similar variables were created to identify single vs. multiple permittees, single vs. multiple species, and single vs. multiple land uses. To identify the generation of an HCP, a field was added titled Generation of Permit. Based on the date of the initial permit, each record was coded to reflect First Generation (≤ 1994), Second Generation ($1995 < x \leq 2001$), or Third Generation (> 2001). This particular variable was used to select the appropriate records for all of the following analyses. Because of changes in the contents of HCPs by generation, only Third Generation records are considered when identifying the case study for Phase II of this effort. Specific findings for the Phase I analysis are discussed in Chapter 4.

While the information identified and analyzed in Phase I is useful in both an historical context and with respect to certain characteristics of current HCPs, there are also limitations to the methodology of Phase I. First, with the exception of complexity as it has been described and utilized herein, looking at the broad range of variables in the ECOS database does not assist in identifying the context in which HCPs are being developed and implemented. There are no variables related to socio-economic and political conditions in locations with approved HCPs. Second, there is also no progress tracking of individual HCPs, and therefore, without individual case studies, it is not possible to identify which stage of implementation a particular plan is in at any given time, nor is there a way to make any assessment of success for any plans, or to identify barriers that may be slowing or preventing implementation, all of which are necessary to evaluate results/implementation attributes discussed below. The Phase II analysis attempts to fill in some of this information for the selected case study. Figure 4.11 contains a schematic identifying the specific ECOS variables used and how that data was used to select the Phase II case for further study.

Phase II Data and Methods

Since each HCP is unique, Phase II seeks to more directly identify how policy networks play a role in successful HCP implementation, are barriers to success, or aid in understanding the types of roles played by various policy actors. As discussed above, a single case involving a complex plan is selected for a more in-depth review.

As discussed in Chapter 2, complexity and problem severity may profoundly affect implementation of negotiated agreements like HCPs. A corollary to that idea is that more complex plans may require a broader network of actors, or partner types, to

implement those plans. The works of Pressman and Wildavsky, Beierle and Cayford, several of Lubell's works and other authors discussed above suggest this may indeed be the case, although inclusion of broad networks of actors does not, by itself, insure success. In fact, it may complicate issues and increase transaction costs as discussed by several authors including Ostrom, North, and Williamson.

Based on the theoretical considerations discussed in Chapter 2, the matrix shown in Table B-1 in Appendix B was developed to address the research questions by organizing multiple variables into the three categories of context, process, and results/implementation attributes based on Beierle and Cayford's conceptual model (2002).

While the attributes are based on Beierle and Cayford's conceptual model, the individual characteristics in each category are somewhat broader and based largely on the work of authors discussed in Chapter 2. Each is included because it is considered likely to affect plan implementation and accomplishment. Note that the nature of relationships between participants on an HCP appears to be embedded in all three attributes. That said, it is hoped that by examining the nature of relationships and other characteristics described within the attributes noted, we may be able to better discern nuances about the role these characteristics play in successful plan implementation.

The context attributes help to characterize the background within which the HCP case study operates. With respect to relationships, for example, prior events may significantly affect the nature of current relationships and the willingness for individuals to continue to work together in an adversarial or collaborative way. The success of prior experiences with planning policies similar to HCPs may affect the way participants view

the HCP process as being a likely way to achieve their goals as opposed to being a quick trip to another dead end effort. Using Scheberle's analogy, if the participants in a process are the same folks who previously experienced a negative cross-country trip, they may be less inclined to get back into a car, plane, or train to experience another trip with the same individuals or agencies.

The process attributes are variables discussed in the literature that may be helpful in implementing environmental resource management plans like HCPs. Authors generally agree that sufficient resources and agreed upon goals are necessary to increase the likelihood of success. The nature of deliberation among parties in a policy network may greatly affect the relationships among participants and either encourage a collaborative effort, or increase the likelihood of an adversarial process. Both types of processes may ultimately achieve success or failure, but the transaction costs of participation may vary significantly. Previously noted authors also identify the ability to manage change and appropriately incorporate strategies for adaptation into an implementation process as factors that may significantly affect successful process outcomes. Using the trip analogy, if you are traveling by car and have a flat tire, whether or not you thought ahead to have an inflated spare tire, a jack, and the knowledge to change a tire may determine whether you have a short-15 minute break in the road trip, or a much more frustrating lengthy wait by the side of the road before you can get moving again.

The results/implementation attributes examine implementation progress and success. Are targeted goals being achieved? Is achievement of these goals occurring at the anticipated stage of the HCP implementation process? Again, using the road trip

analogy, did you reach your destination within the timeframes and under the conditions you had hoped?

Each of these attributes is examined and evaluated in the case study. Methods used in the Phase II analyses are discussed below and findings from the Phase II case study are discussed in Chapter 4.

George and Bennett suggest that single case designs can be very useful in theory development and testing (2005). In this case, the objective is to test the validity of generalizations described in the literature by identifying the factors in Table B-1 in Appendix B believed to be important to successful implementation of environmental resource plans like HCPs, and seeing if the reality of the selected case not only confirms their importance, but may offer some explanation as to why they may be important. Yin also notes that single case studies are an appropriate design under several circumstances. The primary justification for use of a single case study for this research based on Yin's five rationales is to explore an extreme or unique case (2009).

The case study described looks farther into how success is defined and measured in the HCP implementation process by the USFWS and by permittees in the selected HCP. Within the case study analysis, the various policy actors and the roles they play in a network that comes together to implement this multi-party HCP are reviewed for factors affecting the likelihood of successful implementation. An attempt is made to identify what success looks like to various participants, and identify barriers to implementation of HCPs, particularly those associated with policy networks. The case study also makes note of lessons that can be learned that may add value when considering other environmental or natural resource management issues.

While it may be desirable to randomly select an HCP for evaluation from the total population, purposive sampling is instead used here based on the findings of Phase I. The case is examined with respect to contextual, process, and results/implementation attributes shown in Table B-1. The Phase I portion of the study assisted in selecting a complex case for further evaluation in Phase II.

To aid in selection of the case study for Phase II, the following steps were taken. The first step was to identify HCPs with ITPs issued after 2001. Of the 164 HCPs in California, 73 were issued since 2001. The next step was to identify plans with multiple applicants that all become permittees after issuance of the ITP. Of the 73 third generation plans in California, 8 HCPs have multiple permittees. The third step in case selection was to further reduce the number of cases by identifying which, of those remaining, involved management of multiple land uses. Of the 8 HCPs with multiple permittees, 7 HCPs involve multiple land uses. The next step involved identifying which of these 7 HCPs remaining involved multiple threatened or endangered species. This step reduced the number of California case studies under consideration from 7 to 5. Of the 5 HCPs remaining, three were permitted for 75 years, 1 was permitted for 50 years, and the last was permitted for 30 years. None of these permits are expired.

Since the duration of a multi-party agreement is considered a complicating factor in the literature, it was determined to choose a final case for study from the 3 HCPs remaining with a 75 year agreement. Additional investigation was done on all three HCPs permitted to see that sufficient information was available from sources other than the ECOS database to be able to conclude a case study. All three of these have been case studies for HCPs at some point since their inception. The Western Riverside Multi-

Species Habitat Conservation Plan (WRMSHCP) was selected for three reasons in particular. The WRMSHCP has been in place the longest of the three and was permitted in June of 2004. This is important since both the formal and informal policy networks associated with implementing this HCP have had approximately ten years to form. In addition, the HCP and all supporting documents are publically available and easily accessible. Another dissertation was completed in June 2012 examining the role of social capital in the negotiation phase of this HCP. This seemed relevant and helpful background information related to context attributes associated with historical relationships amongst the parties to support the current research effort examining the implementation of the HCP.

The Phase I analysis demonstrates that none of the permits associated with complex HCPs in California has expired yet. While this may be considered a limitation, it also assures a plan is selected that meets current USFWS planning requirements which improves the likelihood that findings here may be applicable to HCPs yet to be permitted. The type of documentation analyzed for this plan includes the formally approved HCP, the Implementation Agreement, Annual Reports, individual permits, and professional journal articles.

To insure ethical concerns are minimized, two steps are taken. The first is to draw from existing documents publicly available. The second step affects case selection. The case was intentionally selected from plans where the researcher's agency is not a participant in order to eliminate a potential source of author bias.

To assist in triangulating findings from multiple sources, interviews were conducted with various permittees, participants, and stakeholders. As recommended in

the literature by Bardach and discussed below, interviews were conducted with individuals representing formal policy network members described in the HCP Implementation Agreement like the USFWS and other environmental entities focused on habitat preservation, and with those seeking the developmental benefits of HCPs including permittees, all of whom are local and regional governments. In addition, entities responsible for management and oversight of HCP lands were interviewed to assess their views on the likelihood of success of HCP activities. Interviews asking the same questions were also conducted with members of the informal policy network associated with this HCP including members of the development community and private landowners. Transcripts from interviews previously conducted by others with various stakeholders of this HCP are also considered to identify network-related common issues of concern (Jimeno, 2012b). Interview questions focused on the research questions seeking information about the likelihood of implementation success, barriers to implementation, nature of the relationships and communication amongst network members, and with others outside the HCP implementation network. Questions are open-ended and attempt to discern information relevant to the factors in Table B-1 in Appendix B to confirm the investigator's understanding of events and relationships suggested by the documentation, or that may not be evident by review of the HCP-related documentation. Interview questions used are included in Appendix C. Interviews were conducted in accordance with Arizona State University's Institutional Review Board (IRB) processes and procedures following IRB approval of the interview protocol. See Appendix D.

Evaluation of a single case often precludes generalization of results to all HCPs, but is expected to result in a better understanding of some of the policy network factors affecting HCP implementation. Review of the documentation and follow-up interviews with participants in the HCP case studied assist in better understanding implementation issues from both USFWS and permittee perspectives. As recommended by Bardach, success measures are considered from the USFWS perspective as the idealistic group, and permittees' perspective as the group seeking selfish or non-programmatic benefits. In addition, the interviews conducted and related transcripts reviewed provide perspective on what constitutes success of the HCP by other than USFWS and permittees perspectives. Use of the information in this way may mitigate potential researcher bias on what constitutes implementation success of natural resource agreements. It may also reflect what network members of other HCPs consider as successful implementation.

The WRMSHCP policy network contains members beyond those representing the USFWS or the permittees. These other network members are broadly acknowledged and their roles are identified formally where appropriate in the HCP's Implementing Agreement and informally through various HCP activities. Their perspectives on HCP success are included in the findings discussed in Chapter 4. Scheberle's typology of relationships and extrinsic/intrinsic factors is used to offer thoughts on network participants relationships discussed. In particular, the presence of implementation energizers within the policy network is also addressed.

Per George and Bennett, it is imperative that congruence testing and process tracing methods be used to improve validity of theory testing in single case studies (2005). Congruence testing here focuses on examining the process attributes. For

example, the literature suggests that having specific goals and objectives beyond biological goals improves the likelihood of successful implementation for USFWS and permittees. Similar statements can be made with respect to accessibility for participation, sufficient authority, quality of deliberation and communication, and plans to manage change and conflict. Discussion of these elements and other findings follow in Chapter 4.

Chapter 4

FINDINGS

Phase I Findings

One of the first analyses of the ECOS data from the State of California examines the number of HCPs and their frequency by generation. As noted previously, first generation plans are those with ITPs issued prior to 1994. The second generation includes HCPs with ITPs issued between 1994 and 2001. Third generation plans include those HCPs with ITPs issued after 2001. An important thing to keep in mind viewing these findings is that each generation, as of the date of the ECOS data received in 2011, is a different length of time. The first generation lasted approximately 12 years, the second approximately 7 years, and the third is approaching 14 years. Some thought was given to comparing generations on a proportional basis based on the time frames in each generation. This wasn't pursued, however, since it may introduce or obscure trends that may be visible below. The raw numbers and percentages below will continue to change over time as the number of HCPs approved in the third generation continues to grow.

As shown in Figure 4.1, of the 164 HCPs permitted to date in California based on the USFWS 2011 data set analyzed, only 18 HCPs, or 11% were issued in the First Generation prior to the No Surprises Policy being enacted. In the Second Generation, 74 HCPs or 45.1% of the total plans were put into place between 1994 and 2001. Seventy two HCPs, or 43.9% of the total plans issued in California have been put in place since 2001. From a policy perspective, this suggests that the assurances put in place for ITP holders by the No Surprises Policy appear to have encouraged others to consider HCPs as a tool for conservation and development after 1994. The number of third generation

plans developed is approximately the same as the number of plans put into place during the second generation. However, that occurred over a 14 year period as opposed to the 7 year period of second generation plans. Additional research is necessary to identify the reasons for the apparent slow-down in issuance of ITPs.

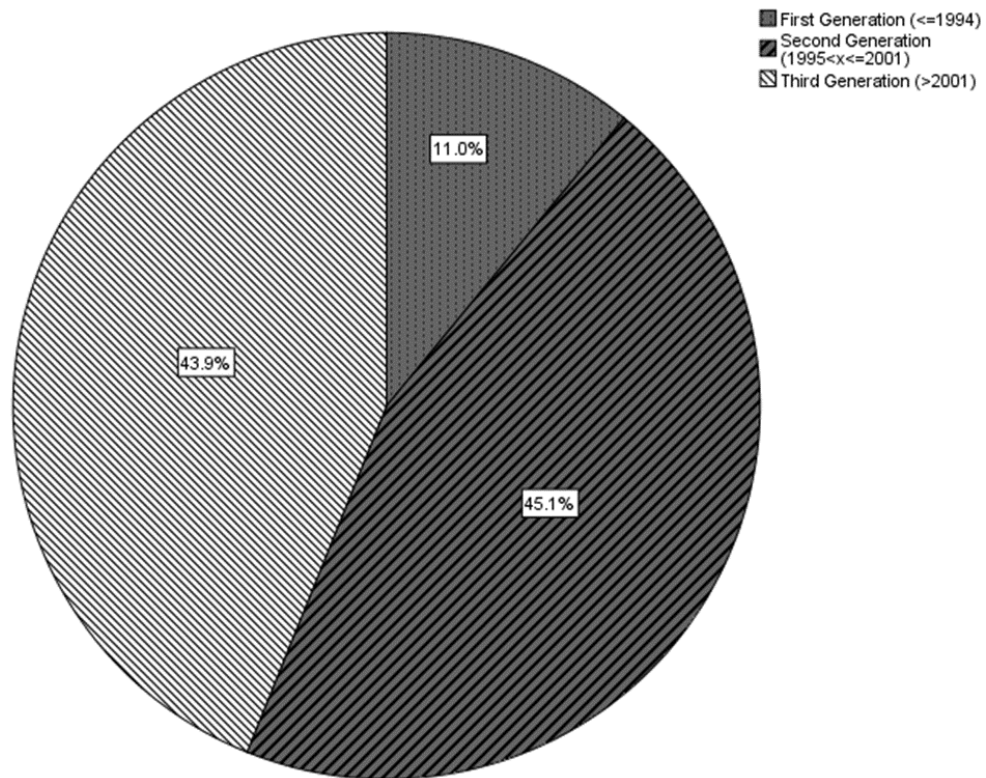


Figure 4.1 Percentages of Habitat Conservation Plans by Generation in the State of California

The next analysis seeks to determine whether changes in the USFWS HCP policies between the generations encouraged single vs. multiple applicants for ITPs. Table 4.1 compares this information by generation.

Table 4.1

Single vs. Multiple Applicants for HCPs by Generation in California

	First Generation		Second Generation		Third Generation	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Individual Applicant	14	77.8	66	89.2	64	88.9
Multiple Applicants	4	22.2	8	10.8	8	11.1
Total	18	100	74	100	72	100

The total number of HCPs approximately quadrupled between the first generation and the second. However, on a percentage basis, the number of multiple applicant plans dropped by about half from 22.2% to 10.8%. The number of multi-applicant plans remained approximately the same at 11.1% from the second to the third generation in California. One conclusion that may be drawn is that the No Surprises policy and the certainty it provides may have made HCPs a more desirable alternative for individual applicants. As shown below, the number of permits issued to individual applicants; i.e., corporations, continued to rise in the second and third generations. While the works of Lubell (2003), and Lubell et al. (2002) suggest that more complexity increases the number of partnerships formed in an attempt to reduce transaction costs necessary to resolve an issue, the inverse may be true as well. Fewer partnerships may be required for less complex ITP needs (Lubell, 2003; Lubell et al. 2002; North, 1990; and Williamson, 1979).

Figures 4.2, 4.3, and 4.4 below show the relative proportions of the different permit applicant types by generation. Percentages for the top three applicant types for each generation are shown in each figure and summarized in Table 4.2. All of the detail related to applicant types and other results discussed here are included in the Phase I Details in Appendix A.

The top three most frequent applicant types in each generation are listed in each figure and summarized in Table 4.2. Single corporations are the most prevalent HCP holders in California in all three generations. Single and multiple local governments and private individuals are the second and third most frequent holders of HCP ITPs in all three generations. The percentages in Table 4.2 across the three generations support the idea that HCPs for private landowners increased after issuance of the No Surprises policy. The first generation is the only time when multiple-applicant HCP's are one of the most frequent applicant types. Another observation is that no private individuals applied for HCPs prior to the No Surprises Policy.

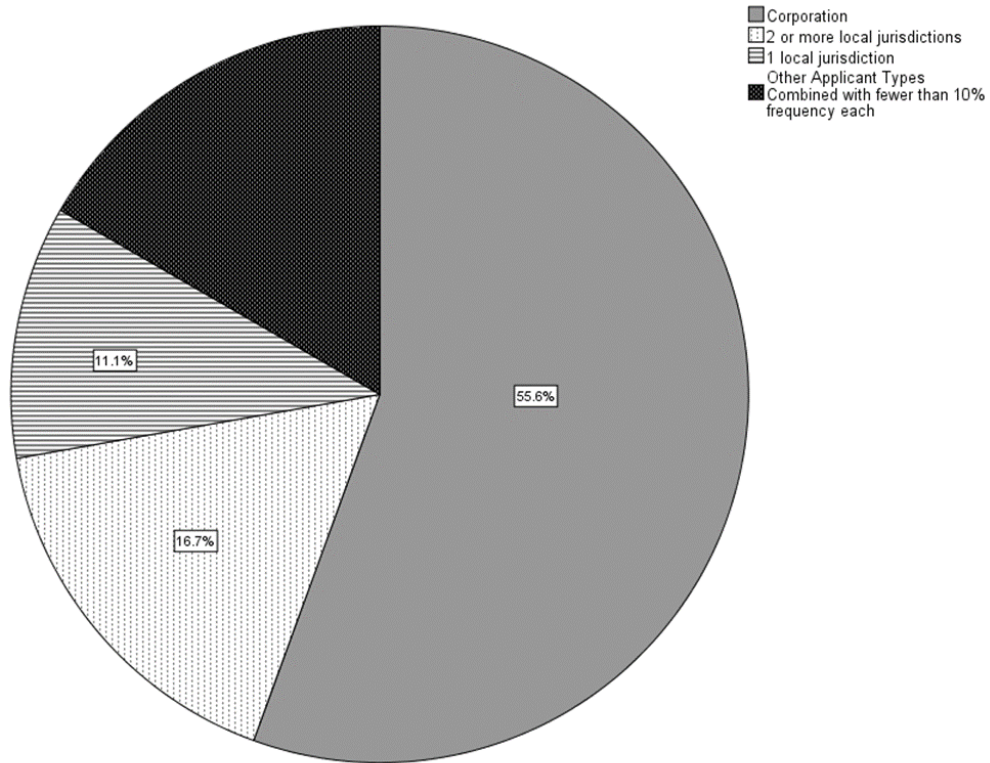


Figure 4.2. HCP Applicant Types in California ITPs – First Generation

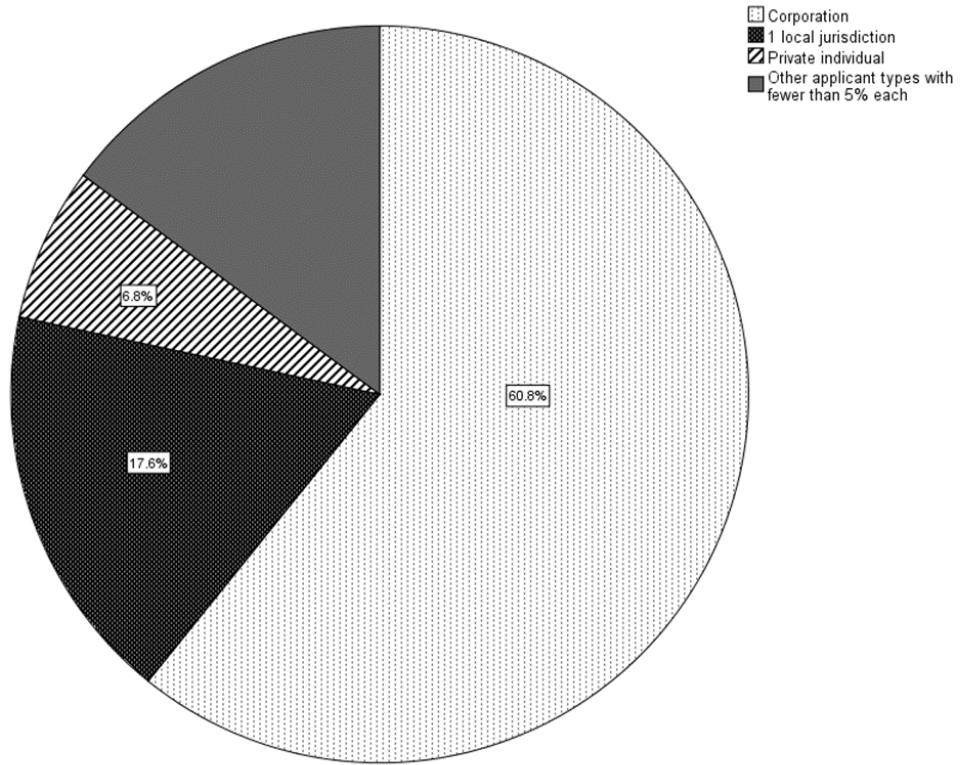


Figure 4.3. HCP Applicant Types in California ITPs – Second Generation

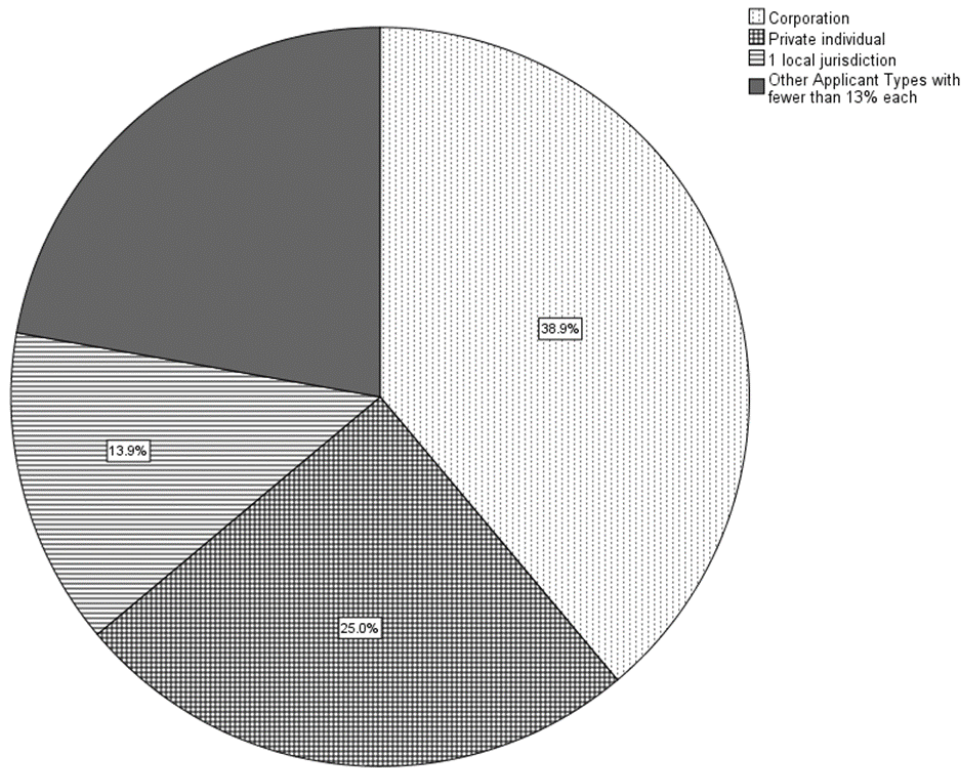


Figure 4.4. HCP Applicant Types in California ITPs – Third Generation

Table 4.3 shows the findings related to single vs. multiple listed species by generation. The most surprising observation here is that the relative percentage of single listed species HCPs has remained stable over the three generations of plans, and it is higher than the percentage of HCPs addressing multiple listed species concerns.

The next area investigated is land use by generation of HCP seeking to understand if changes in USFWS HCP policy to date encourage applicants to apply more frequently in California if multiple land uses are involved. Table 4.4 below suggests that in every generation, a single land use HCP is clearly the most common type and appears to increase with each generation. The first generation land use appears to have a larger percentage of multiple land uses by HCP than the second or third generations.

Considering the findings related to type of applicant, this observation is consistent with North and Williamson's findings that groups will not form unless they reduce the transaction costs associated with individual problem resolution (North, 1990 and Williamson, 1979). The No Surprises Policy and the uncertainty it eliminated may have reduced the transaction costs associated with development by private individuals.

Table 4.2

Top Three Applicant Types by Generation of HCP in California

	First Generation			Second Generation			Third Generation		
	Type	Frequency	Percent	Type	Frequency	Percent	Type	Frequency	Percent
Most Frequent	Corporation	10	55.6	Corporation	45	60.8	Corporation	28	38.9
Second most Frequent	2 or more local jurisdictions	3	16.7	1 local jurisdiction	13	17.6	Private Individual	18	25
Third Most Frequent	1 local jurisdiction	2	11.1	Private individual	5	6.8	1 local jurisdiction	10	13.9

Table 4.3

Single vs. Multiple Listed Species by Generation in California

	First Generation		Second Generation		Third Generation	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
No Listed Species	1	5.6			1	1.4
Single Listed Species	10	55.6	43	58.1	41	56.9
Multiple Listed Species	7	38.9	31	41.9	30	41.7
Total	18	100	74	100	72	100

Table 4.4

Single vs. Multiple Land Uses by Generation in California

	First Generation		Second Generation		Third Generation	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Single Land Use	10	55.6	56	75.7	59	81.9
Multiple Land Uses	7	38.9	18	24.3	13	18.1
Unknown Land Uses	1	5.6				
Total	18	100	74	100	72	100

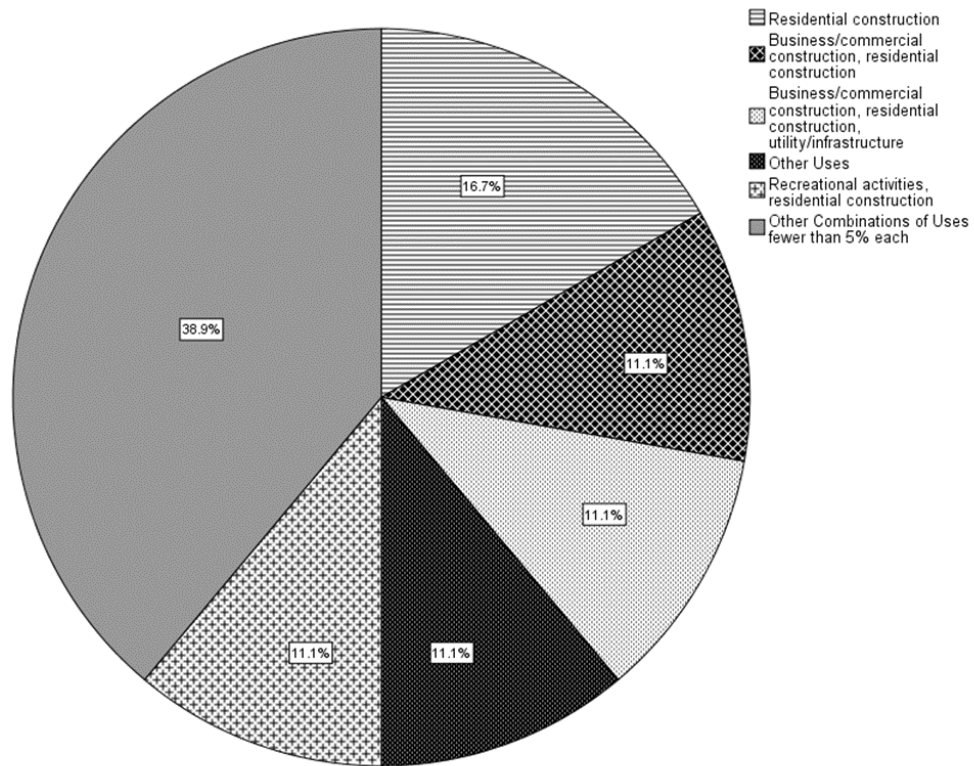


Figure 4.5. Most Common First Generation HCP Land Use Combinations in California ITPs

In the first generation of HCPs in California, the most common land use is for residential construction. The next most frequent land uses are business/commercial construction combined with residential construction, business/commercial construction combined with residential construction and utility/infrastructure, other uses undefined by USFWS, and recreational activities combined with residential construction. Clearly development associated with residential construction was a common use for HCPs prior to 1994.

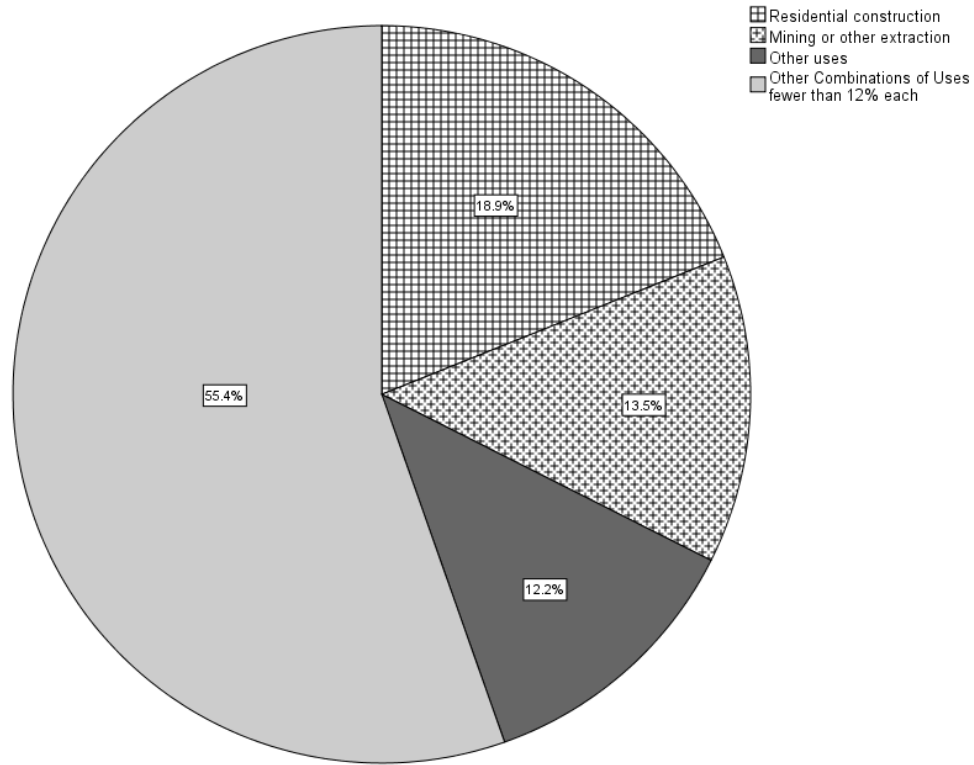


Figure 4.6. Most Common Second Generation HCP Land Use Combinations in California ITPs

Residential construction is still the largest land use within the second generation of HCPs in California. This is followed up by mining or other extraction, and other uses not specified by USFWS.

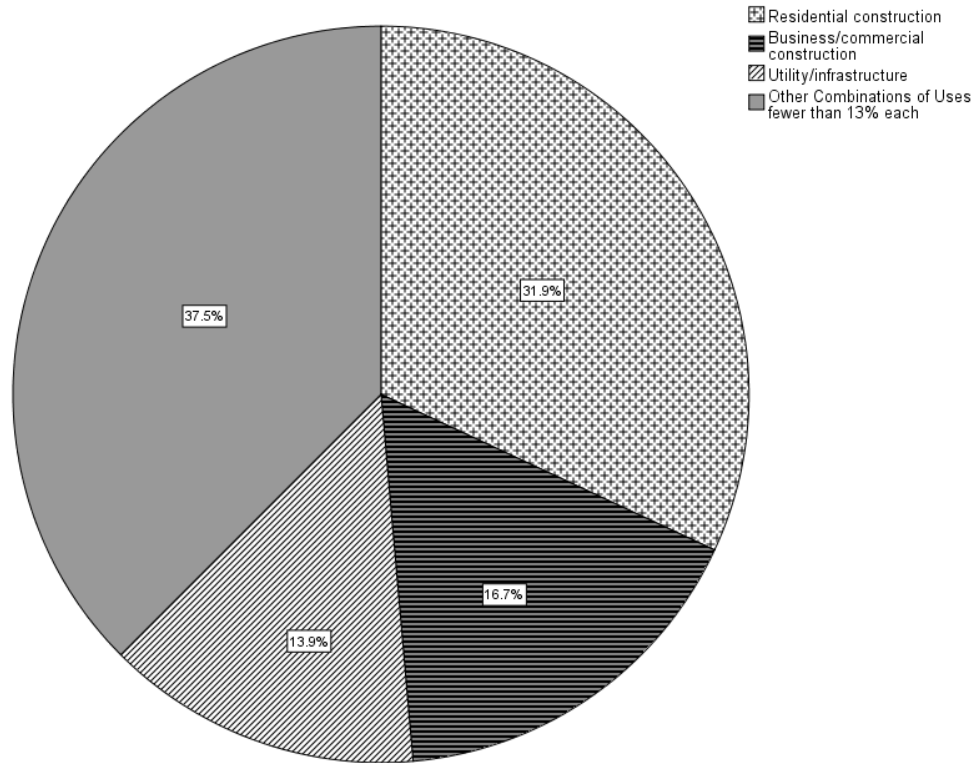


Figure 4.7. Most Common Third Generation HCP Land Use Combinations in California ITPs

Like the first two generations of HCPs, residential land use is still the most prevalent use of HCPs in California followed by business/commercial construction. Utility/infrastructure use is the third most common land use in HCPs approved since 2001. The shift to business/commercial construction over mining may be the result of multiple factors some of which may include 1) some aspect of the Five-Point Policy's requirements making HCPs less desirable for mining purposes, 2) increased growth in southern California since 2001 necessitating commercial development, or 3) perhaps the duration of the mining HCPs extended into 2001 or beyond. Additional research into that question may be warranted.

The next variable examined is the type of NEPA analysis required for individual HCPs by generation. As shown in Table 4.5, there is a marked increase in categorical exclusions in California HCPs in the third generation after the Five Point Policy guidance release. With the advent of adaptive management at that point in time, an increase in either environmental impact statements or environmental assessments might be expected. It doesn't appear, however, that an increase in more complex technical aspects of ITPs is a driver for more HCPs in the third generation. The increase in ITPs for residential construction in the third generation suggests that, for smaller parcels of land, CE's may be more appropriate. Fewer ITPs for those HCPs requiring an EIS may indicate an additional layer of complexity for those types of plans. Future research may help to explain these observations. Level of NEPA analysis is used to assist in the case study selection for Phase II.

Table 4.5

Most Frequent Types of NEPA Analysis for HCPs in California by Generation

	First Generation		Second Generation		Third Generation	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Environmental Impact Statement	3	16.7	6	8.1	8	11.1
Environmental Assessment	15	83.3	54	73	21	29.2
Categorical Exclusion	0	0	14	18.9	43	59.7
Total	18	100	74	100	72	100

The next variable examined is the duration of HCPs. Figure 4.8, Figure 4.9, and Figure 4.10 show the distribution of durations within each generation.

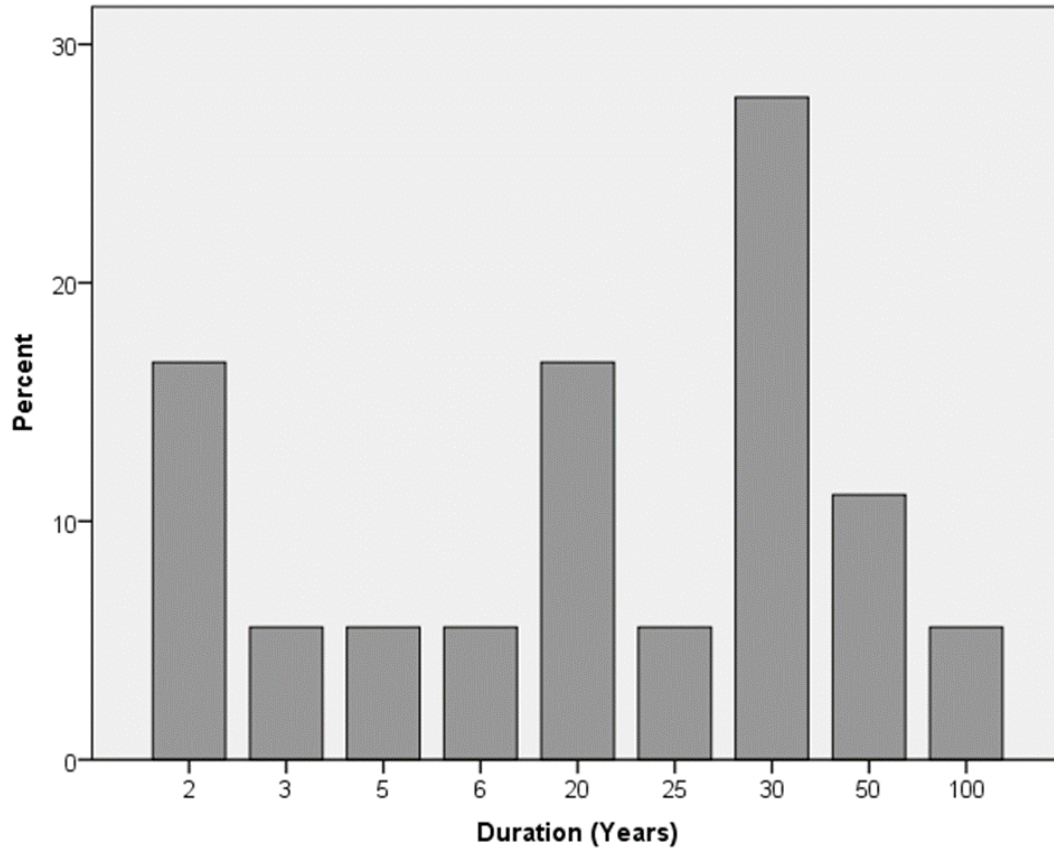


Figure 4.8. First Generation HCP Durations in California ITPs

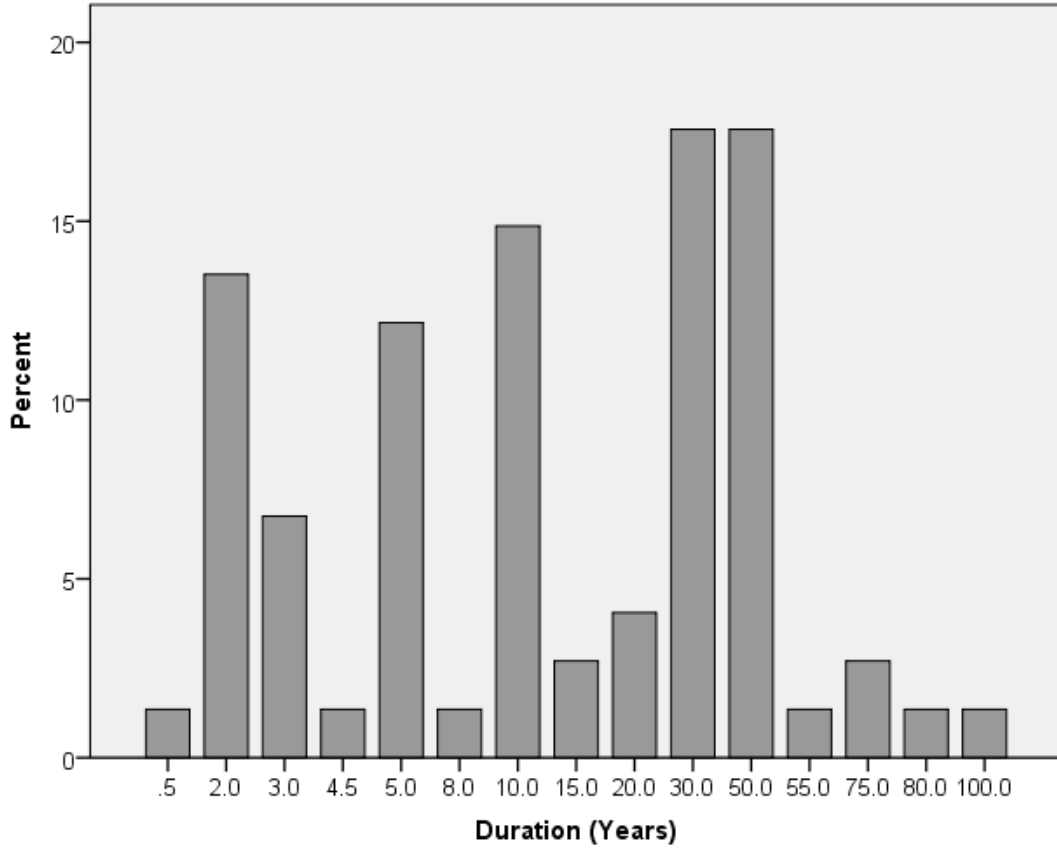


Figure 4.9. Second Generation HCP Durations in California ITPs

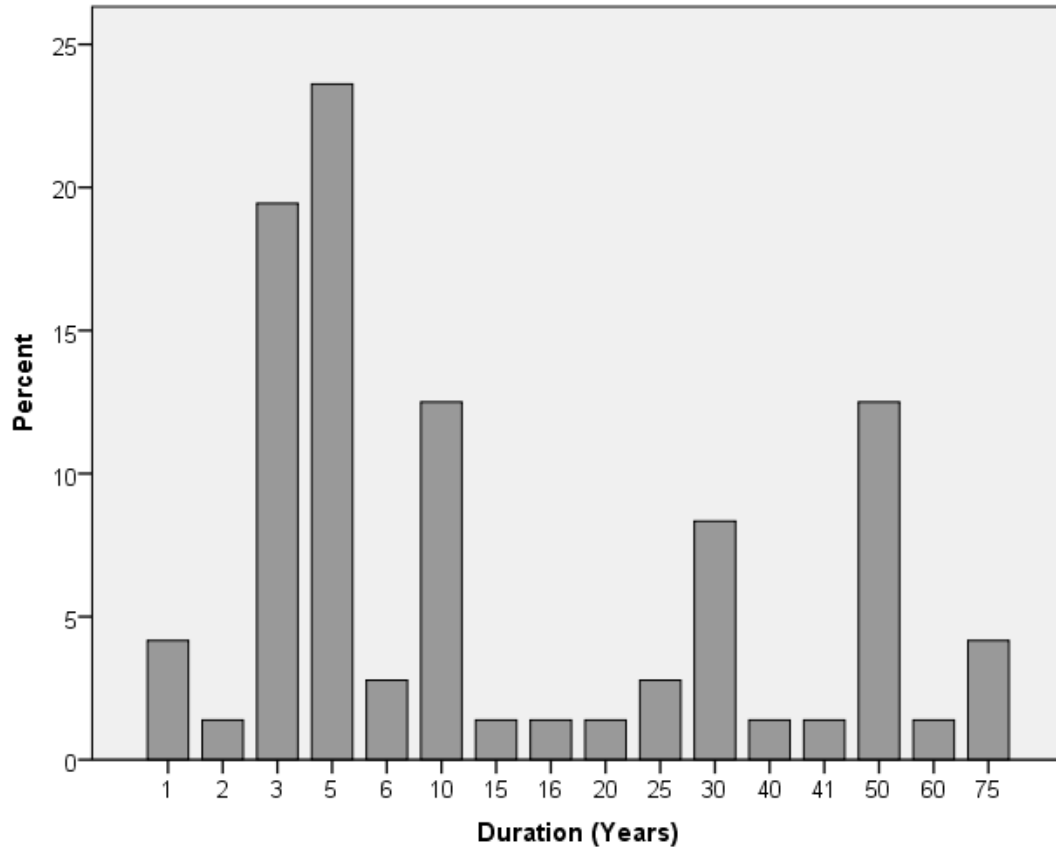


Figure 4.10. Third Generation HCP Durations in California ITPs

The most frequent duration for the first generation is 30 years followed by both 2-year HCPs and 20-year HCPs. In the second generation following implementation of the No Surprises policy, both 30-year and 50-year durations are the most frequent followed by 10-year HCPs. In the third generation of HCPs, the most common length of HCP is 5 years followed by HCPs with 3-year durations. This may be a result of the increase in residential development by private landowners. Both 10- and 50-year durations are the next most common durations. These durations may be associated with the type of land uses in each generation. It may be of interest in future research to test for correlations between duration and identified land use or similar factors. Because of the policy network issues associated with long-term HCP durations, the duration of the case study selected in Phase II is greater than 30 years. This minimum was chosen to target those HCPs whose individual leadership is most likely to change over the life of the ITP.

This assessment demonstrates trends in the uses of HCPs for various land use purposes in the State of California since inception of ITPs as a means to manage endangered species habitat. HCPs are a tool used by different types of applicants to allow development. The findings raise as many questions as they answer. Delving deeper into these questions, however, requires specific details that are not available within the ECOS database. Individual case studies are one way to gather additional information and explore the details behind why individuals or groups of individuals form policy networks to manage habitat issues in the pursuit of development.

Phase II Case Selection

As discussed in Chapter 3, the case was selected from among the HCPs in the State of California. Figure 4.11 graphically describes the selection process. The output of each data selection step becomes the input for the following data selection step.

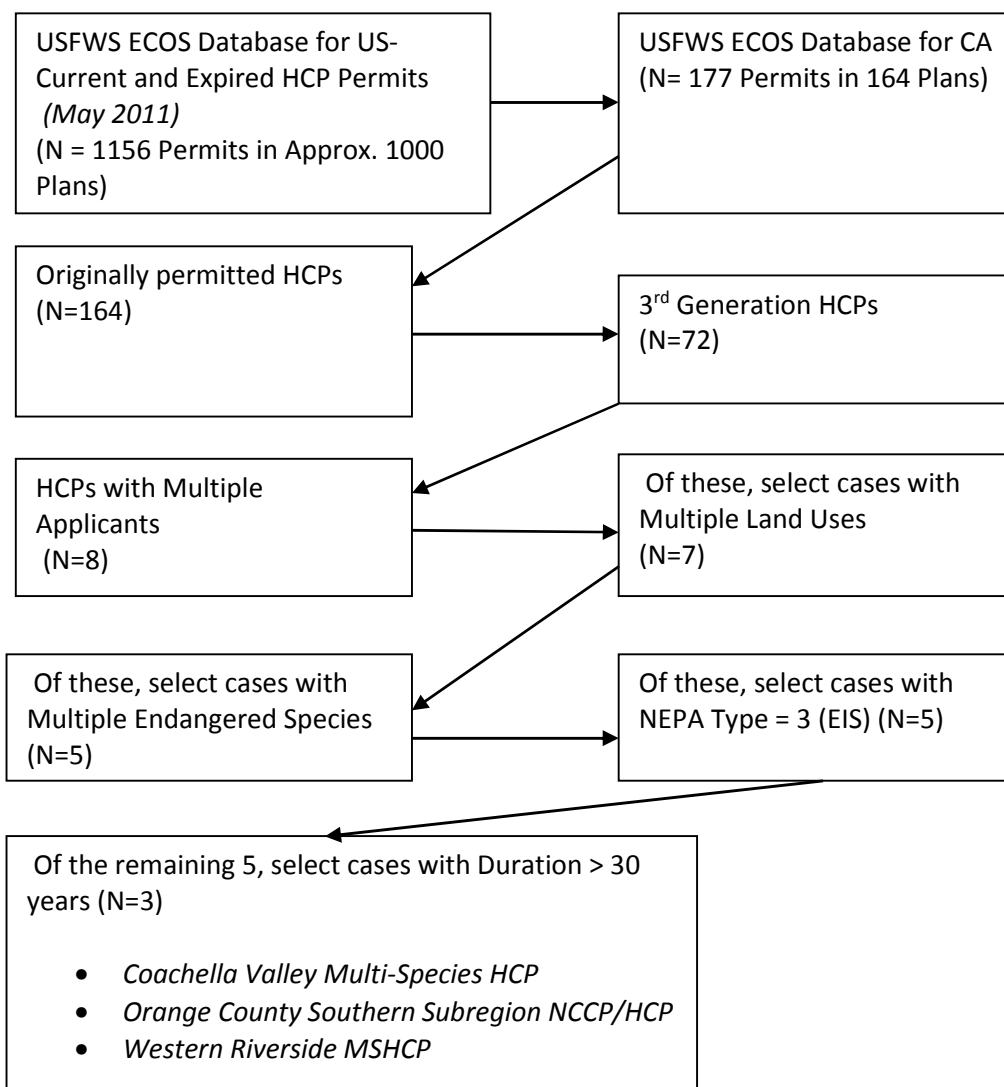


Figure 4.11 – Schematic of Case Selection Logic

Of the three remaining HCPs meeting the selection criteria, the WRMSHCP has the most permittees. In addition, a previous dissertation was completed examining the role of social capital and collaborative negotiation during the development of that

particular HCP. The previous dissertation seemed like an excellent source of information when combined with other sources to assist in determining levels of pre-existing conflict between permittees and other participants identified as a context attribute in Table B-1 in Appendix B. These two conditions suggested the WRMSHCP is appropriate to use as a case study for this research effort. One interesting observation is that all three of the final HCPs under consideration are permitted and monitored by the same USFWS office in Carlsbad, California. It is not exactly known what effect this may have on implementation of each of these plans. It does go to the point earlier, however, that certain geographic areas may be more likely than others to utilize HCPs as a tool for managing both human development and species management tension. The remainder of Chapter 4 examines the WRMSHCP case.

Phase II Findings

Western Riverside Multiple Species Habitat Conservation Plan Overview

The WRMSHCP was developed as a cooperative effort involving the USFWS, California Department of Fish and Game (renamed the California Department of Fish and Wildlife (CDFW) in 2012), local governmental agencies, property owners, development interests, farming interests, environmental interest groups and other members of the public (Western Riverside County, 2004c, Section 20, p. 4). The plan was permitted in 2004 for a length of 75 years to identify and conserve high quality habitats and the species that depend on them while integrating and providing for future land use, transportation, and wildlife conservation to residents of western Riverside County in California (USFWS, 2011). Per the WRMSHCP documents, this HCP is one of several large, multi-jurisdictional habitat-planning efforts in Southern California with the overall

goal of maintaining biological and ecological diversity within a rapidly urbanizing region (Western Riverside County, 2004a, Section 1.1).

The WRMSHCP is a necessary component of the Riverside County Integrated Plan (RCIP) because threatened and endangered plant and animal species, and their habitat are present throughout the WRMSHCP area where public and private projects associated with future growth and land development are planned. The RCIP includes 1) a comprehensive revision of the County's General Plan to establish future land use and housing needs; 2) the Community and Environmental Transportation Acceptability Process (CETAP) overseen by the Riverside County Transportation Commission (RCTC) to identify and provide for future transportation and communication corridors to relieve traffic congestion; and 3) the WRMSHCP (Western Riverside County, 2004c, Section 2.0, pp. 2-3).

The WRMSHCP protects 146 species and their associated vegetation communities (Abe, Dionne, Drennen, Felix, Golla, Graham, Guard, McMichael, Miller, Paramo, Pfaff, Ragsdale, Reinig, Ross, Sandoval, Sherrock, Talluto, 2014). The Plan Area includes approximately 1.26 million acres (1,966 square miles) in Riverside County. See Figure 4.12 below. The original plan includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. In addition, the County of Riverside and the RCTC are permittees. The cities of Eastvale, Jurupa Valley, Menifee, and Wildomar were added as permittees following initial issuance of the HCP permit. Areas within the WRMSHCP also include

the following bioregions: Santa Ana Mountains, Riverside Lowlands, San Jacinto Foothills, San Jacinto Mountains, Agua Tibia Mountains, Desert Transition, and San Bernardino Mountains (Western Riverside County, 2004a, Section 1.1).

The Riverside County Regional Conservation Authority (RCA) was created upon issuance of the WRMSHCP to manage the administrative needs of the plan.

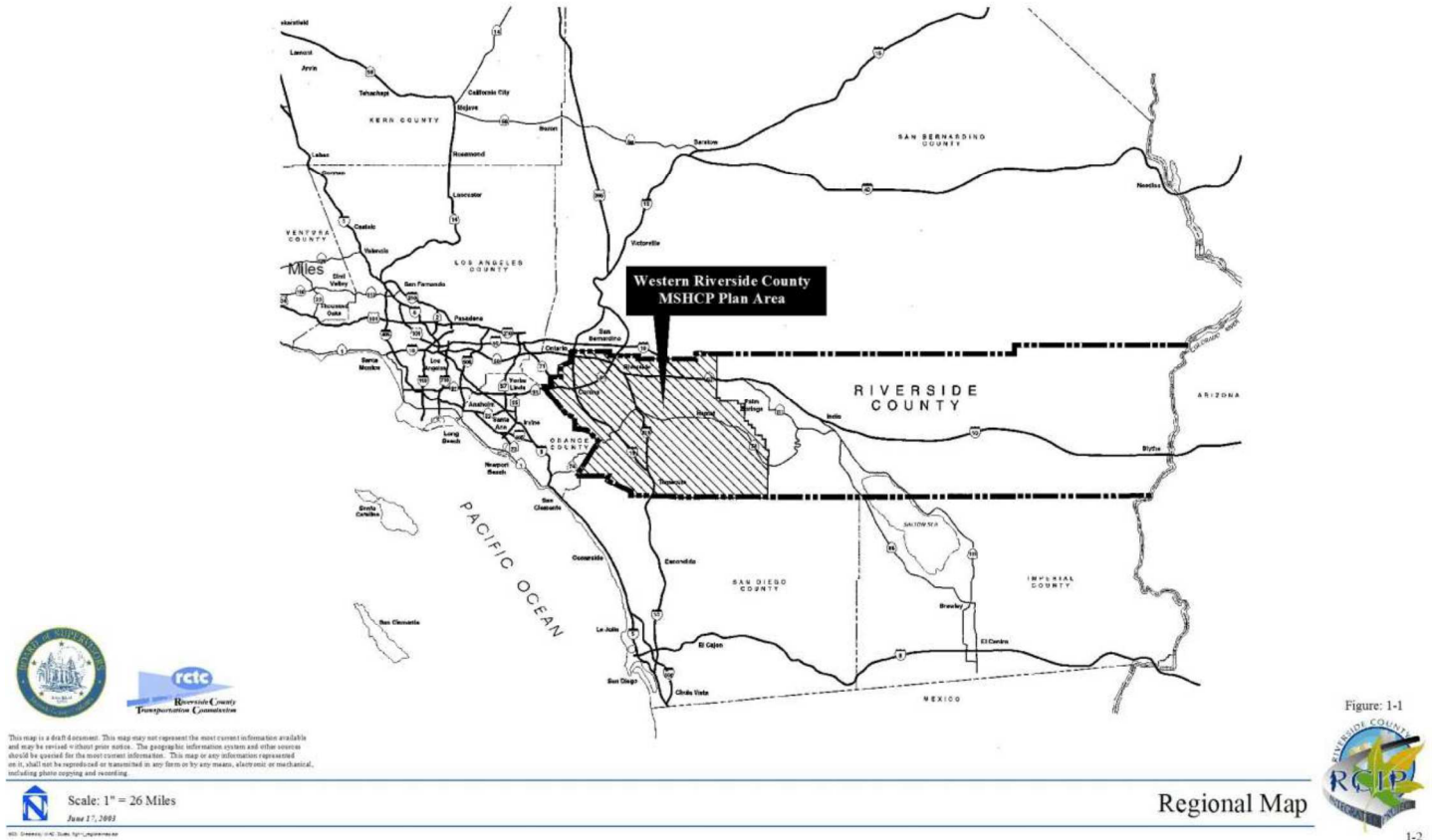


Figure 4.12 Map of WRMSHCP Plan Area from Volume 1, Section 1 of Western Riverside MSHCP (http://www.wrc-rcia.org/Permit_Docs/MSHCP_Docs/volume1/Vol1-sec1.pdf , 11/2/14)(Western Riverside County, 2004a)

Per the WRMSHCP, the strategy for managing the Conservation Area requires a balanced approach allocating responsibility for assembly of habitat and long-term management to Riverside County, state, and federal governments, the cities permitted, and the private and public entities engaged in construction activities that potentially impact the species covered under the WRMSHCP. Figure 4.13 is a summary of the existing public and quasi-public lands forming the core of the reserve system. The white areas outlined in blue comprise the Criteria Areas where the RCA seeks to acquire the remaining 153,000 acres during the first 25 years of the permit. This 153,000 acres will be acquired from within the 300,000 acre Criteria Area (Western Riverside County Regional Conservation Authority, 2013a, p. 3). The dark green areas in Figure 4.13 are those acquired as of September 17, 2014 (Western Riverside County Regional Conservation Authority, 2014).

Under the permits associated with the WRMSHCP, local projects, both public and private, have an obligation to mitigate their impacts on species. To encourage conservation on privately owned lands, the WRMSHCP's implementation strategy relies heavily on incentives to provide compensation to property owners who convey their property to the WRMSHCP Conservation Area. These incentives are in lieu of, or in addition to, monetary payment in exchange for the conveyance of a property interest, and may include waiver and/or reduction of certain development fees, monetary compensation for entering into an option agreement, fast track processing, density bonuses, clustering, density transfers, and property reassessment and tax credits if feasible (Western Riverside County, California 2004a, Section 8.4.1). Where incentives are not sufficient, conservation requires the purchase of properties from willing sellers

(Western Riverside County, California 2004a, Section 1.1). The Wildlife Agencies (USFWS and CDFW) issue a permit for “take” of Federal and State endangered species associated only with approved projects (Western Riverside County, 2004a, Section 1.1).

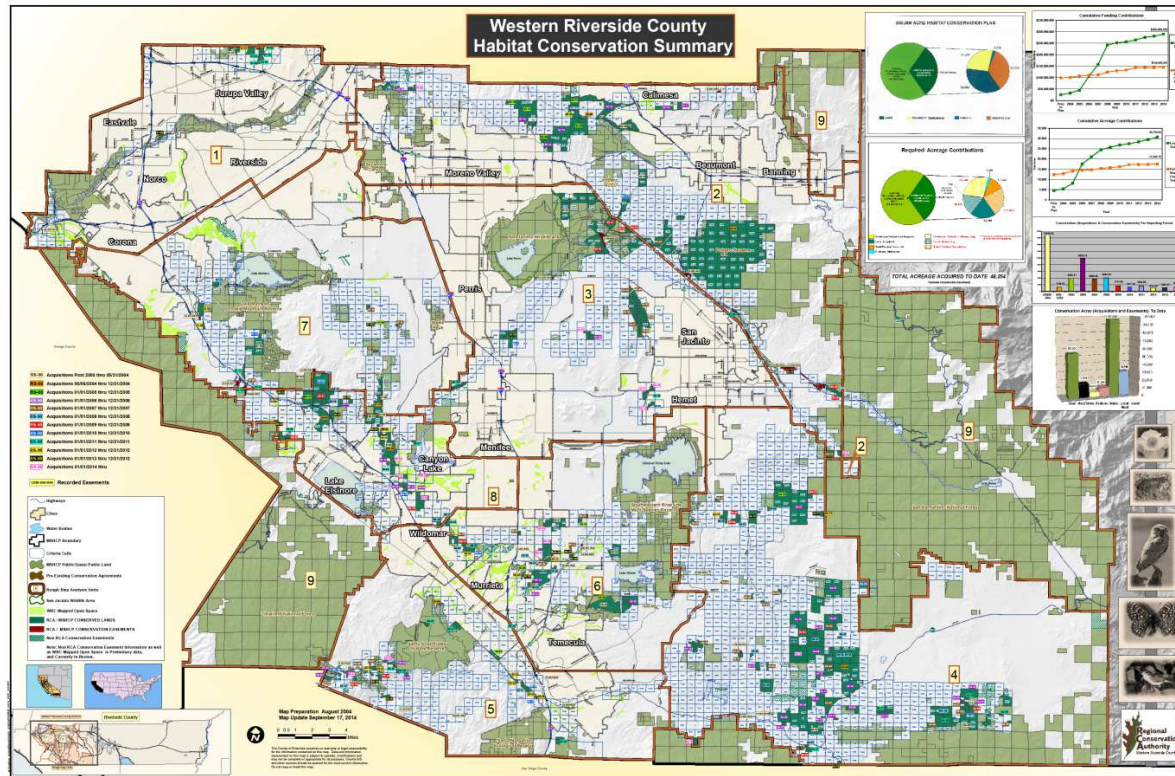


Figure 4.13

Western Riverside Multi-Species Habitat Conservation Summary Map as of September 17, 2014

Note: The light green areas are the 347,000 acres of existing public or quasi-public lands that form the core of the reserve system. The white areas outlined in blue are the cells that comprise the Criteria Area, the land from which Riverside Conservation Authority (RCA) will acquire the remaining 153,000 acres over the next 25 years to meet the goal. The dark green areas are the lands RCA has acquired to date, 48,254 acres or 31%. (Western Riverside County Regional Conservation Authority, 2014)

The WRMSHCP is also part of California's NCCP. Like the HCPs, the NCCP is a cooperative effort between public and private partners to protect habitats and species while allowing compatible and appropriate economic activity (California Department of Fish and Wildlife, 2014). The primary objective of the NCCP is to conserve natural communities at the ecosystem level while accommodating compatible land uses. Both the CDFW and the USFWS provide support, direction, and guidance to NCCP participants.

NCCP objectives are broader than the California and Federal Endangered Species Acts and are designed to identify and protect individual species that have already declined significantly in number. NCCP agreements signed in conjunction with the NCCP plans require coordination with federal wildlife agencies, USFWS and National Marine Fisheries Service, on actions associated with the federal ESA, including USFWS HCPs. The WRMSHCP NCCP permit notes that the plan serves as an HCP under the federal ESA, and as an NCCP under the CDFW Code. Both the USFWS and the CDFW can authorize take of Federal and State listed species and other species of concern, respectively, within plan areas (California Department of Fish and Wildlife, 2015).

Review of Proposed Factors to Consider in Successful HCP Implementation

This section explores the various factors identified in Table B-1 in Appendix B specific to the WRMSHCP. Findings associated with each of these factors are based upon published documentation and responses to interviews conducted with various participants and stakeholders of the WRMSHCP. The respondents' views broadly represent perspectives of the USFWS and the CDFW as Wildlife Agencies, and Riverside County, local elected officials of permittee cities, developers, and private land owners

and stakeholders as Other Respondents. Part of their agreeing to be interviewed included the commitment that individual identities would not be shared as part of this effort. Random names have been assigned to specific quotes reflecting individual informants' perspectives.

As described in Chapter 2, Bardach suggests that to better understand implementation, at least two points of view should be analyzed: the idealistic group and the group interested in selfish or non-programmatic benefits. While this language can be interpreted in multiple ways, for this analysis, the Wildlife Agencies are considered the idealistic group since both the federal HCP requirements and the state NCCP requirements are the drivers behind creation of HCP and similar NCCP policy. Narrowly, the permittees may be considered the group most interested in non-programmatic benefits. However, other parties to the WRMSHCP including developers, private landowners, environmental groups, the scientific community, and other stakeholders broadly fit into this category and are included here as well.

Respondents were all asked the same questions. Individual responses and follow-up questions and answers varied widely. Accordingly, while each respondent addressed each broad category of question as noted in Appendix C, not all respondents provided the same level of detail for the information requested. Responses here are broken down into two categories: those provided by Wildlife Agencies, and those provided by Other Respondents for the reasons described above. Please note that, except for the distinction between Wildlife Agencies and Other Respondents, the narrative based on the interviews is organized by concept and not by a particular respondent. Note also that this is not an all-inclusive transcript of any individual interview; instead this is a summary of the

respondent feedback to the questions posed specific to the particular attributes being investigated.

Context Attributes

As discussed in Chapter 3, context attributes are the characteristics of an HCP that describe the background within which the case study HCP operates (Beierle and Cayford, 2002).

Problem Complexity

The Phase II case study selection process assures that the WRMSHCP meets the definition of complexity as discussed in Chapters 2 and 3. These factors include an HCP that manages multiple permittees, multiple threatened and endangered species, multiple land uses, and has a duration lasting longer than 30 years.

Pre-existing Conflict between Permittees and/or Participants Affecting Levels of Social Capital

Section 1.2.1 of the WRMSHCP document gives historical background on the difficulties associated with developing the plan (Western Riverside County, 2004a, pp. 1-4). From a technical standpoint, it states that development in Southern California generally occurred in the coastal areas, while the inland valleys and hillsides of Riverside and San Bernardino counties remained largely rural, agricultural, and relatively undeveloped until recently (pre-2000). As development increased, so did the conflict between landowners and state and federal regulatory processes responsible for protecting threatened and endangered species and their habitats. These conflicts threatened the ability of local jurisdictions to plan for economic development and a high quality of life. Entities seeking ITPs associated with specific development projects during this period

experienced costly delays in both public and private development prior to the WRMSHCP. Piecemeal project-by-project efforts resulted in disconnected habitats not conducive to efficient and effective species management.

The burden of mitigating the effects of this urbanization now falls upon the County, cities, and landowners who hold the remaining intact vegetation communities (Western Riverside County, 2004a, Section 1.2.1). This mitigation disparity is described as conflict between the “haves and have-nots” (personal communication, Mackenzie, 2014); between cities and other local entities which built out before others and therefore have no remaining open land to contribute toward the land acquisition goals of the WRMSHCP. This contributes to the appearance that the process of collectively managing lands as part of the WRMSHCP effort is not a fair process. Communities that develop first benefit at the expense of those who choose to develop later at significantly higher costs. One unintended consequence of this appears to be that individual landowners in areas that develop later may be forced to sell their properties at lower values only after lengthy regulatory delays.

Section 1.2.3 of the WRMSHCP speaks to the history of using HCPs as a planning tool in Riverside County (Western Riverside County, 2004a). An HCP was developed to manage habitat for the fringe-toed lizard in Coachella Valley in 1985. Some of the participants of the WRMSHCP still remember the years of debate and legal wrangling associated with the listing of the Stephens kangaroo rat (SKR) in areas of Riverside County. The species was listed as endangered in 1988. A temporary HCP was put into place until a more permanent HCP was established in 1996 (Riverside County Habitat Conservation Agency, 2015).

Jimeno discusses the role these previous HCPs played on development of the WRMSHCP. She states that “One of the most challenging obstacles facing those who sought to establish the Western Riverside Multiple Species Habitat Conservation Plan (WR MSHCP) was the bad blood created during the execution of the county’s SKR HCP” (Jimeno, 2012, p. 76). She states that Riverside County first created the Riverside County Habitat Conservation Agency (RCHCA) that approved the interim SKR HCP. One of RCHCA’s first actions was to establish a strict prohibition against take of the species which resulted in two significant impacts. The first was that it generated almost unanimous agreement that the HCP was not in the landowners’ interests since they were effectively prohibited from doing any development of their property until a long-term plan was established. It took 8 years to put a long-term plan in place. The second was a high level of uncertainty for landowners in the broader study area who did not know whether or not their land would be subject to restricted use (Jimeno, 2012, p. 77). In her dissertation, Jimeno describes impacts to individual landowners who attempted to comply, but found that limitations imposed during this interim period would not allow some land owners to farm acreage previously farmed. She states they were subject to expensive Environmental Impact Reviews each time land was disturbed. Other landowners tried to sell their property during this time frame, but lost offers from developers because they were unable to obtain permits from USFWS allowing development. Lawsuits were filed against the USFWS, the CDFW, and the RCHCA claiming that inclusion of their property within the SKR HCP had essentially been a land taking for public purpose without just compensation. Other landowners were affected by USFWS requirements that no disking of land be allowed. Disking is a popular means of

brush abatement to reduce fire risks. Many believed this requirement was at cross purposes with other local requirements to keep land clear for fire abatement purposes. Based on interview responses associated with this effort, differing opinions remain today about the effectiveness of other means of brush abatement that were allowed by USFWS but either may not have been used by landowners, or that may not have been as effective, to manage fuels. Subsequent fires and the resulting damages led to federal Senate hearings and other public profiling in the media both locally and nationally (Jimeno, 2012).

All of this controversy influenced the development of the WRMSHCP. Many of the same participants were involved in both planning processes. Conflict over who could participate in the SKR HCP led to the adoption of pre-negotiation procedural agreements to avoid similar scenarios during negotiation of the WRMSHCP. Contention over who would bear the cost of species protection in the SKR HCP, and the realization that sufficient financial resources were not available as needed during a recession in the 1990s, led to significant delays in land acquisition for the SKR. There was hope that lessons learned from the SKR HCP implementation would be applied as the WRMSHCP developed (Jimeno, 2012).

Jimeno refers to recollections of Former Riverside County Supervisor Tom Mullen who was involved in both HCP processes when she states that county officials knew that key stakeholder participation would be required during negotiation of the WRMSHCP. As a result, the county formed a Preparation Committee made up of state, county, city, and wildlife officials, and an Advisory Committee made up of various stakeholders including property owners and environmentalists. However, Jimeno also

notes that some disagreed with Mullen's depiction of the Advisory Committee as broadly inclusive. She relays stories of participants who stated that many smaller landowners were not represented and were unaware of the plan throughout most of the negotiation phase. She discusses examples of those who were explicitly denied from participating. She states that "... acceptance as a legitimate stakeholder within the Advisory Committee meant embracing the notion of willingness to compromise" (Jimeno, 2012, p. 90). In at least one instance, the perception that an individual was not willing to compromise eliminated them from further participation in plan negotiation.

Jimeno documents a number of issues that arose during the WRMSHCP negotiating process in addition to stakeholder access. These included determining how decisions would be made and communicated to the Steering Committee overseeing the WRMSHCP process, the primary goals of the plan, how the land acquisition would be funded, and difficulty in understanding USFWS criteria, a perceived lack of cooperation from the agency, and concerns over scientific adequacy. One significant change in the WRMSHCP from previous HCPs was to develop flexible reserve boundaries as opposed to fixed boundaries. Lessons from other plans suggest that if firm boundaries are identified, the result can be rapid land devaluation and economic loss that can irreparably damage families and businesses (Jimeno, 2012). Instead, as depicted in Figure 4.13, criteria cells were developed for the WRMSHCP identifying desirable property that would limit development until either those properties were acquired and/or put under long term conservation easements, or determined not to be necessary for plan implementation. There was extensive debate over development of a land negotiation and acquisition process. The WRMSHCP ultimately included the Habitat Evaluation and

Acquisition Negotiation Strategy (HANS) to aid permittees in negotiating the regulatory process to transfer property to the plan reserve. The basic assumption behind this strategy is that landowners should be fairly compensated for their land, and provides for both developer fees and developer incentives previously mentioned. Jimeno concludes that leadership of the WRMSHCP Steering Committee understood the need to gain political consensus from the Advisory Committee on the various elements of the plan early on in order to ultimately be successful.

The comments below summarize respondents' responses when asked to comment on the nature of the relationship between USFWS and permittees prior to issuance of the WRMSHCP ITP, and how that may have affected trust levels during implementation of the WRMSHCP.

Wildlife Agencies –

The Wildlife Agency respondents concurred that the relationships going into the development of the WRMSHCP were difficult between Riverside County and the USFWS because of the SKR HCP in the 1990s. “At that time, HCPs were new and what may look like mistakes now were primarily due to lack of experience. Relationships were very contentious. The SKR HCP included hard, long, bloody, really, really bloody, you know riotous public meetings” (personal communication, Dylan, 2014). Shortly after these events, the gnatcatcher was listed. There were reports of owners with large tracts of coastal sage scrub land destroying plants on their property to avoid potential ESA issues. The gnatcatcher listing was closely followed up by listing of the Quino checkerspot butterfly in the region. These events reinforced the idea that single species

management is not a viable long-term strategy for dealing with economic conflict and avoiding extirpation of species.

Wildlife Agency respondents also referred to Tom Mullen and his vision of dealing with multiple species at the same time. Along with the vision, he brought the support of other County supervisors. “He was the man who brought it across the finish line with respect to creation of the MSHCP” (personal communication, Dylan, 2014). “The County also brought the cities to the table; however, the cities did not participate in any meaningful way during the WRMSHCP negotiation and development phase” (personal communication, Dylan, 2014).

The permit is in its 10th year of implementation. Relationships have been evolving and changing during that time. Today, many of the cities only remember the frustrations associated with implementation and feel the plan has been imposed on them, even though their city councils adopted implementation ordinances when the plan was initially permitted. There has been almost no contact between some of the permittees and the Wildlife Agencies, while other permittees have been in contact almost daily. There’s a definite wariness of the process with the City permittees that may be associated with the high turnover of staff and heavy reliance on consultants. Riverside County raised sales taxes to generate funds for both transportation projects and to support the WRMSHCP. The result was a ‘shotgun wedding’ for some of the cities who otherwise would likely not have participated (personal communication with Dylan, 2014).

There is as much trust between the Wildlife Agencies and the Riverside County Regional Conservation Authority (RCA) formed to administer the

WRMSHCP as there has ever been, although there are still differences of opinion between the agencies on how best to implement the plan. There's an acknowledgement that the RCA is subject to actions of elected officials which may, in turn, affect their actions. There is a very good relationship between the Wildlife Agencies themselves; they communicate frequently and understand that they must maintain a good relationship because it's a difficult plan and they have to be willing to compromise. There were difficulties early on during implementation working with USFWS staff that was "more rule-based, black and white, no gray in between, which is impossible on this plan" (personal communication, Morgan, 2014).

Other Respondents –

Some of those charged with implementation responsibility agree that there used to be constant friction in interpreting the plan.

As new staff arrives at RCA, the Wildlife Agencies, the cities, or the County, new cycles of interpretation occur. Day-long meetings monthly with the Wildlife Agencies have significantly improved working relationships. You have to have a good relationship. Participants have learned there are advantages to bringing forward controversial projects early and encouraging appropriate jurisdictions to do the same (personal communication, Harper, 2014).

"Implementing the agreement is like a marriage, it takes work" (personal communication, Mackenzie, 2014).

Relationships with the permittees during the negotiation phase of the WRMSHP still leave some permittees with a negative perspective of the plan.

“We’re in cahoots with the USFWS,’ but the cities do not uniformly consider themselves voluntary participants in the plan regardless of what the plan says. Instead, they are used to gather development fees for the RCA” (personal communication, Gerry, 2014).

Roles of the RCA are discussed in more detail below. In general, the cities work through the RCA rather than directly with the Wildlife Agencies. At least some cities have not had a great working relationship with the USFWS (personal communication, Gerry, 2014). Others suggest that the plan works well when the cities and other permittees take authority, not when they default land use decisions to the Wildlife Agencies (personal communication, Shelby, 2014).

We believed during negotiation of the WRMSHCP that the RCA would be the arbitrator for everyone with the USFWS as a way to deal with USFWS’ perceived heavy-handedness. The idea behind the plan was that USFWS would get more by working through the plan, and permittees would be able to move forward. Instead, USFWS are just bullies and are a roadblock. There was a belief that the RCA would be the neutral party between USFWS and landowners to deal with that roadblock, but it isn’t happening. There’s a sense that USFWS isn’t playing fair, that they are inflexible, and are not acting in good faith. It’s a bad marriage with USFWS (personal communication, Mackenzie, 2014).

Some respondents can see how the plan could be implemented fairly as intended. However, at least one respondent’s perspective acknowledges differing viewpoints between the USFWS and property owners.

There's no real structure or forum for formal regular meetings with landowners or environmentalists and the Wildlife Agencies. Local permittees are supposed to be the decision makers, but they often relinquish that authority to the RCA (personal communication, Shelby, 2014).

Capacity of Participants to Navigate Regulatory, Political, Social, Economic, and Technical Issues

Several respondents addressed the question of participants' capacity to navigate through the WRMSHCP land acquisition process.

Wildlife Agencies –

With respect to the capacity of participants, the high staff turnover at the city level creates a big need for learning. The Wildlife Agencies would like to have better outreach so that the cities would feel more comfortable calling and asking questions. Once people get the wrong approach in their mind, they don't change it unless you have the time to call them up or meet with them and talk about it. The time to build those personal relationships is lacking (personal communication, Morgan, 2014).

Other Respondents –

With respect to the capabilities of participants, a comment was made that permittees play a large role in implementation since they make up much of the RCA Board of Directors. However, "Board representatives are a revolving door and don't always get the meat and potatoes of what they're supposed to be doing" (personal communication, Gerry, 2014).

Context Attributes Findings

Comparing the responses of the Wildlife Agencies to the Other Respondents here leads to a several observations. First and foremost is that both parties share concerns in multiple areas. Both parties vividly remember the conflict leading up to the decision to pursue this multiple species HCP and in negotiating the terms of the WRMSHCP. The negative recollections associated with these events continue to affect how both formal and informal parties to the plan make decisions today. It appears that the previous adversarial relationships associated with the SKR HCP directly led to decisions to create a more collaborative process to manage multiple species in the region. This suggests that learning occurred between the parties in the network and they opted to move into a more collaborative sphere for development of the WRMSHCP (Weible, 2008).

Both Wildlife Agencies and others acknowledge that the relationships amongst the parties continue to evolve, largely due to changes in personnel associated with elected officials at the county and local government levels. Both groups recognize that rigid approaches to problem solving do not work. Some flexibility in thinking is required. Along these lines, both parties refer to the WRMSHCP as a marriage, shot-gun or not. The relationships are difficult and take continued work to manage. The importance of outreach activities associated with the plan is noted.

The Wildlife Agencies identified Tom Mullen as someone who played a leadership role, not only in moving forward with the previous SKR HCP, but especially in the negotiation of the WRMSHCP. The Wildlife Agencies also commented on currently having trusting relationships between themselves and the RCA.

Other Respondents refer to ongoing negative relationships with the USFWS using words like “unfair” and “inflexible.” They observed that the plan works better when the permittees exercise their authority within the terms of the Implementing Agreement. This comment suggests that the transaction costs for permittees may be too high resulting in lack of participation by some of the permittees (Lubell et al., 2002; North, 1990; and Williamson, 1979).

The Other Respondents specifically mention that there does not appear to be a formal venue or forum for landowners and environmentalists to participate in WRMSHCP decisions. As noted by Pressman and Wildavsky, creation of an appropriate venue for participation is a fundamental key to implementation success (1984).

The Other Respondents also acknowledge the helpful role that informal players like the landowners and environmentalists play in implementing the plan (Lubell and Fulton, 2007; Sabatier, 2007).

Process Attributes

Process attributes are factors that appear to be helpful and/or necessary to implement natural resource management plans like HCPs (Beierle and Cayford, 2002).

Presence of Specific goals/objectives other than Biological

The overall goal of the WRMSHCP is based on the RCIP Vision Statement and supporting policy directives. The plan is to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. Those goals are explicit and easy to understand. Based on an analysis described within WRMSHCP Section 3.0, it was determined that the plan will result in a Conservation Area in excess of 500,000 acres. This includes approximately 347,000 acres of existing Public/Quasi-

Public Lands, and approximately 153,000 acres of Additional Reserve Lands (reserve) to be acquired (Western Riverside County, 2004a, Section 1.3).

There are 3 primary goals of the plan. The Biological Goal is to conserve covered species and their habitats in the WRMSHCP Plan Area. The Economic Goal is to improve future economic development in the County by providing an efficient, streamlined regulatory process through which development can proceed in an efficient way, describing where development should and should not occur. The Social goal is to provide for permanent open space, community edges, and recreational opportunities which contribute to maintaining the community character of Western Riverside County (Western Riverside County, 2004a, Section 1.3).

Neither the Wildlife Agencies nor Other Respondents had any specific comments with respect to this factor during the interviews. This may be because the goals are clearly stated in the WRMSHCP and there is nothing found in this investigation to suggest the goals have changed. Insights related to this factor may be gleaned, however, through the discussion regarding the motivation of the participants below.

Identify Type of Actors Participating in addition to Permittees and Wildlife Agencies

Based on documentation including the WRMSHCP, related meeting minutes, RCA and permittee resolutions, RCA bylaws, and discussion with respondents, the primary actors playing a role in implementation are developer groups and individual developers, environmental groups, agricultural groups, other public and private landowners, and citizens in addition to the permittees and Wildlife Agencies of the WRMSHCP.

Wildlife Agencies –

The Endangered Habitat League (EHL) is a critical partner because, if a permittee is not implementing a permit correctly, the EHL may be willing to sue them. They're committed to conservation planning, have the ear of people who don't want to listen to the agencies, and are compromise-oriented. Dan Silver of the EHL plays a very important role. He represents multiple environmental groups, and is a practical, get-it-done guy. Sometimes just hearing him out reminds us of the importance of being straightforward and practical (personal communication, Morgan, 2014).

Individual developers play a role. Some sat on the Steering Committee to support development of the WRMSHCP. Consultants participate in the implementation in various ways. Ed Sauls' is one in particular. He used to be a member of the Building Industry Association. His niche has been solving listed species problems, negotiating, and he thinks outside the box. Like most consultants, he never forgets his clients' needs (personal communication, Dylan, 2014).

“Biological consultants are still needed but to a much lesser degree in implementation to write necessary California Environmental Quality Act (CEQA) documents” (personal communication, Morgan, 2014).

“Friends of the San Jacinto Valley, the local Audubon chapter, and The Nature Conservancy all participate by reviewing projects, advocating for species, and threatening legal challenges if necessary” (personal communication, Morgan, 2014).

There are other constituencies who are invested in conservation that are frustrated with the Wildlife Agencies for not taking a line that is appropriate from a conservation or natural resource perspective, but that is not mandated or necessary under the WRMSHCP. However the plan states that the conservation coming out of these hooked up squares (in the criteria areas) was enough. Absent the WRMSHCP, the voices of these groups may be heard differently (personal communication, Dylan, 2014).

Other Respondents –

Tom Mullen is an actor who's played a major role in MSHCP implementation activities. He's kind of like the father of our MSHCP. He's a gentleman, a gracious guy. Tom is a bright guy and the RCA uses him often as a consultant. Referring to Mullen, one respondent stated that they are on opposite sides of things a lot, but he has integrity and I can deal with anybody as long as I can disagree with you with integrity. Mullen is a player on the political scale at that level where, no matter who is on the Board of Supervisors, they have to deal with him (personal communication, Mackenzie, 2014).

“Developers and landowners, and to some extent, the larger environmental community play a role in MSHCP implementation activities. But developers and landowners are not formally organized. They are generally independent. They will coalesce, however, when RCA pulls crap” (personal communication, Shelby, 2014).

There has been friction with some developers and others because they are one of many specialized interest groups working through the WRMSHCP process. The Farm Bureau was a major player in developing the WRMSHCP;

however, they've played no active role in implementation. The Building Industry Association is a big player as a significant portion of development within Riverside County is housing. The Building Industry Association carries most of the burden of financing the WRMSHCP through development fees. They are also big proponents of the plan. The plan provides certainty in the process.

Coordinating with the Corps of Engineers was a problem at the start of implementation since they did not fully understand the plans provisions for Section 7 consultation. RCA tried to do a special management plan for 404 permits, but there was not support for the 401 process, the State portion of the permitting process, due to issues with the Regional Water Quality Boards. The rules are not consistent between the Regional Water Quality Boards. The State believes in on-site mitigation vs. the Corps of Engineers approach that looks at regional or watershed mitigation. It took a few years, but now the plan is recognized by the Corps of Engineers through an abbreviated ESA Section 7 process which recognizes the compliance with the WRMSHCP (personal comments, Harper, 2014).

“An RCA biologist does a great job with public outreach and is willing to work either on his own, or with the Wildlife Agencies, to answer permittee questions” (personal communication, Gerry, 2014).

The Nature Conservancy doesn't bring much money, but they do contribute to help defray costs for things like land appraisals and are very helpful, particularly with their political connections in Washington D.C. and Sacramento.

The EHL has been very helpful on specific projects (personal communication, Harper, 2014).

Accessibility for Actors other than Permittees to Participate (Open vs. Invitation only, etc.)

The Implementing Agreement describes various groups and their roles created to support the WRMSHCP. Participation is largely through this Cooperative Organization Structure (Structure) (Western Riverside County, 2004c, Section 11.2). This is discussed in more detail below. However, the Structure does not identify ways for individuals or entities not described to participate in the process.

The USFWS Five-Point Policy (Policy) (National Archives and Records Administration, 2000) states that, in USFWS experience, the more public participation that occurs in the development phase of a plan, the more likely it will be accepted by the public. However, inclusion of interested parties in the development of an HCP is ultimately the decision of the applicant. The ESA and its implementing regulations require only a public comment period after the plan is submitted and published in the Federal Register (p. 35246). The Policy goes on to state that “Although the development of an HCP is the applicant’s responsibility, the Services will encourage applicants for most large-scale, regional HCP efforts to provide extensive opportunities for public involvement during the planning and implementation process” (p. 35256). So while the USFWS encourages public participation during plan implementation, the decision on whether and how to accomplish that lies with permittees.

NCCP agreements identify public participation process requirements. For example, all draft plans, memoranda of understanding, maps, conservation guidelines,

species coverage lists, and other planning documents associated with an NCCP must be made available for public review in a reasonable and timely manner. An outreach program is also required to provide information to interested persons including landowners with an emphasis on getting input from a balance of affected public and private interests including state and local governments, county agricultural commissions, agricultural organizations, landowners, conservation organizations and the general public (State of California, 1991). Note again, however, the focus is on public participation during plan preparation as opposed to during plan implementation.

In addition to the groups explicitly outlined in the Structure, an Executive Committee and a Stakeholder Group were created by the RCA to assist in making decisions. These groups are discussed in more detail below as part of the roles of primary actors in the WRMSHCP.

Wildlife Agencies –

There's a decent amount of public outreach through the RCA, and the RCA is still learning about the public outreach sphere. That's to be expected. The RCA took pamphlets to Washington, DC, focused on infrastructure and jobs. They were stunned at how much people wanted to pay attention to them with this approach as opposed to asking to give USFWS more dollars, or explaining their problems with implementation. Flipping the channel from 'look at all the conservation we're achieving to look at all the infrastructure and community development that's happening inside our plan area' was smart in this political climate (personal communication, Dylan, 2014).

There seems to be a need for a ‘Friends of the MSHCP’ group; people who develop constituencies in certain places. For example, if we could figure out how to get someone in charge of hunting on conservation lands where it’s appropriate, that would bring in another constituency. People have to engage if we’re going to keep the MSHCP. If the local population does not have an emotional attachment to the conservation that is achieved, we’re kidding ourselves in an expensive and elaborate way. If there are going to be natural resources for future Americans, then it means existing Americans have to not take them off the planet (personal communication, Dylan, 2014).

We need to do a better job with public outreach and support for the plan. All the legislators or Supervisors hear is ‘I can’t build my project.’ They’re not hearing from the people who say I like the hills or I enjoy hiking, or I’m glad there’s open space (personal communication, Morgan, 2014).

Other Respondents –

RCA reaches out to others, for instance business groups. Key stakeholders are sought out because they are influential in the area. RCA wants to inform them what they are doing and wants to let people know that, if they have concerns, now is the time to voice them. While there is no requirement for the RCA to do the outreach, if it does not, then RCA will have additional issues to deal with (personal communication, Harper, 2014).

RCA is pretty open when it comes to public outreach. They have field trips and invite classes to the habitat areas. The USFWS comes and talks to the

RCA Board when they are asked. It is helpful, but the RCA Director just defends their position on species (personal communication, Gerry, 2014).

“The RCA has done some outreach to try to find out under what conditions people would support additional funding. There was originally some outreach to the public. There continues to be outreach to the permittees” (personal communication, Shelby, 2014).

Role of Primary Actors (regulatory, political, technical participatory, co-management)

With respect to the network of parties associated with the WRMSHCP, a number of formal participants are identified and their roles are outlined in the WRMSHCP language and the Implementing Agreement. The current signatory parties to the plan are the permittees listed in Table B-2 in Appendix B, and the USFWS and CDFW as the Wildlife Agencies. While some participating entities have engaged in the WRMSHCP as envisioned, others have not. The Implementing Agreement states that successful implementation of the WRMSHCP requires both a local administrative structure and effective coordination with the state and federal partners (Western Riverside County, 2004c, Section 11.2). To do this, they established an organizational structure for implementation and management of WRMSHCP activities as described below.

The RCA website describes 4 of these groups of partners to the WRMSHCP: Members or Permittees; Participating Special Entities made up of regional public facility providers; Partner Agencies who are responsible for public and quasi-public lands within the reserve system; and Friends including the Wildlife Agencies and others with

conservation, development, planning, and agricultural special interests (Western Riverside County Regional Conservation Authority, 2014).

The Wildlife Agencies are clearly formal parties to the WRMSHCP as the entities issuing the ITPs. Responsibilities of the USFWS include issuing ITPs to permittees upon satisfaction of the legal requirements outlined in the WRMSHCP (Western Riverside County, 2004c, Section 14.1). In addition, the Wildlife Agencies commit to providing both technical assistance and seeking additional funding for plan activities to the extent practicable during implementation of the plan. The USFWS also provides various assurances to the permittees. They recognize the efforts of permittees within the plan, and commit to requiring reasonable and prudent measures associated with approved projects that are consistent with the plan. In recognition of the permittees commitments, the USFWS agrees not to designate Critical Habitat within the plan area, and if they do, that they will not require any additional protective measures beyond what already exists in the WRMSHCP. They also agree that any subsequent species recovery plans do not obligate permittees to take on additional tasks. In accordance with the No Surprises policy, if Unforeseen Circumstances¹ are identified requiring additional mitigation, the USFWS agrees that any mitigation will be restricted to modification of the MSHCP conservation area and will be the least burdensome measures available.

¹ Unforeseen Circumstances are defined as changes in circumstances affecting a covered species adequately conserved or geographic area covered by the MSHCP that could not reasonably have been anticipated the by parties at the time of the MSHCP's negotiation and development, and that result in a substantial and adverse change in the status of the covered species adequately conserved (Western Riverside County, 2004c, p. 14).

The CDFW also makes commitments and assurances. They acknowledge authorizing take of protected species by issuance of the NCCP permits. Like the USFWS, they commit to not requiring additional land, water, or financial compensation or additional land use restrictions unless they determine that continued implementation of the agreement jeopardizes species. Permittees may be required to take additional mitigation action in response to changed conditions. However, these are not intended to require additional funding or impose significant additional burdens on the permittees. Both Wildlife Agencies commit to extending ITP protection to recognized Third Parties (Western Riverside County, 2004c, Section 17).

Each permittee is responsible for implementing the WRMSHCP through their normal land use, planning, and approval processes (Western Riverside County, 2004a, Section 6.0; Western Riverside County, 2004c, Section 3.59). This includes adopting and maintaining resolutions or ordinances to allow them to implement all of the requirements of the WRMSHCP for public and private development projects. Permittees also collect Local Development Mitigation Fees and other fees as appropriate, comply with the appropriate habitat evaluation and land acquisition strategies identified in the WRMSHCP, transmit required documentation and funding to the RCA and Wildlife Agencies, and manage WRMSHCP Conservation Area property or conservation easements owned or leased by the permittee. Of the 153,000 acres of reserve required for conservation under the plan, the permittees are obligated to provide 97,000 of those acres. The remaining 56,000 acres were originally to be paid for by state and federal entities (Western Riverside County Regional Conservation Authority, 2013a, p. 8).

One significant step in plan implementation was creating the RCA. The RCA was created as a Joint Powers Authority to provide primary policy direction for implementation of the WRMSHCP (Western Riverside County, 2004c, Section 3.93, p. 13). Duties of the RCA include land acquisition and administration; land management; biological resource monitoring in the WRMSHCP preserve; and mitigation fee collection and management. The RCA also administers budget and funding strategies, reviews development of covered activity projects within the WRMSHCP criteria cells, assumes some of the duties and responsibilities of the RCHCA pursuant to the SKR HCP, conveys taking authority to entities utilizing the Participating Special Entity provision in the plan, administers the boards and committees set up by the WRMSHCP, serves as custodian of records related to plan implementation, oversees and monitors WRMSHCP clerical changes, amendments, and criteria refinements, and generally assists with resolving implementation questions, concerns, or disputes (Western Riverside County Regional Conservation Authority, 2007).

Participating Special Entities are regional public facility providers, e.g. a utility company, school, water district, etc., that operates or owns land within the WRMSHCP Plan Area and applies for take authorization pursuant to the Implementing Agreement (Western Riverside County, 2004c, Section 3.83). The Participating Special Entity submits an application to the RCA detailing the proposed activity and its potential impacts. If the RCA finds the proposed activities are in compliance with the WRMSHCP, it issues a Certificate of Inclusion to the permit. Participating Special Entities pay a fee based on the type of activity proposed (usually between 3-5% of total

capital costs). Development activities also pay a Local Development Impact Fee (Western Riverside County, California 2004c, Section 11.8).

The WRMSHCP and Implementing Agreement also make provisions for Third Parties Granted Take Authorization. These parties may be landowners, developers, farming interests and other private and public entities undertaking activities covered by the WRMSHCP as long as these activities are under the direct control of the permittees, or with a Certificate of Inclusion or other written mechanism in compliance with the Implementing Agreement and WRMSHCP (Western Riverside County, 2004c, Sections 3.106 and 17).

In addition, the RCA has several subgroups and committees to assist with oversight and implementation of the WRMSHCP (Western Riverside County, 2004a, Section 6.6.2). Subgroups within the RCA include the Board of Directors, the Executive Director and Executive Committee, the Stakeholder Committee, and the Reserve Management Oversight Committee. As previously mentioned, the original WRMSHCP Structure did not anticipate a formal Executive Committee or Stakeholder Committee (Western Riverside County, 2004a, Section 6.6.2). Both were added by the RCA Board of Directors through the Western Riverside County Regional Conservation Authority By-Laws.

The RCA Board of Directors role is to provide primary policy direction for implementation of the WRMSHCP and to provide opportunities for public participation in the decision making process. The Board of Directors convened its first meeting in February 2004 and has been meeting approximately monthly ever since. The Board of Directors is responsible for forming the Funding Coordination Committee. They've

chosen to meet that obligation by forming the Executive Committee to oversee RCA administrative and staff functions (Western Riverside County Regional Conservation Authority, 2007). Per the RCA website, the Executive Committee is appointed by the Chairperson of the RCA Board of Directors and ratified by the Board of Directors to oversee RCA's administrative and staff functions, and other matters as delegated by the Board.

The Executive Committee consists of seven members including the Chairperson of the Board of Directors, the Vice Chairperson of the Board of Directors, and past Chairperson of the Board of Directors, and 2-4 representatives of Riverside County (Western Riverside County Regional Conservation Authority 2015a). This group began meeting in July 2004 and has met approximately monthly ever since.

Under the current Structure, the Executive Committee forms the Funding Coordination Committee which consists of members of the Wildlife Agencies and RCA (Western Riverside County Regional Conservation Authority 2007). The Funding Coordination Committee advises the Executive Director of the RCA on funding priorities, acquisition of additional reserve lands, and prioritizing areas for conservation as requested (Western Riverside County, 2004a, Section 6.6.2).

The Executive Director of the RCA is responsible for fulfilling the duties and responsibilities and administering the WRMSHCP on behalf of the RCA (Western Riverside County, California 2004a, Section 6.6.3).

The WRMSHCP also created an Elected Officials Ad Hoc Committee to resolve outstanding issues regarding permittee project compliance. The Elected Officials Ad Hoc Committee is made up of elected officials representing the RCA and the Permittee

proposing the project (Western Riverside County, 2004a, Section 6.6.2.E.4). This group has been called upon by the Board of Directors as needed since April 2004 to focus on specific tasks requested by the Board (Western Riverside County Regional Conservation Authority, 2004b).

The Reserve Management Oversight Committee (RMOC) serves as the intermediary between the on-the-ground activities of the Reserve Managers, and the decision making function of the RCA. The Executive Director of the RCA forms and chairs the RMOC. As originally envisioned, the RMOC was composed of representatives of the Wildlife Agencies, RCA, and various city, county, state, and federal agencies and private individuals managing conservation lands within the WRMSHCP area. Individual members are appointed by the RCA (Western Riverside County, 2004a, Sections 6.6.3 and 6.6.4.A).

The RMOC is currently being restructured. It consists largely of elected officials. As originally structured, all real estate acquisitions had to be approved by the entire RMOC, often in closed session due to the level of detail associated with each acquisition. Instead, that function is currently managed by a subcommittee of the RMOC consisting of Reserve Managers, RCA, and the Wildlife Agencies. Elected officials now help prioritize acquisitions at the Board of Directors level (personal communication, Charles Landry, Executive Director of the RCA, November 11, 2014).

In addition to the committees above, Reserve Managers are individuals selected by public and private land owners within the Conservation Areas to ensure that the RMOC's oversight and advisory duties and responsibilities are successfully executed.

Reserve Managers report to the RCA Executive Director (Western Riverside County, 2004a, Section 6.6.5).

There is also a Reserve Monitoring Program Administrator (Administrator) responsible for administering the WRMSHCP Monitoring Program. For the first 8 years of the plan, this was the CDFW. While the CDFW continues to provide monitoring support to the Administrator, monitoring activities are currently contracted to staff of the Santa Ana Watershed Association (Western Riverside County, 2004a, Section 6.6.6; Western Riverside County Regional Conservation Authority, 2013f).

Other key participants in implementation of the WRMSHCP are the Independent Science Advisors (Advisors) appointed by the RCA Executive Director. The Advisors are subject matter experts that assist in implementation at the request of the Executive Director to coordinate with Reserve Managers and the Administrator and provide the best scientific information available (Western Riverside County, 2004a, Section 6.6.7). These advisors may be independent, associated with educational institutions or public agencies, non-profit organizations, or employees of biological science firms (Western Riverside County Regional Conservation Authority, 2007).

The RCA Board of Directors also created a Stakeholder Committee. The Western Riverside Regional Conservation Authority By-Laws were proposed and approved on June 7, 2004. The by-laws referred to four standing committees: the Funding Coordination Committee, the Reserve Management Oversight Committee, the Administrative Committee, and the Stakeholder Advisory Committee. The Stakeholder Advisory Committee was appointed by the Chairperson and ratified by the Board. It was composed of 15 members from groups representing property owners affected by the

MSHCP; government agencies within Riverside County; groups representing environmental interests implicated by the MSHCP; and other stakeholders. Committee members could not appoint alternates (Western Riverside County Regional Conservation Authority, 2004a).

There are references in the Board of Directors meeting minutes of December 6, 2004 to an Implementation and Guidelines Committee which would meet after January 1, 2005. The February 7, 2005 Board of Directors Meeting Minutes include a report stating that the first meeting of the Implementation and Administration Guidelines Committee (IAGC) occurred on January 12, 2005 and was attended by 12 of 15 appointees. The IAGC asked that several issues be considered in future meetings including the opportunity for public comment on the HANS Joint Project Review determinations, a flowchart of the HANS process, access to fair market value compensation for lands outside the criteria area required for conservation, certainty in the project review process, protection of local land use authority, and reduction in the use of species surveys (Western Riverside County Regional Conservation Authority, 2005d).

The March 7, 2005 Board of Directors Meeting Minutes included items to consider Resolution 05-01 Amending Bylaws to Change the Name of the Stakeholder Advisory Committee to the Implementation and Administration Guidelines Committee and Increasing Membership. Sixteen members of the committee were requested and the name change needed formal approval. The changes were adopted along with the statement that the IAGC would meet when requested by the Board of Directors to review implementation plans and perform other duties directed by the Board. Reasonable efforts

were to be made to meet twice yearly (Western Riverside County Regional Conservation Authority, 2005e).

Specific meeting minutes of the early Stakeholder Advisory Committee and the subsequent IAGC were not found. However, reference is made to the IAGC in the Board of Directors Meeting Minutes dated June 13, 2005 reporting that the IAGC was determining how frequently the committee should meet (Western Riverside County Regional Conservation Authority, 2005f). On October 12, 2005, the RCA Administrative Committee Meeting Minutes record that the IAGC made recommendations that the composition of the committee should remain unchanged, but that the voting and quorum requirements should change; that technical members be added; and the County and RCTC should be removed as members since their voices were heard elsewhere. Additional recommendations were that the IAGC should meet quarterly, there was concern expressed about the restriction on member alternates, and that a workshop be scheduled to identify pros and cons associated with development of a wildlife refuge (Western Riverside County Regional Conservation Authority, 2005b). The Board of Directors ratified changes to the IAGC membership at their December 6, 2005 meeting but no detail is provided related to those changes (Western Riverside County Regional Conservation Authority, 2005c).

RCA legal counsel addressed the IAGC recommendations at the December 14, 2005 Administrative Committee meeting. Counsel reiterated that the IAGC consists of 16 members and that 9 must be present for a quorum. Counsel recommended either amending the by-laws to set the quorum at six or seven, or reducing the number of Committee members. One Administrative Committee member asked if they could get

more active members, perhaps suggesting that participation had been lower than expected. The Executive Director of the RCA (Tom Mullen at that time) recommended retaining the IAGC structure and continuing to meet, then reporting back to the Administrative Committee in September 2006 to see how IAGC membership responded (Western Riverside County Regional Conservation Authority, 2005a).

At the July 12, 2006 Administrative Committee meeting, the Deputy Director of the RCA reviewed staff's proposal to restructure the RCA's Standing Committees. The Administrative Committee name was changed to the Executive Committee, and the membership of the Stakeholder Committee (the IAGC) was changed to include representatives of the environmental community, building industry, and property owners. The Administrative Committee members agreed to forward these changes to the July 24, 2006 Board of Directors meeting for final approval (Western Riverside County Regional Conservation Authority, 2006a).

In July of 2006, the recommendation was made to the Board of Directors to restructure the Stakeholder Committee to include the requested representatives to review implementation issues from a stakeholder perspective, and from time to time, make recommendations the RCA Board. A change to the by-laws would again be necessary. The Executive Director of the Property Owners' Association in Riverside County commented that the RCIP process offered an opportunity for stakeholders to discuss issues of concern including discussion of the HANS process, protection of local land use authority, species surveys, and certainty in the project review process. The current proposal for the Stakeholder Committee to meet only 2 or 3 times per year was not sufficient to resolve those concerns. He requested that the current Stakeholder

Committee schedule of meeting quarterly be continued. The RCA Executive Director noted there was no restriction on the number of meetings that could be held. Beyond that, no further information is recorded (Western Riverside County Regional Conservation Authority, 2006b).

In October 2006, the by-laws were again amended to change the composition of the Stakeholder Committee to include 16 members representing property owners, environmental interests, and the building industry. Members could not appoint alternates; the committee would meet as often as necessary, at least twice yearly; the Executive Director would facilitate discussion, and the Committee would review implementation plans from a stakeholder perspective in addition to other duties directed by the Board (Western Riverside County Regional Conservation Authority 2006c).

There is a large gap in reporting on activities of the Stakeholder Committee between 2006 and 2013. Comments made by respondents and others familiar with the WRMSHCP suggest that the Stakeholder Committee did not meet for an extended period of time.

The first of the Stakeholder Committee meetings whose minutes are published on the RCA website took place in July 2013, nine years after the WRMSHCP was established. The group discussed the Committee's purpose and goals as approved by the RCA Board of Directors. The four goals include a 9-year review of the implementation process, recommendations to streamline the WRMSHCP project review process, review the funding plan and recommend new funding sources, and review the survey process to facilitate WRMSHCP objectives and seek to eliminate survey requirements (Western Riverside County Regional Conservation Authority, 2013d).

Several members of the public spoke during the first Stakeholder Committee meeting. One expressed hope that the Stakeholder Committee will have an opportunity to address issues that have presented challenges to individual landowners to date including funding and property owner rights issues; that “the Committee will work diligently to resolve the problems concerning property owners rights regarding the acquisition process, and work diligently, not to just save the multi-species plan, but to restore honor to the way it’s being implemented” so her family and others can find some sense of justice (Western Riverside County Regional Conservation Authority, 2013e). The second meeting of this group took place on September 5, 2013. Additional comments were made by members of the public identifying frustration by landowners whose sales were pulled out of escrow multiple times as a result of MSHCP issues. Another landowner said they were being asked to donate property rather than be compensated for it in order to get a lot split approved (Western Riverside County Regional Conservation Authority, 2013b).

This group met seven times between July 31, 2013 and September 2014. As of April, 2015, the minutes of the September 2014 meeting remain to be posted. No mention of the Stakeholder Committee appears in Board of Directors or Executive Committee agendas or meeting minutes since the September 2014 meeting. No future meetings are currently noticed on the RCA website.

Each respondent was asked to comment about their roles and the roles and capabilities of actors and coalitions in plan implementation.

Wildlife Agencies –

The Wildlife Agencies provide technical expertise for project review and monitoring by attending meetings, reviewing conservation easements, and following up when people are not compliant with the plan (personal communication, Morgan, 2014).

“The USFWS role is implementing the permit policies and procedures leading to perfection of the conservation strategy” (personal communication, Dylan, 2014).

The HCP envisioned the Reserve Management Oversight Committee (RMOC). Its intent was to direct monitoring and management of the resource to make a cohesive strategy and set priorities. The initial thought was that it would be the land managers, but as soon as we said the words ‘budget’ and ‘approve and control,’ we obviously had the elected officials. The RMOC grew into this unwieldy body; everybody is technically on it from land managers to Supervisors; it ended up with a slew of responsibilities. The RMOC’s not functional; it’s sort of a plan weakness. The RCA has coped by identifying things the RMOC must do, approving the monitoring program work plan and delegating them to other things. If someone was going to take anybody to task about what isn’t right, the RMOC is a place it could be done (personal communication, Dylan, 2014).

Other Respondents –

“The RMOC structure and function are currently being re-evaluated. It was not previously productive due to the structure of the makeup” (personal communication, Harper, 2014).

Actors have Authority to Implement Plans

It appears most formal actors and signatories to the Implementing Agreement have sufficient authority to implement their obligations under the WRMSHCP. In particular, the permittees are required to adopt and maintain ordinances and general plans that allow them to implement the requirements and fulfill the purposes of the ITP and the plan. This includes collection of designated fees, compliance with acquisition processes, protection of species, and implementation of best management practices as appropriate. Permittees participate as member agencies in the RCA, and carry out all applicable application and review responsibilities outlined in the Implementing Agreement. Permittees also manage applicable conservation area properties, and participate as members of the RMOC (Western Riverside County, 2004c, Section 13).

Wildlife Agencies –

“Limited authority and multiple interpretations of state law affect NCCP implementation which also affects MSHCP implementation. In some cases, there’s no take for state species, so there’s not mitigation policies to be included for some projects” (personal communication, Morgan, 2014).

There were no interview comments from Other Respondents addressing concerns about parties lacking authority to implement the plan. There is a reference to permittees not using the authority that’s accorded them in the Implementing Agreement (personal communication, Shelby, 2014).

Motivation of Participants

Common goals of the participants are memorialized within the various WRMSHCP documents. The Wildlife Agencies are explicitly focused on protection of

the species and their habitats. While many of the permittees and other actors in the process have an interest in species protection, the motivation of individual actors varies depending on their land use interests. Respondents were asked to comment on whether there was congruency between the objectives of the USFWS and the permittees.

Wildlife Agencies –

The Wildlife Agencies were very direct in stating that they did not think there was congruency between their objectives and those of permittees.

“For USFWS, this is a conservation strategy, and for permittees, it’s a development permit” (personal communication, Dylan, 2014).

It is naïve of regulators to expect permittees to view it as anything but a development permit. That said, however, permittees should be proud of their stewardship associated with a regional plan because it makes communities better and more livable (personal communication, Dylan, 2014).

The Wildlife Agencies attribute part of the disparity in objectives to turnover of people either implementing the plan, or being affected by the plan.

“You have new people and they don’t remember how difficult it was under the old process so they see it as an impingement on their land use authority” (personal communication, Morgan, 2014).

Other Respondents –

“Cities see their role as supporting and funding RCA, not as voluntary members of the WRMSHCP. If the cities withdrew, the HCP would fold” (personal communication, Gerry, 2014).

Others say that whether or not there is congruity between the objectives of the USFWS and permittees depends entirely on the individual.

Cities approach the WRMSHCP from their own perspective based on their needs. Some are big supporters of the plan since they are seeking open space and preservation. Others signed on because of the poisoned pill on transportation funding only available to members of the WRMSHCP. The major positive incentive is that you can't get major infrastructure or developments done without the plan. Frankly, we couldn't build any substantial transportation projects prior to the plan. There are currently two billion dollars in transportation projects under way within the County that wouldn't have moved forward without the plan. And because of the MSHCP, for the first ten years of the plan, there were no lawsuits against highway transportation projects permitted by the plan (personal communication, Harper, 2014).

One respondent described the differing motivations as creating a delicate tension between USFWS and permittees.

There is congruency to accomplish the 153,000 acres of additional conservation. There is not congruence on who pays for it. And there's a delicate tension between choices about which projects get built which way, and how much land gets conserved. But the plan is designed to handle some of that, particularly through the Rough Step process.² USFWS has largely withdrawn from the responsibility to fund the plan (personal correspondence, Shelby, 2014).

² Rough Step is a process described within the WRMSHCP to insure that land acquisitions are made in appropriate vegetation categories to assure that development is

Other respondents suggest there is little congruency between the goals of the USFWS and goals of others.

The goal of property owners is to know that they are going to get the maximum amount of money out of their property. USFWS just wants as many acres of somebody else's property as they can get. The RCA just wants to leave its lights on and make sure it lives another day. The County wants to make sure that nothing gets in the way of their roads and infrastructure projects (personal communication, Mackenzie, 2014).

What I want as a stakeholder is the ability to have beautiful open spaces, to know that we can preserve and protect our environment and species. But I want to make sure my city has enough economic opportunity through development to be healthy, prosper, and be able to grow and renew itself (personal communication, Mackenzie, 2014).

Quality of Deliberation, Collaboration, and Empowerment

The WRMSHCP Structure was developed as described above with the idea of allowing high quality deliberation, collaboration, and empowerment. It's difficult to say to what extent that is occurring. Feedback received from respondents suggests that while deliberation, collaboration, and empowerment may occur at some level between parties to the process, not all issues are being resolved satisfactorily.

Other Respondents –

not removing too much of a specific vegetation category (Western Riverside County Regional Conservation Authority 2013a).

Developers did not expect that the RCA Executive Committee would seek to undermine the protections of landowners. They are very disingenuous and lack fulfilling commitments because they are panicked. The WRMSHCP was never adequately funded. This lack of funding makes them concerned they will run out of money and lose the plan so they seek to stop the bleeding and protect themselves rather than allowing the plan to move forward. They do not trust the process (personal communication, Shelby, 2014).

There always will be people who do not agree with plans or processes, so there will be lawsuits. The RCA has had a couple of lawsuits claiming inverse condemnation and other issues. In real estate acquisition, sometimes the landowner and the RCA cannot agree on price so neither party is able to move forward. If we can agree, then RCA has four years to come up with the funding to purchase the property. The perception of value for landowners vs. the fair market value is sometimes a big problem (personal communication, Harper, 2014).

Adequacy of Communication Networks

The formal structure set up within the Implementing Agreement created multiple committees made up of representatives from multiple agencies in order to create communication networks that were deemed necessary for plan implementation. Feedback from respondents suggests some communications work well, others less so. Responses to questions associated with several factors address aspects of communication adequacy.

Wildlife Agencies –

We have a real good relationship with USFWS. We communicate all the time. The USFWS is very much focused on maintaining a good relationship because they recognize this is a difficult plan and we are going to have to compromise on things (personal communication, Morgan, 2014).

I would not initially have identified other federal agencies as stakeholders, but they appreciate the HCP. We have asked them to do WRMSHCP as part of the CEQA documents for projects. In response to that, we have a monthly meeting with the Water Board, the Corps of Engineers, the CDFW people, and staff with the RCA. We hear about impacts to waters of the state, and talk about appropriate site-specific mitigation. It has fostered working relationships with the Corps of Engineers and the Regional Water Board. That has been extraordinarily helpful in USFWS work, but also in their workload. It is interesting because we can link arms and there is trust and there is humor and there are those relationships. It has changed communication patterns within the regulatory agencies. It has made all of our workloads easier and our relationships firmer. It has also helped us deal with applicants who are willfully difficult. That is the thing I value the most (personal communication, Dylan, 2014).

Other Respondents –

“Meeting monthly with the Wildlife Agencies, the RCA, and jurisdictions as appropriate has significantly improved the working relationships” (personal communication, Harper, 2014).

The consultants working for the RCA work on issues that may require the RCA to elevate the problem with USFWS to Washington DC. Additionally, the

consultants are assisting in developing the loan program RCA is working on to provide early acquisition of properties. It absolutely pays to keep everyone engaged in DC, otherwise our plan is forgotten. And if the local agency office makes a change that could affect the plan use, we must elevate our issues.

Because of the stove piping at the government agencies, it's really hard to go up the chain and get help if you are blocked at an agency lower level (personal communication, Harper, 2014).

Procedures to Manage Change, adaptive management in leadership

Section 6.8 of the WRMSHCP and Implementing Agreement, Sections 14.12 and 11.4 address Unforeseen Circumstances and Changed Circumstances respectively as defined within the "No Surprises" policy related to biological issues (Western Riverside County, 2004a; Western Riverside County, 2004c). Section 20 of the Implementing Agreement deals with modifications and amendments to the MSHCP and makes provision for clerical changes, land use changes, and adaptive management changes. It makes the distinction between minor amendments and major amendments and establishes procedures associated with each type of amendment. Section 21 deals with termination of permits and describes the process and responsibilities associated with termination. Section 22 of the Implementing Agreement deals with withdrawal of permittees and specifies permittee mitigation responsibilities that continue. It also requires that the RCA and the Wildlife Agencies evaluate to what extent the take authorization may be provided to remaining permittees.

As discussed in some detail above, Section 11.2 of the Implementing Agreement addresses the Structure (Western Riverside County, California 2004c). Each entity

created as part of that Structure has a description of membership and responsibility that define the source of human capital for each committee. Within the last 10 years, there have been changes in leadership within each part of the Structure from the elected officials that populate various committees, to the Executive Director and key administrative staff at the RCA, and leadership within the Wildlife Agencies. It appears the WRMSHCP plan was developed necessarily anticipating change and turnover of people in various positions within the Structure over the 75-year life of the plan. The Implementing Agreement assures the Structure remains the same during the life of the plan, unless officially amended by agreed-upon procedures.

Respondents were generally asked to address change in the roles of actors over time.

Wildlife Agencies –

The WRMSHCP permit is going into its 10th year. There have been evolving and changing relationships in that time. The network changes in response to changing conditions and that is the trick. If it does not, it will break. Changes in personnel at USFWS and RCA allowed relationships between the two agencies to improve (personal communication, Dylan, 2014).

Turnover of government officials is a huge issue. The elected officials on the RCA Executive Committee are stuck with this plan and see the hurdles, but they often do not see the conservation values. There are places now already in conservation that the cities want to exchange for other areas based on development opportunities. Part of the friction between USFWS and RCA is that RCA executives think that may be possible. But the land was paid for with public

money for conservation purposes and exchange should not be allowed. That's a political issue they're dealing with and I'm not confident we'll be able to resolve this. Cities change the purpose of their development over time. Either they should get in, or get out of the WRMSHCP (personal communication, Dylan, 2014).

The network of agencies and permittees is working as well as it could. It has not been ideal because of lack of funding. With fewer projects coming in during the economic downturn, it would have been nice to focus on management, monitoring, and acquiring land. There just were not the resources to do that. It has been improving a little bit. The RCA is always pointing at the state and federal commitments for acquisition and its flat because federal funding for HCPs is not increasing. It would take 150 years, if we got funded every year, to meet those obligations when it should be done in 15 years. And USFWS offered to get a national wildlife refuge in the area because that would help acquire a lot of land, but it was turned down. The water districts or the cities weren't supportive of it. They'll try again but there may not be state support for it in DC (personal communication, Morgan, 2014).

Other Respondents –

“The institutional structure has not really changed, it has been workable. Some of the people that put the plan together have been surprised that the plan is functioning as well as it is” (personal communication, Harper, 2014).

I believe that multispecies conservation could be a good thing. The dilemma is finding human beings that have the moral conscience to act in good

faith from beginning to end. I do not know how you put a government entity in place and maintain enough historical knowledge to have that handshake count from year one to completion. I am not sure it can be done. I am not sure that is not what is wrong with the whole concept, the idea that we would make it better for infrastructure projects and development, and that property owners could get well-treated and that species could get the landscape level protection, and that we could do all those right things. That appeals to me. But the process, I do not know that the human condition makes it possible to follow through that and not have collateral damage. The collateral damage is always going to be whoever has the least amount of financial ability to fight back, and that is going to be the individual (personal communication, Mackenzie, 2014).

The network has not fallen flat yet. They are still working to try and get through it. Funding would solve most of the problems. Some in the network have been able to be flexible and creative, others have not. It is the inability for some people to act in good faith. If the RCA just followed the rules established instead of trying to remake them every time they bump into a rule they do not like, I think the plan would have worked (personal communication, Mackenzie, 2014).

There are many things we would like to change about the plan, almost none of them we can easily do. We do not want to reopen the plan in a way that would require us to end up in having to preserve more land, and do more than what we have already agreed to in the Implementing Agreement. Many in the Wildlife Agencies would like to take another bite of the apple, and make major

changes. Politically, the plan is a compromise and that is reflected in the difficulty in making changes so we look at what changes we can do to tweak things and make plan implementation smoother (personal communication, Harper, 2014).

“We are at least 10 years old in June and the plan is well and functional. Considering the recent recession, RCA is pretty healthy” (personal communication, Harper, 2014).

There have been several leaders over time at RCA. The first was a disaster, especially when coupled with a non-consensus builder at USFWS. The next RCA leader, Tom Mullen, did an outstanding job. He is a fabulous leader whose strength was seeing the bigger picture on how everybody came together, and the importance of keeping people together. His weakness was that, since he is a big picture guy, he did not have the detail behind him to follow through. He had to backfill in the details. Then the next leader was really a follower. And then the current RCA director is bureaucratic and linear in his thinking. He defines his job as “defending the permits” rather than implementing the plan. The result is he always concedes to the Wildlife Agencies. The group is potentially cracking at the seams. They tried to remove the Chairman of the Board of Directors last year, never called a vote. Very rough, but still hanging together (personal communication, Shelby, 2014).

Procedures to Manage Conflict

Section 23 of the Implementing Agreement deals with remedies and enforcement and begins by stating that “. . . each Party shall have all remedies otherwise available to

enforce the terms of the MSHCP, this Agreement, and the Permits, and to seek remedies for any breach, subject to the following limitations” (Western Riverside County, 2004c, Section 23.1). Key to this section is the statement that no party shall be liable in money damages to any other party or person for any breach of the agreement, any performance, or failure to perform a mandatory or discretionary obligation imposed by the Implementing Agreement (Western Riverside County, 2004c, Section 23.1.1). That said, any material breach or violation of the terms of the agreement is considered a default. If any party to the agreement determines that another party is, or may be, in violation of the agreement, they will give written notice to the perceived violating party. That party has 45 days to cure that violation. If it takes longer, or if the violating party fails to diligently cure the violation, a lawsuit may be filed seeking recovery of damages, etc. Because of the unique nature of the species and the likelihood for irreparable damage to species, parties may request injunctive and temporary relief while an issue is resolved. Permittees may generally use their lands as long as the use is in accordance with the WRMSHCP, and the Wildlife Agencies may revoke or suspend permits under a list of stated conditions in the Implementing Agreement (Western Riverside County, 2004c, Section 23).

While these procedures apply to parties to the Implementing Agreement, they do not extend to others that are not a party to the Implementing Agreement. Individual landowners, for example, whose property is in an area designated for conservation, with or without the landowners knowledge, seem to have little recourse except to 1) work through their respective permittee, the RCA, and the Wildlife Agencies, 2) use social and political pressure to affect the actions of the parties to the Implementing Agreement, or 3) take a subset of the parties to court.

Several anecdotal examples of individual landowners experiences with the WRMSHCP without avenue to a satisfactory conflict resolution process were provided in the interviews and transcripts reviewed as part of this research effort. To maintain anonymity, those will not be elaborated upon here. However, those stories lend credence to statements by respondents which suggest that landowners with sufficient knowledge and financial capability can either work through the WRMSHCP process to get their land use projects approved and/or their property sold, or, take legal action against appropriate parties to the Implementing Agreement and the WRMSHCP. It is those landowners without the knowledge or the financial capability to resolve issues or take legal actions that are referred to in the interviews as “collateral damage.”

Process Attributes Findings

Based on the literature and the information and emotion contained in this section, implementation is largely a function of process (Beierle and Cayford, 2002; Brogden 2003; Lubell, 2003; and Sabatier & Mazmanian, 1980). One thing that seems clear is that, without a formalized process of some kind, efforts for multiple parties to organize in any consistent way to accomplish multiple, coordinated goals is unlikely to succeed in any measure (Ostrom, 1990).

With respect to the presence of goals other than biological, neither the Wildlife Agencies nor Other Respondents commented. Other goals are captured in the WRMSHCP documents. It may be that, because these goals are clearly stated and support the rest of the process noted, neither party felt it important to comment upon. Having multiple and sometimes conflicting goals rallied enough of the parties together to

develop the WRMSHCP plan. Per Beierle and Cayford, goals of both the lead agency and the public must be considered when designing public processes (2002, p. 65).

With respect to parties to implementation in addition to permittees and the Wildlife Agencies, both the Wildlife Agencies and the Other Respondents identified other organizations and individuals.

The Wildlife Agencies mentioned the EHL and Dan Silver in particular, for the role they play in furthering the process. The Other Respondents singled out Tom Mullen as both the “Father of the MSHCP,” the former Executive Director of the RCA, and his continued role as a consultant to the RCA. Both groups also commented about developers and consultants in the process. In particular, the Wildlife Agencies singled out Ed Sauls as someone who solves problems by thinking outside the box. They also acknowledge the participation of other environmental groups. The Other Respondents commented on occasional friction between developers and landowners. They highlighted the participation of the Building Industry Association that advocates against excessive government regulation and policies that make it harder or more expensive to build in the region (San Diego County Building Industry Association 2013). They also mentioned other governmental agencies like the US Army Corps of Engineers, the California Regional Water Boards, and in some cases, homeowner groups.

The Structure is consistent with the literature in recognizing the importance of state and federal agencies working closely with a local administrative structure to effectively implement the WRMSHCP (Lubell and Fulton, 2007; Scheberle, 2004).

The participation by parties external to the ITP and the Implementing Agreement appears to play a large role in implementation of the WRMSHCP (Brogden, 2003; Lubell

et al., 2002; Pressman and Wildavsky, 1984; Sabatier, 2007; Sabatier and Mazmanian, 1980).

With respect to accessibility of the process by entities that are not party to the Implementing Agreement, both the Wildlife Agencies and Other Respondents acknowledge outreach by the RCA and its importance in moving the process forward. The Wildlife Agencies expressed a need for local groups and individuals to engage in the management and use of the conservation area.

With respect to the roles of the primary actors, both the Wildlife Agencies and the Other Respondents identified the current structure of the RMOC as an issue that needs to be addressed. It seems to be a perception by both groups that having too many elected officials trying to manage too many of the WRMSHCP details is not considered productive.

The Wildlife Agencies identified issues with actor authority associated with the difference between take for federal and state listed species and the impacts that may have on project mitigation. Other Respondents did not comment. One conclusion that can be drawn is that at least most of the appropriate governmental parties are at the table and can exercise whatever authority they have to move toward common plan goals (Brogden, 2003; Ostrom, 1990; Pressman and Wildavsky, 1984; Sabatier and Mazmanian, 1980).

With respect to the motivation of the parties, the one thing both the Wildlife Agencies and the Other Respondents agree upon is that there is no congruence between the goals of the USFWS and the permittees. As one respondent stated, the USFWS seeks conservation, the permittees seek development. Other Respondents have goals ranging from seeing more open space and land preservation, to the need for transportation

corridors to fund economic development. This wide range of goals points to the need for a uniform process to manage the resulting conflicting activities. What underlies this whole process, however, is a recognition by all the respondents that the whole range of goals is worthy of public investment. As highlighted by Weible and Sabatier, beliefs may converge between coalitions seeking solutions, but each coalition remains distinct in their beliefs (2009).

The Wildlife Agencies did not comment on the quality of deliberation while the Other Respondents had a great deal to say on that subject. Specifically, the nature of the relationship between developers and landowners affects the relationship between permittees and USFWS. This supports the idea that developers and landowners have a role in the implementation process. One question would be whether their role could or should be expanded beyond that of a Stakeholder Committee member who only gets to comment intermittently when called upon by the Board of Directors to do so, or whether there should be other avenues besides the courts or the political realm for their participation. Another interesting observation was that RCA does not trust the process since they are largely responsible for implementing the process. It may just be one person's opinion, or it may indicate a larger problem that has not yet come to light.

Beierle and Cayford specifically identified the quality of deliberation as a process factor related to the likelihood of implementation. This includes the opportunity for good arguments to win out over overt power; the ability to question claims and assumptions; and participant sincerity, honesty, and comprehension. Lack of these attributes may decrease the likelihood of successful implementation (Beierle and Cayford, 2002).

With respect to adequacy of communication networks, both the Wildlife Agencies and the Other Respondents agree that communication has improved the relationships with parties to the plan and with other government agencies in particular.

As far as having procedures in place to manage change and adaptive leadership, there are many things in common between the Wildlife Agencies and the Other Respondents feedback. Both groups speak of evolving relationships over time that encourage commitment of both parties to be flexible. Both groups identify turnover of participants as an issue, particularly as permittee cities perspectives change over time. The Other Respondents expanded on change and express concerns about the ability of any institutional structure to be able to successfully transfer knowledge from one generation to the next and how that translates to good faith among the parties. They express concerns about human failings in general over the long term. While the Wildlife Agencies are concerned about how cities change their point of view over time, the Other Respondents express concerns about RCA changing the rules over time. Once again, the Other Respondents highlight Tom Mullen's participation throughout the years in his various roles as an example of how good leadership matters.

One of Pressman and Wildavsky's pivotal ideas is that policy efforts must build in ways to manage change in order to be successful (1984). Ostrom also discusses the need for incremental change over time due to learning through trial and error (1990). At the very least, the network and its rules in the case of the WRMSHP had flexibility built into the plan that members are using to adapt over time. The network implementing the WRMSHCP is using trial and error in addition to expert input to implement the plan.

As far as having procedures in place to manage conflict, those are clearly present in the plan. One primary drawback observation from this review, however, is that formal procedures can only be outlined and enforced between parties to the Implementing Agreement. There are a number of stakeholders affected by WRMSHCP decisions that are not a party to that agreement, and that have limited and often unsatisfactory avenues available to them to resolve conflict. The Other Respondents refer frequently to the collateral damage which results from this process. The inability to manage conflict between parties to the Implementing Agreement and other stakeholders may ultimately reduce the likelihood of implementation (Lubell, 2003; Lubell et al., 2002; Beierle and Cayford, 2002).

Results/Implementation Attributes

The results/implementation attributes examine implementation progress and measures of success (Beierle and Cayford, 2002) .

Stage of Implementation

Utilizing Beierle and Cayford's stages of implementation as a guide, the WRMSHCP is in Stage 4, Actions Taken on the Ground. Stage 1 is interpreted as the completion of the plan. Stage 2 refers to commitments made by lead agencies or other authorities interpreted in this case to be issuance of the ITP. Stage 3 involves changes in law, policy or regulation. Ordinances or resolutions adopted by local governments as permittees would be examples of Stage 3 activities completed. Stage 5 is considered the final stage of implementation where plan goals are reached. In this case, you could argue that the earliest Stage 5 could start is upon completion of acquisitions of reserve lands. The stage of implementation factor in Beierle and Cayford's conceptual model helps to

assess the likelihood of implementation. The closer the stage to completion of an implementation action, the higher the likelihood it will be completed. Actions taken on the ground typically involve staff and large budgets. That is certainly the case for the WRMSHCP (Beierle and Cayford, 2002, p. 57-59).

Up-to-date monitoring plan and relevant metrics for other than biological goals

The Implementing Agreement addresses reporting requirements for the WRMSHCP. Of the nine elements listed for annual reporting, there is one element for reporting the clerical and minor amendments to the plan each year, and one associated with the collection of development fees. The remaining elements relate to measures of compliance with conservation and land use restrictions. There are no stated elements related to achievement of social goals or other development goals except to identify development that may be in violation of the plan. This is consistent with the responses of the Wildlife Agencies below where their goals are largely biologically related. Other Respondents had no responses associated with this attribute.

Wildlife Agencies –

Success occurs in several stages. At the Joint Project Review level, is this project implementing the MSHCP? We are evaluating success project by project. Then there's Rough Step. That counts that as a huge success. There are also two policy successes. We now do streamlined Section 7 consultations when inside the MSHCP plan area. Also, the definition of conservation in the plan includes a legal instrument for the protection of conservation property. That is going to be an added annual reporting requirement. WRMSHCP is the only plan in Southern California that consistently does their report on time. This might be an overly

unfair statement, but as an implementation structure, this plan is leaps and bounds ahead. The ways to count success: acquisition, things coming together, our successes and failures are still local and on the spot (personal communication, Dylan, 2014).

Presence of forces negatively affecting implementation/barriers to success

The interviews conducted as part of this case study suggest that accomplishing the WRMSHCP goals is more difficult and controversial than was originally anticipated even with the conflict experienced as part of the SKR HCP prior to development of this plan. Primary areas of concern include funding adequacy and equity concerns associated with land acquisition processes. In general, equity issues associated with land acquisition processes in this and other contexts may be an appropriate topic for future study because of the inherent tension between public good vs. private property rights.

Funding is an essential element of the WRMSHCP and was originally anticipated to be provided by permit holders in proportion to their impacts within the WRMSHCP area. Funds to mitigate the effects of local projects were expected to be spread equitably among public and private sources to balance costs and benefits. A national economic downturn beginning in late 2007, sometimes described as the Great Recession (Economic Policy Institute, 2014), impacted revenue garnered from development fees and had a significant negative impact on fund availability for land acquisition. Results from the interviews suggest that although a great deal of attention was paid in the development of the WRMSHCP to revenue generation to minimize funding issues, the economic downturn during the early acquisition phase contributes greatly to individual beliefs about successful implementation of the WRMSHCP to date. As part of the WRMSHCP,

reserve lands are expected to be acquired within the first 25 years of the permit and funded by development of more than 330,000 residential units and associated commercial and industrial development to be built during the same timeframe (Western Riverside County, 2004a, Section 8.1). Actual progress in land acquisition has been delayed beyond that originally anticipated, at least in part because of funding issues.

Wildlife Agencies –

The major weakness in a developer fee paid for conservation strategy is that when the economy is booming, there are lots of developer fees. Land prices are as high as can be. When the economy is not booming, land prices are low, but there are no developer fees coming in to take advantage of more reasonable land prices. Without enough funding to acquire property, the RCA has to make priority decisions. The WRMSHCP has a Rough Step process to keep conservation and development apace of each other. The purpose is to prevent the acquisition of all the cheap land while the high development pressure area develops, and then you can't afford to purchase the conservation land in the high development area. Part of the obligation of the cities as permittees is to permit only development that will keep them in Rough Step. They don't understand that as land use authorities, it is their role to maintain Rough Step, not the RCA's (personal communication, Dylan, 2014).

The plan assumed there would be a percentage of developable land that would go into conservation. For example, if you have 100 acres, you get to develop maybe 60 acres, or 80 acres, or 20 acres depending on multiple factors, and the rest goes to the RCA for conservation. The projection at this time is

woefully short. The fee system may need to be restructured if permittees don't step up to the plate. The slowing economy at the same time development is slowing means you are trapped with conservation being purchased at the most expensive level. The RCA is working on getting a loan program so that regional HCPs can borrow federal dollars and then pay them back with those development fees. It's modeled on the state revolving fund loan programs through EPA. Nobody but the federal government has enough resources to pull it off. As a nation, we have said through the ESA that it is among our needs not to have species fall off the planet, so it is appropriate for there to be access to federal dollars to solve local communities' problems. A teeny, tiny national tax could fund all of these plans (personal communication, Dylan, 2014).

National will is important in implementation of long term plans. Frankly, the Congressional environment is important. Sequestration affects implementation of this plan. We prioritize, we triage. National will shows up in lots of ways. Ecological Services as an organization does a great job. They teach themselves and reward themselves for their negotiation ability. They suck at implementation. They fight for months over square feet and then walk away and never look at the thing again. They should figure out how to charge for each Section 7 consultation and there should be somebody who uses those funds for implementation (personal communication, Dylan, 2014).

Barriers to success include limited authority and multiple interpretations of state law affecting NCCP implementation which affects MSHCP implementation of state species. There is also not enough money for staff or for

land acquisition. The State of California is just coming back from the economic downturn. All the staff is stressed out because they have been doing a huge workload for a while. They are getting ready to hire new people but it has been really bad. And then there is the lack of federal support for HCPs in general. A lot of influence is local. There is a perception that developer interests affect local elections resulting in changing levels of support for the WRMSHCP. And another city changed their rules about subdividing parcels in a way that was inconsistent with the plan. EHL sued them and won so the city had to stop (personal communication, Morgan, 2014).

Other Respondents –

“The WRMSHCP works well when permittees take authority, not when they default land use decisions by conceding authority to the RCA and Wildlife Agencies” (personal communication, Shelby, 2014).

One of the big problems right now, 10 years into the plan, is that people forget how difficult it used to be to get projects permitted and infrastructure built before the MSHCP. We also have had a huge turnover politically in the champions who created the plan. Because it has been so long since many have had to deal with the Endangered Species Act, some do not understand the difficulties that would be faced without the plan. The biggest struggle is funding. If there were more dollars available, RCA would be buying a lot more land right now. We would have a lot less friction, particularly from landowners, because the money to buy property would be available. However, in any type of plan there will always be some issues because RCA cannot just arbitrarily pay landowners

what they want. By policy, RCA uses the Federal Yellow Book process as a standard (personal communication, Harper, 2014).

One problem we expect is that, as the economy improves, land prices will go up faster than we gain revenue. There is a long delay factor in the building cycle so it is difficult for RCA to get in front of the wave using the current source of funding, development mitigation fees (personal communication, Harper, 2014).

“Property rights concerns are significant and this is an issue we have to continue to address since it is part of the current political climate of the area” (personal communication, Harper, 2014).

With respect to barriers to implementation, each permittee has a different level of sophistication about planning overall, and about how the MSHCP fits into that. Often, they will defer to RCA when they do not need to. Background varies between officials. Some are very savvy. In addition, lack of interest, funding, and political support are all barriers. Lack of leadership is also a barrier. Maybe lack of leadership would not be such an important issue if adequate funding was available. With respect to lack of funding, early on the Board of Supervisors stated they were going to take a leap of faith that the funding would be there for land acquisition (personal communication, Shelby, 2014).

Other negative external influences include the economic downturn and that the leadership did not plan for variations in economic cycles. No funding was ever set aside to take advantage of market cycles, although it was discussed during negotiation of the WRMSHCP (personal communication, Shelby, 2014).

Another barrier is that the plan spends time protecting species that are not even endangered or threatened, just there. And there are imbalances in those protections like the cougars, who keep the deer population down, until the deer population gets down too far, then cougars start eating pets. The RCA could capitalize on this and raise revenue by issuing permits to kill cougars when they need to, but they will not do it. Barriers also include limited physical access to acquired habitat. In some cases, the County condemns land (like shooting areas) so they do not have to go clean it up (personal communication, Gerry, 2014).

“The WRMSHCP implementing agreement is not working well. Landowners have to give up their land at below market prices. Some people view the RCA as a land grabbing organization” (personal communication, Gerry, 2014).

Funding is not sufficient. Funds are raised through developer fees and a mitigation fee is assessed for other properties to take care of the habitat areas. Also, the RCA lobbies Washington, DC for funds. And then the RCA acquires property on tax lien sales at cost rather than at fair market value. RCA also writes a contract to buy property when they don't have funds, then the landowners have to wait until funds are available. Landowners have to donate a portion of their property to the RCA in order to get development permits. What is to prevent the RCA from selling some of their property to developers if they need money (personal communication, Gerry, 2014)?

“There are no funds, they do not have the funds, and they never did. The RAND report came out and said you do not have enough money to do this” (personal communication, Mackenzie, 2014).³

Barriers to implementation involve the non-project HANS and the project HANS.⁴ Project HANS is the one developers use. There was a big blowup recently at the RCA. Board Members walked out. It was a circus. The RCA is underfunded, they have problems, they do not want to walk the hard line, and they want to push off doomsday as far as they can. And I think the goal is if we push it out far enough, we will find a way to get the money (personal communication, Mackenzie, 2014).

The collateral damage is the property owners who are stuck because there is no funding. If you are a property owner and you need to sell your property because you just found out you have a terminal disease and you need the money, you cannot wait years, and you also cannot afford to file a project HANS and say you are going to do all these studies and produce these maps. And it is different from city to city. Cities have the ability to make their own kind of implementation criteria which can complicate it for some more than it needs to be.

³ The RAND report titled “Balancing Environment and Development Costs, Revenues, and Benefits of the Western Riverside Multiple Species Habitat Conservation Plan” published in 2008. This report examines the value of the land needed for the reserve, the financial consequences of acquiring the land over different periods of time, and the projected costs of operating the reserve. It compares projected costs and revenues and identifies potential funding sources to fill any resulting funding gap. It also examines the prospect for achieving the MSHCP's habitat-conservation goals and whether the MSHCP has, in fact, streamlined the permitting processes. Finally, it identifies issues that the RCA Board of Directors, RCA staff, and stakeholders should address to ensure the plan's success and the ongoing economic and ecological health of the county (Dixon, et al. 2008).

⁴ See Appendix D for a summary of each process.

We suggested that RCA should help the cities adopt more uniform policies that give the property owners a better option than when they file their HANS application so they were not forcing property owners into the non-project HANS, which is where RCA does not want them to go (personal communication, Mackenzie, 2014).

A non-project HANS is where I just go in and say how much do you need? What of my property do you need for your MSHCP? They do a criteria determination and get back to you and tell you this is what we need to have. Right now every application submitted is going to be 100% because RCA is behind the curve. They define it not by the acres they need, but by how much of the criteria cell they need. If you're the last bastion of hope for that cell and you file your application, they need all of you (personal communication, Mackenzie, 2014).

If we do a project HANS, RCA gets to play with the criteria a little differently. They get to negotiate with you a little. They may say that you can have 10% development, but you have to give us the other 90%. This is how we negotiate when we do not have money. I am not going to buy you. I am going to give you enough development so that I can say you were not harmed. And you give me the rest of it (personal communication, Mackenzie, 2014).

If I come in with a non-project HANS, I am 100% conservation and RCA has to buy it. That is not how it was supposed to work, but that is what you do when you are desperate. The MSHCP requires appraisal. They have to give you fair market value. But under a non-project HANS, they made up some rules. If

they are negotiating with you under a project HANS, they can throw that onto the table because you are trying to get a development. And if you are a developer, you do all kinds of things; pay all kinds of blackmail to get things done. The cities play with you. So you grow – developers are accustomed to that. The ordinary property owner says what? They want to get rid of the non-project HANS because that allows a homeowner with 20 acres to say, I just realized nobody will buy my property because of the MSHCP. So here is my HANS application. How much of my property do you want? Oh, you want all of it? OK. Buy it. What do you mean you only want to buy it for a third of what I think it is worth? That is not right. As a property owner, you have the right not to spend \$15,000 and do your own appraisal according to the Yellow Book standards. And the appraised value is 100% based on fair market value as if the MSHCP did not exist. That is what they are supposed to do. The problem is, you cannot find comparable properties where that has not been a factor. The reality is you cannot get freeway market value for a piece of property that is next to a freeway. You cannot get fair market value when all the comps are also in the MSHCP. It skews the values. So the RCA makes its own rules. And none of the rules have been tested in court because RCA settles lawsuits. The only way to get a deal at RCA is to sue them (personal communication, Mackenzie, 2014).

One of the barriers to the MSHCP is the fee. It really does bother me that property owners have to pay a fee of \$1500 or more to get a criteria determination. I would have fought that from the very beginning. I would have argued it is like zoning. A person ought to be able to make a phone call, give you

a property address, and you should be able to give them a determination. I know they did not want to do that and I know the fees and the applications are all barriers to getting that answer quickly. But the fact you cannot get to that answer quickly is a fundamental flaw in the process. It is a moral flaw. It is not right (personal communication, Mackenzie, 2014).

There are holes built into the plan. Given the current course, it would be entirely plausible for people like me to go out en masse and start lobbying Congress differently than we do now. Congressional members may be the ones that are going to make this decision. When it comes to Congressional members, the voice of the property owners is a huge lobby. We really do matter. We are votes, but we ring very true in the minds of Congressional members. Congressional members hear the property owner, the small business owner. They hear them pretty darn well. And if we are sending messages that are even-handed, it doesn't matter what party affiliation you have. My message can be that the MSHCP is a huge opportunity for everybody, it can protect species, it can help infrastructure projects go, it can be good for business and it can be fair to property owners if it can be properly funded. I can also change my message and say this is what it could have been, but here is what is happening. If I come marching back into your office and say here is my elderly property owner who has been waiting over ten years to get paid half the value the property should have been, and here is my retired homeowner who has been dealing with this now for years jumping through every hoop, and now they are going on a waiting list and no one will buy it, I will say do not fund the WRMSHCP. Please stop funding this plan so that it

goes away, so one person can just sell their property to a developer because it is right next door to the freeway that is coming through and it should be worth a fortune. But the property owner cannot get there, so do not fund it. Make it go away so they get the relief they need and deserve. They have played the game as long as they can. It is not fair. Those are different messages and they resonate clearly and fairly and soundly to elected officials (personal communication, Mackenzie, 2014).

Relationships between Implementing Parties

As noted in the sections above, changes have occurred in the relationships between parties over time. The comments below relate to relationships between parties at the time of the interviews.

Wildlife Agencies –

There is as much trust between the USFWS and the RCA as there has ever been in the trust but verify category. USFWS trusts the RCA to do their best to implement the plan. There are sometimes differences in what the RCA thinks is the best way to implement and the way USFWS thinks is the best way to implement the plan. RCA is subject to elected officials which is difficult (personal communication, Dylan, 2014).

Generally, permittees are meeting the expectations of USFWS. They have a really critical role. We have been frustrated by their intentional zoning practices, e.g., when they zone vernal pool habitat as a light industrial area, then you create immediate conflict with people who buy the property and then find out it's identified for 100% conservation for vernal pool habitat. In another instance,

they want to rezone rural agricultural land as high density housing, right next to a wildlife area. We tell them that it is not a good idea and they ignore us (personal communication, Morgan, 2014).

Other Respondents -

The nature of the relationship between developers and landowners affects the relationship between permittees and USFWS. USFWS cares little for how landowners pay for or give up property; landowners don't care as much about biology. Instead, landowners care about open space and permits, and about the lack of efficiency in the process. They care a lot about when they give things up and are inadequately compensated (personal communication, Shelby, 2014).

Trust issues associated with the Wildlife Agencies during implementation relate to designation of critical habitat within the plan area and use of state funds to match federal funds to date. There have also been issues related to differences between State NCCP requirements and Federal HCP requirements. In general, however, plan implementation is progressing well (personal communication, Harper, 2014).

The people whose jobs depend on the plan are determined to keep the plan afloat no matter what. It is their job. I have had the Director of the RCA say 'I have to protect the plan.' And I said, 'No, the plan exists to accomplish a set of goals. It isn't its own entity that must survive at all costs.' It exists for a purpose and if it cannot fulfill that purpose, it needs to either cease to exist or we need to go back to the drawing board and fix it, make it right. And you cannot do that unilaterally. We got married together. We have to come together and figure out

how to fix it. That is not what is happening because the fix is really hard (personal communication, Mackenzie, 2014).

Overall Sense of Progress/Satisfaction/Success

Wildlife Agencies –

The overall success varies from hopeful to going home and thinking this is just not worth my time. It is never going to work and humans get what they deserve. We are going to kill the planet and ourselves. Everybody should learn how to vegetable garden and can food because we are going to need it. If we get a refuge here, all this counts, this could work. The USFWS has an outstanding obligation to this plan. If the political reality of the federal government is that permittees cannot trust the government to maintain direction for long term plans, then they have no business doing this. If the government cannot meet obligations to local communities then it is personally an integrity issue. It should be an integrity issue for the public too. So getting the government to meet their obligations here is one of the biggest ways to count success on this (personal communication, Dylan, 2014).

I think the plan works actually, I think it works. It goes back to staffing. If USFWS had one or two more people, they could work more closely with the permittees and work things out before they got to the State. And there would be an earlier working relationship with the permittees. The same is true for the State. Maybe it still would not matter because permittees are listening to the building industry. But I think we could be more effective with people (personal communication, Morgan, 2014).

“The USFWS looks at success as not having to pull a permit. And linkages are starting to be pieced together so that is good” (personal communication, Morgan, 2014).

We have been telling RCA we need a feel good meeting where we can see some good stuff because we are getting discouraged. And it is good because RCA has an active management and monitoring program. The RCA is not as well-funded as they would like, but they are out there doing it on the ground (personal communication, Morgan, 2014).

We are behind on acquisition and we are behind on easements being recorded but everyone knew this would be a difficult plan. I am so down in the weeds all the time, I do not really step out and look to see if we are on track or not. I think it would feel more successful if I thought more people were supportive of the plan. A lot of people do not even know what it is or that it exists (personal communication, Morgan, 2014).

It would be helpful to think of the plan in terms of milestones. You could have success on one front but not on another. If we had a good outreach program, and people like the plan, that would be success. Of if we had a good monitoring program. But if we are behind on land acquisition, then we are failing on that front. I think it will switch back and forth depending on where we decide to focus (personal communication, Morgan, 2014).

With respect to other network members’ vision of success, it varies. Riverside County is one of the fastest growing counties. But it’s like, ‘What is your long-term vision and who are you trying to attract?’ In one city, the water district said they did not have enough water to develop, and so the city was trying

to take over the water district. I think half of the permittees would like to get rid of the plan. Their idea of success is building their project and getting their development or road or whatever it is built in a streamlined way. There are some cities the agencies never work with on the plan because the cities want more conservation within their boundary. And others want to protect their view shed so they have been pretty good partners. Other cities do not want to pay their fees, they do not want to follow the plan, and they feel like they have a huge burden of conservation in their boundary, even though they annexed it into their sphere of influence. Some cities are really not thinking. They try to reach across all this conservation land to put in a high traffic road and business space, and then they are horrified when they realize it may be tougher than they thought. Other cities we just never hear from and we do not know why. They may not be developing or they don't have sensitive resources. There are entities like Southern California Edison who are participating special entities in the plan. They have take coverage for what they do in an area. It is not cheap at 3-5% of project costs, but they are part of the plan. When they are out of the plan area, they have to go through other state and federal processes to work. In conservation areas, there are more surveys required so it may not feel as streamlined to them because we want them to avoid sensitive resources (personal communication, Morgan, 2014).

I feel success when I get something out on time. I see success when projects come back in and they have revised their footprint. It still does not always meet the plan guidelines, but at least it is avoiding most of the sensitive resources in an area that is highly controversial, so it is a compromise. And then

we look to the city to make up additional acreage. Sometimes I do come up for air and wonder how we are doing. How are the reserves coming together? Each annual report talks about gains and losses. I would like to have a meeting to step back and look at what we have lost or see if we are on track. It feels like every project is coming in at below the minimum acreage. Are we losing or am I only seeing the really controversial projects? I do not have a good sense of how we are doing overall (personal communication, Morgan, 2014).

There is concern over losing linkages for species that are not part of the plan. There is also concern for the County Fish and Game Commission. They are anti-MSHCP because they are kind of cut out of it. And the State is supportive on hunting where appropriate so it seems like a huge tactical error not to beg them as advocates. People don't see hunting as part of the plan. Conservation and hunting are not mutually exclusive. Other plans as they develop should have that as part of their plan. The plan does not say there is no hunting. But there is a public perception that, if the land goes into RCA ownership, they cannot hunt on it. And RCA does not have the staff to deal with the hunter, but it should be on their radar screen, and they could work with local groups willing to manage it. There is currently a problem with feral pigs hunters could help with (personal communication, Morgan, 2014).

There are complaints others have registered about the lack of recreational access to areas in the plan which is interesting because RCA is very supportive of trails and public use and it could just be that we do not have the management plans in place yet. If local users cannot get out there and use it, then they are not

going to be supportive. We want local advocates. We need eyes on the ground that care about the plan. You have to build community support for that (personal communication, Morgan, 2014).

“Sometimes I wonder why we even review stuff if they are just going to ignore it. I should just go out and talk with school kids. I would be a lot happier” (personal communication, Morgan, 2014).

Other Respondents –

While there are a number of issues where we have disputes between the various stakeholders, all are still working effectively together. The biggest challenges the MSHCP has is funding. It is not as robust as any of the stakeholders would like. RCA is doing a new Nexus study.⁵ The Nexus study examines the required revenue and what the expected revenue is. Do we need to change RCA fees? What fees do we need to generate in the next five years and how is that going to be done? The study identifies the fee requirements per acre for commercial residential, commercial industrial, rooftop residential, etc., (personal communication, Harper, 2014).

There are different ways the plan defines success. What are the infrastructure projects that have been expedited by the plan, and can we point to

⁵ A Fee Nexus Study is required under California law to determine the level of the mitigation fees. The Nexus Study Update is necessary to revise the mitigation fee to reflect current market conditions, values of land slated for conservation, monitoring requirements, management efforts and funding an endowment as required by the MSHCP. The original nexus study for the MSHCP, Final Mitigation Fee Nexus Report of the Western Riverside County Multiple Species Habitat Conservation Plan, formed the basis for the current local development mitigation fee. (David Taussig & Associates, 2003).

those? Has development become certain? Yes. If you are a developer, you know what you are going to be able to do in what areas. The second way we define success is ‘Are we acquiring what we need to for the reserve?’ If we look at acres per year acquired, then we have dropped a bit below the straight line; however, the RCA focus is on the high-cost areas because those are the habitat linkages that are already under development pressure. RCA is more concerned about acquiring those high-cost properties now and then worrying about the number of acres later because we can catch up. Another measure of success is when we hear people say ‘This is a good thing’ and ‘They preserved this area out near my house.’ That is a success (personal communication, Harper, 2014).

It is appropriate to think in terms of multiple interim milestones. We are looking at what projects have been facilitated, what development has been approved, and what acres have been preserved. Then there is a whole set of management metrics to examine. For example, do we see increases in species in an area, etc.? Both the RCA and University of California, Riverside Center for Conservation Biology are monitoring the species within the plan. All stakeholder groups are watching RCA’s progress. Recently a water district in a lawsuit with a number of environmental groups asked for assistance to help solve their issues. RCA worked with both sides and came up with a solution which provided species coverage for the water district project, while preserving valuable species and its habitat. The plan is working (personal communication, Harper, 2014).

The failure of the plan is the failure to treat people properly in implementation of the plan. RCA does not have the money to pay for land in

areas where there is development occurring, so they have delayed people in selling their property. Owners face multiple levels of bureaucracy rather than clarity. The interests of the owners are not being honored. Several lawsuits are pending. Successes include lots of property that has been acquired for conservation, and many development projects that have been permitted. There is a mix of successes and failures. There are ways the plan could be implemented fairly and as intended. Lack of funding can be strategically addressed, but RCA has failed to do that. So the leadership failure has resulted in secondary things failing (personal communication, Shelby, 2014).

The USFWS will never consider this a success. Previously vacant land had local jurisdiction over it. Now the RCA has jurisdiction. A councilman would only consider it a success because now it could lower or eliminate some developer fees. Success would also be reducing the cost of development by eliminating developer and landowner fees (personal communication, Gerry, 2014).

“The implementation is really messy, really messy. It is complicated. It is messy from a property owner’s viewpoint” (personal communication, Mackenzie, 2014).

Success is everybody wins. That is what the plan was designed to do. Everybody was supposed to win. We all gave up a little, but we won. No collateral damage. The core of the question is success is measured in the eyes of the beholder and the beholder is going to depend on whether you are a plan person, whether you are a member of the RCA, whether you are a conservation agency or whether you are a property owner or whether you are a city. Your

perspective on that word as it applies to the plan is going to be different for everyone (personal communication, Mackenzie, 2014).

Success of this plan is that fairness remains the key because it has to be the core. So a fair, even-handed approach where we get the conservation we need is success. Maybe not as much as we wanted, but we got all of it we needed to be able to accomplish conservation goals. I would consider success the flexibility to recognize that sometimes we give up some acres, but we enhance habitat in other areas to help us achieve those goals; that cities found less frustration getting to their targets, getting to their goals. Right now, the cities are very frustrated (personal communication, Mackenzie, 2014).

The overall sense of the plan is that it is a failure. I think the implementation currently is in failure status. I think it is going down. I think it is on its way out. I think they need a new captain and somebody that knows how to redirect the crew. I think they are just taking it to the end of the world and then they are going to drive it over the edge. They are unsuccessful at this point because they spent a lot of money. They bought a lot of land. They have also wasted a lot. They spent a lot of money on low hanging fruit that they did not have to go after. This plan was heaven sent for deep-pocket developers. They took all the cherries off the top early on and they left everyone else holding the bag. So all the big guys, everybody that everybody's supposed to love to hate, you just gave it to them. You just gave them everything. And you left the rest; you left the hard part for the little guy. The plan was poorly thought out in that

regard. And now, because of the lack of funding and the unfairness that goes with it, the plan is imploding (personal communication, Mackenzie, 2014).

Likelihood of Implementation

Referring to Beierle and Cayford's conceptual model, the likelihood of implementation can be low, moderate, or high. They identify several forces acting on implementation that will either help, halt it, or make it irrelevant. Based on their previous assessment of a number of case studies they identify 1) disagreements that stall implementation, 2) exclusion of people or issues that leave conflict unresolved, 3) political intervention, 4) changing circumstances making implementation undesirable, and 5) links to other policies or programs as elements to consider when identifying the likelihood of implementation (Beierle and Cayford, 2002, p. 62).

For the most part, parties to the Implementing Agreement seem to have found a way to resolve many disagreements that stall implementation. One major criticism of this plan is that it has seemingly left issues involving individual landowners that are not signatories to the plan with unresolved conflict. There are multiple examples of the RCA and others inviting political intervention. Parties to the plan still see accomplishment of plan goals as desirable. With respect to the linkage to other plans, the WRMSHCP was specifically developed to dovetail with other Riverside County Plans and agreements like the SKR HCP. From that perspective alone, the County has a vested interest in the plan continuing to move forward. So, while the road to accomplishment has its share of potholes, there is at least a moderate likelihood of implementing the plan. There are forces negatively affecting implementation that will continue to cause delays and dissatisfaction not only amongst the parties to the ITP, but to stakeholders in the region as

well. It would seem these must be addressed at some point in order to move forward. The quality of deliberation is associated with likelihood of implementation. This is an area of concern between parties associated with the WRMSHCP and others.

Beierle and Cayford note that what fosters or hinders implementation is not the level of participation in the program per se, but results from impacts to the larger regulatory program in which implementation operates (Beierle and Cayford, 2002, p. 62). This suggests that if biological goals are being met, and if transportation needs are being addressed, an argument can be made that the likelihood of implementation of the plan is at least moderate.

Results/Implementation Attributes Findings

The first attribute here is Stage of Implementation. The WRMSHCP is in its tenth year, and has reached Stage 4 of implementation in Beierle and Cayford's conceptual model (2002). It has already passed many of the hurdles necessary to increase the likelihood of implementation. There are certainly negative influences and barriers to implementation, but there are also things that are working. Looking from a different perspective, large amounts of time, money, political and social capital are invested in the plan. Parties are still interested in achieving their goals so they continue to have a vested interest in working together.

Factors negatively affecting implementation are described in detail. The single most often mentioned factor by both Wildlife Agencies and Other Respondents is lack of funding. There are differing perspectives on how participants got to this point. These vary from the consultant reports expressing concerns about the availability of resources, to the "leap of faith" on the part of some plan participants that funding will become

available. Certainly the economic downturn affected progress. However, varying economic cycles are a constant, and in fact were an issue with previous HCPs in the region. The implementing network is currently in the process of updating the funding study done, ten years into the plan implementation, to identify ways the funding issue can be addressed moving forward. The literature identifies funding again and again as a mandatory resource to assure successful implementation by a policy network (Beierle and Cayford, 2002; Brogden, 2003, Gruber, 2010; Lubell et al., 2002; Pressman and Wildavsky, 1984; Sabatier and Mazmanian, 1980).

Both Wildlife Agencies and Other Respondents identify authority issues as a barrier to success, although in different ways. From the Wildlife Agencies perspective, it is a jurisdictional issue that translates to lack of mitigation for certain species. From the Other Respondents perspective, it is a result of permittees not exercising the authority that is available to them to make land use decisions. Both groups identify the constant turnover of plan participants as a barrier to implementation. Other Respondents express concerns related to climate change that may affect long-term viability of the species that has not been addressed. Lack of interest and political support to deal with funding or degrading private property rights are a growing concern. Other Respondents repeatedly expressed concerns that collateral damage to individuals not only seems inevitable, but that it also seems to be an acceptable outcome of the process.

Comments from the Wildlife Agencies suggest that relationships have improved over time with respect to both permittees and RCA. Trust issues remain for Other Respondents with both the RCA and Wildlife Agencies. One take-away from the comments surrounding fairness in the process suggests that the nature of relationships in

a network may change over time as predicted by Weible (2008). The adversarial SKR HCP network worked together to form a more collaborative effort under the WRMSHCP. However, collaboration alone doesn't insure success. Unmanaged difficulties that marginalize some members in a collaborative effort may also lead back to unitary or adversarial network relationships (Weible, 2008).

There are a multitude of responses across the board when it comes to describing participants overall sense of satisfaction and progress. There are responses from both the Wildlife Agencies and Other Respondents who think the WRMSHCP is working well overall. And there are also respondents from both groups who think the WRMSHCP is either not working overall, or they just do not know what is working and what is not. Sometimes all three responses come from the same individual. This suggests there may be much work to be done in identifying more of those "other than biological" metrics to really assess progress of the WRMSHCP toward all three goals of the plan.

The statement regarding being so far down in the weeds you do not know whether the plan is successful or not suggests there is an opportunity for someone to pull the big picture together and frame those successes for both participants and the larger community. Annual reporting does that to a certain extent. Perhaps other metrics could be developed to give a more well-rounded sense of success.

One comment of note is the Wildlife Agencies' awareness of the implications for the plan if the federal government cannot maintain long term plans due to funding, authority, or other constraints.

With respect to Other Respondents feedback, there are metrics relevant to communities related to the social goals of the County that may not be being met. Failures

noted relate to ways people are treated during implementation of the plan. The presence of lawsuits suggests there may be opportunities to cooperate, particularly when at least a portion of those lawsuits are settled before going to court. As Lubell notes, perceptions of effectiveness depend on policy core beliefs and institutional structure. In particular, institutions that resolve conflict are perceived to be more effective by stakeholders who believe the process is fair, and trust the implementing parties (Lubell, 2003).

Leadership is a requirement that has been mentioned throughout this effort. Some respondents talk about the leadership of individuals during negotiation of the WRMSHCP that were able to pull divergent coalitions together to form the plan. Concerns were also expressed that lack of leadership will result in the failure to fully implement the plan. Leadership is not something you can easily build into an agreement, particularly one designed to last multiple generations.

It is appropriate at this juncture to compare the findings above with elements of Scheberle's implementation model examining the relationship between federal and state actors in policy implementation. She refers to implementation energizers; extrinsic factors, or those outside the implementing agencies control; intrinsic factors, or those within the implementing agencies control or "within part of the constellation of forces unique to a particular implementing agency;" and refocusing events (Scheberle, 2004, p. 43). Extrinsic and intrinsic factors were included within the case study as factors affecting implementation in Beierle and Cayford's model.

Scheberle defines implementation energizers as those focusing, day in and day out, on achieving on-the-ground results (2004). There are a handful of individuals within the Wildlife Agencies who meet this definition. The results they seek are acreage

included in the reserve to be protected and appropriately managed. Several individuals outside the Wildlife Agencies were mentioned in the interviews that could also be considered implementation energizers. Tom Mullen is given credit by both Wildlife Agencies and Other Respondents as being a pivotal actor in the creation and implementation of the WRMSHCP. His involvement was not as a representative of a federal or state government with a mandate to improve endangered species habitat, but as a representative of a county experiencing tremendous demand for growth with the potential to significantly harm species management efforts in the region. Ed Sauls as a developer, and Dan Silver, as the Executive Director of the EHL, were two other names mentioned by multiple respondents as individuals who make significant contributions, one way or another, to the creation and implementation of the WRMSHCP. Whether they are “implementation heroes” or not in Scheberle’s vernacular is surely a matter of policy network perspective, but there appears to be general agreement that they have the capacity to influence both the direction and magnitude of implementation activities. There are other voices heard throughout the interviews as well. These are voices of individuals seeking healthy communities with a high quality of life, but seeking accomplishment of those goals in a way that respects not only the communities participating in the WRMSHCP, but the individuals affected by implementation of the plan.

Scheberle defines refocusing events as events which change the implementation direction or pace. The economic slowdown beginning in 2008 fits that definition with respect to its impact on the pace of anticipated land acquisition. Resulting activities include a detailed examination of the fee structure associated with the plan and recent

changes in amount and timing of payments due to the RCA from permittees. It's not clear yet whether these changes will alleviate barriers to plan accomplishment, or exact a price too high and cause some permittees to withdraw from further participation in the plan (Scheberle, 2004).

Scheberle's typology was discussed in Chapter 2 (2004). She notes that the role of federal actors can dramatically affect working relationships and implementation patterns. This typology identifies two characteristics critical to predicting whether federal and state officials will respond positively to each other; mutual trust, and extent of involvement by oversight personnel. More trust is considered better, more oversight is not always considered beneficial for working relationships (2004). At this stage of development, interviews with staff from both federal and state agencies involved in the WRMSHCP, and others in a position to observe interactions between the two, indicate a relationship where agency participants are generally pulling together in a way that achieves more than either could do alone. This indicates a shared commitment to policy objectives while each agency answers to different constituents and stakeholders. Scheberle notes that pulling together is a result of efforts of both state and federal participants to achieve programmatic success (2004). This type of relationship, in addition to the presence of various implementation energizers, seems like key factors when considering the long-term likelihood of implementation of the plan. One element associated with implementation energizers not addressed by Scheberle is why these individuals choose to fight so hard for program success. That was not taken on by this effort, but may be a rich investigative path for future research.

A final evaluation looks back to Bardach's supposition that implementation is really a control problem where one person is asserting control while another person is attempting to escape it (1977). In chapter 2, the USFWS was identified as the sponsoring coalition, and the permittees were identified as the coalition seeking non-programmatic benefits. Interview responses related to the overall sense of progress and success of implementation of the WRMSCHP in its first decade are both discouraging and hopeful. The Wildlife Agencies recognize they are behind where they expected in acquiring reserve lands, but are hopeful that funding, in particular, will improve and still allow acquisition goals to be met. They reference other goals achieved in terms of preservation of habitat and related corridors. In addition to these programmatic goals, they talk about the importance of acceptance of the benefits of the plan to communities who must embrace the reserve lands to preserve them in the future. One concern they expressed is whether or not programmatic goals can ultimately be achieved without long-term federal support. Other Respondents also express both discouragement and hope. From the permittees perspective, the desired outcome was increased growth, largely dependent upon building transportation corridors. There are indicators to suggest the permittees have achieved more working in partnership with the Wildlife Agencies within the WRMSHCP than they would have been able to accomplish absent the plan. This success, however, comes at both the cost of participation in the program related to fees used to fund reserve land acquisition and long-term monitoring, but also at great personal cost to some within their jurisdictions. Success, as one respondent described it, is in the eye of the beholder.

While it's far too early in the implementation process to determine whether or not the HCP will ultimately be considered a success, it is clear that there are a number of smaller, incremental successes and failures along the way. Given the 65 years remaining for the permit, fifteen years of which remain for reserve land acquisition on the current path, it is not yet possible to project the final outcome. It is possible to say, however, that implementation in this case supports what the literature largely describes as a dynamic, ever-changing process requiring investment of significant resources with the objectives of attaining significant gains.

Chapter 5

Summary of Findings, Implications, and Future Research Possibilities

While Phase I results are helpful in looking at HCPs in California from an historical perspective, the Phase II findings allow comparison of generalizations described in the literature to actual case study findings. It is hoped that as more cases are examined, the individual findings can be used to improve theoretical considerations. The WRMSHCP studied is considered an extreme or unique case within the context of Yin's five rationales (Yin, 2009). It is exactly the complexity of this case, however, that allows greater analysis of the characteristics identified in Table B-1 in Appendix B, and application of these to address the research questions.

Research Questions

Research Question 1: What factors play a role in successful HCP implementation?

The literature identifies many factors that may play a role in successful HCP implementation. Some of the most common were identified in this research effort and organized into context, process, and results/implementation attributes shown in Table B-1 in Appendix B based on the previous work of Beierle and Cayford (2002).

Phase I findings suggest that groups will not form to create HCPs unless it appears that groups need to form in order to successfully accomplish their goals (Berry, et al., 2004; Lubell and Fulton, 2007; Lubell et al., 2002; North, 1990; Ostrom, 1990; Williamson, 1979). With respect to context attributes, Phase II findings indicate that problem complexity, pre-existing conflict, and the capacity of individuals and groups to participate in implementation activities do have the potential to affect the success of implementation activities (Beierle and Cayford, 2002; Lubell and Fulton, 2007; and

Lubell et al., 2002). The case study findings support the idea that transaction costs can be reduced by groups of actors coming together to resolve complex issues. Pre-existing conflict was a significant factor in affecting decisions to form the WRMSHCP and in exacting commitments by multiple parties to move forward with the plan. That said, however, group memory of that conflict seems to be fading over time. Absence of conflict, or at least different levels and types of conflict between parties during implementation ten years after negotiation of the plan suggest that some participants have forgotten or are unaware of how difficult it was to develop regional projects prior to the existence of the WRMSHCP. What has become more apparent during this time, however, is that putting an institution in place to develop regional projects is having significant impacts on at least a portion of individual landowners, whether they are choosing to develop or not.

Process attributes findings confirm that, for complex coordinated implementation efforts, the presence of a formalized, flexible process appears necessary to implement HCP activities (Beierle and Cayford, 2002; Brogden, 2003; North, 1990; Ostrom, 1990; Pressman and Wildavsky, 1984; Sabatier and Mazmanian, 1980; Williamson, 1979). Much of the WRMSHCP organizational structure seems to be working as envisioned. The RMOC and the Stakeholder Committee in both its configurations since issuance of the ITPs may be the exceptions. Both committees are being reinvented in ways that will hopefully assist with implementation success over the long-term.

Results attributes observed in the WRMSHCP case include relationships between the parties to the WRMSHCP and stakeholders, and their contribution to the overall sense of satisfaction and success.

The case study clearly suggests the importance of not only identifying, but measuring progress toward multiple, seemingly at odds, goals (Pressman and Wildavsky, 1984). Multiple respondents expressed hope and concern about whether stated biological, economic, and social goals stated in the WRMSHCP are being met. Breaking these goals into multiple, interim milestones may be a way to either reassure participants that progress is being made, or provide an opportunity to reassess individual aspects of plan implementation allowing appropriate revision of activities as implementation progresses to improve accomplishment of goals.

Relationships between developers and landowners, neither of which are signatories to the WRMSHCP, affect the relationship between the permittees and the USFWS, and ultimately the perception of success or failures of the HCP goals. This reinforces the idea that there exist both formal and informal policy networks, the effects of which must be recognized throughout implementation (Scheberle, 2004).

While the quality of deliberation varies amongst permittees, and certainly amongst stakeholders outside of the ITP, findings from the WRMSHCP case reinforce that adequate deliberation is required during implementation (Beierle and Cayford, 2002). It appears to be a necessary process element to utilize flexibility built into the Implementing Agreement to adapt to changing circumstances over time. Having an adaptive process to overcome the transaction costs associated with evolving relationships and changes resulting from external events affecting implementation allows for changes in activities to compensate for negative impacts. Findings from Phase II support the idea that the presence of trust in relationships amongst the implementing parties is important in achieving success (Scheberle, 2004).

One of the barriers to success identified in the WRMSHCP is that there are a number of stakeholders affected that are not parties to the HCP and therefore have limited avenues available to them for conflict resolution (Lubell, 2003). The idea of perceived fairness in treatment of all is a key element of success identified by various stakeholders. Other barriers identified include lack of adequate resources like funding and political support across jurisdictions and governmental levels to accomplish implementation objectives, fees perceived as excessive charged to individual landowners to find out whether or not they are affected by the WRMSHCP and how that affects their land use decisions, and multiple interpretations of law and policy related to species management. Lack of trust between signatories to the WRMSHCP and between affected stakeholders is negatively affecting the likelihood of success. Broadening the scope and quality of deliberation may offer some relief by allowing affected voices to be heard and their concerns addressed.

Research Question 2: How is success defined and measured in the HCP implementation process by the USFWS and by permittees?

As discussed in Chapter 4, some of the ways Wildlife Agencies measure success is based on achievement of their land acquisitions goals, maintenance of habitat linkages for protection of species, and fulfillment of long-term commitments of the government. The presence of good working relationships with permittees was also noted as a measure of success, as is not having to pull, or cancel, a permit. Permittees currently measure success in terms of the infrastructure development that habitat acquisition allows.

There was a significant amount of input in the interviews about the relative success of the WRMSHCP by stakeholders who are neither Wildlife Agencies nor

permittees. The perceived fairness of the HCP processes affecting landowners is at the heart of many of these comments.

While Bardach's recommendations to choose the point of view of an idealistic group and a group seeking non-programmatic benefits for study to determine the success rate of a policy are clearly necessary and informative (1977), the case study strongly suggests that impacts to groups other than the Wildlife Agencies and permittees is also necessary to evaluate overall policy success. For example, specific feedback to politicians by non-signatories to the WRMSHCP regarding effects to private property rights and landowner perspectives on the success or failure of the plan could ultimately change the tide of political will to no longer support the HCP.

Research Question 3: How might the presence of various policy actors and the roles they play in a network that comes together to implement a multi-party HCP affect the likelihood of successful implementation?

One of the findings from the Phase I analysis of multi-applicant HCPs indicates that the No Surprises Policy may have made individual-applicant HCPs more attractive. In fact, individuals applied for ITPs only after creation of the No Surprises Policy in California. This supports the findings of North (1990) and Williamson (1979) that groups or coalitions will not form unless the transaction costs of moving forward without them are too high.

Accordingly, more complex ITP needs may require partnerships to accomplish the HCP goals (Lubell and Fulton, 2007; Lubell et al., 2002, and Ostrom, 1990). The presence of various policy actors in WRMSHCP implementation suggests that 1) there may be no other venue specific to their issues available to them, or 2) if there are other

venues for managing policy actors' issues, the transaction costs of participating in another venue are higher than for participating in the WRMSHCP process, regardless of whether actors are part of an idealistic policy group or a group focused on non-programmatic success (Bardach, 1977; Pressman and Wildavsky, 1984). The fact that diverse groups of actors do, in fact, come together to implement HCPs suggests that those actors perceive their chances of success are increased by utilizing HCPs to accomplish their goals. The WRMSHCP likely would not have been created, or at least would look very different today if parties to the SKR HCP had not recognized the importance of habitat preservation to allow development, and taken steps to negotiate the Implementing Agreement to improve the likelihood of implementation of the WRMSHCP.

Research Question 4: Why does success matter? Does policy network success relate to more successful HCP implementation?

For long-term HCPs like the WRMSHCP, one of the most important ways success matters during the implementation period is to assure that the plan continues to move forward toward achieving its goals. In order to do that, it needs a continued influx of resources including funding and political will (Beierle and Cayford, 2002; Brogden, 2003; Lubell et al., 2002; Ostrom, 1990; Pressman and Wildavsky, 1984; Sabatier and Mazmanian, 1980; Scheberle, 2004).

Since the Phase II findings support the idea that a policy network does influence the success of implementation, one may also conclude that policy network success may relate to more successful HCP implementation. Interviewees of the WRMSHCP policy network describe both wins and losses to date. The history of this network suggests that with continued communication to overcome barriers identified relating to resources,

differing jurisdictions and goals, the short-term memory of actors in the process, especially elected officials, etc., there is an increased likelihood of implementation success.

Research Question 5: Beyond HCPs specifically, is there something that can be learned from the case study here that adds value to other environmental management efforts?

The findings above suggest that the attributes described in the literature utilized throughout the Phase II analysis are useful ways to characterize aspects of success or failure of an implementation effort by a policy network (Beierle and Cayford, 2002). Implications for both policy makers and practitioners implementing HCPs are described below. While the study of a single case does not support generalizing the findings described above, it does suggest that there is merit to comparing findings from this case to similar findings from other cases in future research in order to develop findings that may be generalized to other environmental policy networks. Elements of HCPs are similar to elements of other policies focused on environmental preservation or improvement, especially as they affect private property rights. Many of the implications described below may apply to other federal/state/local collaborative efforts and to joint regulatory efforts as well. Trust between parties and fairness issues appear to be universal concerns when considering collaborative problem solving strategies.

Implications for Policy Makers

The findings from the WRMSHCP suggest the following implications for policy makers that may be considered for other long-term, negotiated environmental agreements. These are loosely categorized as implications related to parties to

agreements, and implications related to stakeholders, any of whom may be part of the policy network. Within these categories, they are not listed in any particular order.

Prior to discussing implications in each of those categories, however, it should be pointed out that one implication applies to both categories of network participants. This relates to that nebulous quality called leadership. While a full discussion of leadership is not possible here, a few thoughts on the subject stand out in the literature. As noted by Denhardt and Denhardt (2006), leadership is not a science but an art that gives people and organizations purpose and direction, and energizes people. Anyone can lead from any level. Per the Denhardt's, leadership is about change, and change involves deeply rooted human values. They state that "We may go along with monetary incentives, management reports, and performance targets, but only leadership that touches our emotions and is consistent with our values will engage our full energy." (2006, p. 8). De Pree highlights three themes he associates with leaders that may be worthy of consideration here: integrity, skill in building and nurturing relationships, and the nature of building communities (De Pree, 2004, pp. ix-xi). He goes on to state that integrity is a principle that serves society; that the ability of each of us to exercise our special gifts depends on the presence of the gifts and skills of others; and the recognition that community is where we have opportunities, where meaningful goals can be set and their achievement measured, where we can grow and prosper, and respect, honor, and thank the people who contribute to our lives (2004, p. xi).

Leadership, or lack of it, is identified by multiple participants in Phase II as an important element in implementation of the WRMSHCP. The recognition of the importance of leadership, and the acknowledgement that it can come from any part of a

policy network is one overarching element to consider when developing and implementing policy over the long-term.

Parties to Agreements

The first policy implication from Phase I associated with parties to negotiated environmental agreements is that fewer partnerships may be required for less complex HCP needs. This is based on the number of ITPs and type of NEPA analyses associated with ITPs issued in the State of California. Likewise, single species HCPs are the most common across all three generations of HCPs developed within California to date, as are single land uses like residential construction.

The second implication suggests that adding adaptive management requirements to HCPs does not seem to have caused a shift in the percentage of single vs. multiple applicant HCPs in the State of California.

The third implication for policy makers can be gleaned from an historical look at passage of the No Surprises clause in the ESA. Phase I findings suggest that inclusion of the No Surprises clause in the ESA seems to have made HCPs more desirable in the State of California, particularly for single ITP applicants. One explanation could be that the desired policy outcome of reducing the long-term financial risk of landowners does encourage the use of HCPs as a development tool. Reducing the long-term financial risk of landowners may apply to other environmental improvement activities.

A fourth policy implication from Phase II reinforces previous findings in the literature by authors including Beierle and Cayford (2002), Brogden (2003), Lubell (2003), Lubell et al. (2002), North (1990), Ostrom (1990), Pressman and Wildavsky (1984), Sabatier and Mazmanian (1980), and Williamson (1979) that a formalized

process is necessary when working with multiple parties to assure that successful HCP implementation proceeds as planned. Agreed upon roles and responsibilities, and rules for interaction are seen as key. This structure plays an important role in moving forward as institutional memory fades or becomes distorted over time, as political and economic cycles change, and as individual actors enter and leave the action arena.

A fifth policy implication relates to public outreach. Based on USFWS and CDFW experience discussed in Phase II, public outreach activities have a positive impact on implementation of the WRMSHCP. In this case, permittees may not be taking full advantage of the opportunities to reach out to the public within their jurisdictions. Public outreach, while not without cost, and with questions over how much benefit may be received by authors like Beierle and Cayford (2002), may still be helpful in undertaking environmental management issues.

The sixth observation for policy consideration relates to intergovernmental relationships. Study of the WRMSHCP in Phase II recognizes the importance of state and federal cooperative relationships in working closely with a local administrative network to implement multi-jurisdictional activities associated with the plan. This may also apply to other types of negotiated environmental agreements (Lubell and Fulton, 2007; Scheberle, 2004).

The seventh implication for policy makers from Phase II recognizes that political will is a key element identified to insure continued implementation of the WRMSHCP. Since politics and their related economics are generally cyclic in nature, the implementation infrastructure must have provisions in place to continue implementation

activities as political will waxes and wanes over time. Elements that assure a continuous funding stream are examples of necessary provisions.

Stakeholders

The first implication for policy consideration related to affected stakeholders demonstrates that numerous actors participate in WRMSHCP implementation in addition to the Wildlife Agencies and permittees who are signatories to the HCP. As noted in the Phase II case study, the policy network includes developers, environmental groups, agricultural groups, public/private landowners, and private citizens. The interests of these parties are sometimes utilized, or in other cases, could be utilized to fulfill needs of the HCP. For example, it was mentioned in the case study interviews that there could be a substantial role for a Friends of the MSHCP group, as well as hunters and other conservation groups in management of WRMSHCP lands.

A second implication for policy relates to consideration of effects to stakeholders which may appear as unintended consequences. Policy rules are often developed around the targeted parties whose behavior the policy is seeking to change. In the context of the WRMSHCP in Phase II, it is appropriate to recognize the need to include non-targeted, but affected, parties when developing policy rules to minimize unintended policy consequences resulting in the collateral damage described in the case study.

For example, the Phase II case study suggests that the price of land and the length of time it takes to sell in areas that develop during implementation of an HCP may be negatively affected. This results in negative impacts to individual landowners within HCP-targeted criteria cells. Because of the way real estate is typically valued in the US, recent land sale prices affect not only those landowners who choose to develop or even

maintain historical land uses within a criteria cell, but may ripple outward throughout a geographic region to other landowners. These kinds of negative, long-term regional economic results should be considered when identifying broader environmental management strategies. There is nothing in this study to suggest, however, that development of other economic land management practices more in synch with habitat preservation are precluded. On a regional geographic scale, however, this may be a significant shift that would need to be supported by other factors such as changes in permittee zoning and targeted economic development efforts.

Another example of unintended consequences demonstrated by the WRMSHCP case suggests that additional consideration be given to the development of implementation fee structures paid by citizens bound to the WRMSHCP through the permittees to avoid appearing to penalize landowners upon whom the HCP success depends. This fee structure could be addressed as the implementation policy network reevaluates funding sources for future land acquisition under the WRMSHCP. The sense of fairness associated with this issue would seem to apply to other environmental management strategies.

Implications for Practitioners

The following points demonstrated in the WRMSHCP case seem relevant to on-the-ground efforts to implement similar long-term negotiated environmental agreements. And unlike the implications for policy makers, these relate to implementation more at the policy network level than within the categories noted above for policy makers.

The first implication for practitioners is the acknowledgement that relationships between individuals associated with the WRMSHCP, both in the formal and informal policy networks, are important and continue to evolve over time.

The second implication recognizes the need for access to a venue for deliberation not only amongst the parties to an HCP, but associated stakeholders and affected parties. This may significantly increase the likelihood of successful HCP implementation. Input and participation by the public and special interest groups should be considered when developing strategies for environmental activities implemented by policy networks.

Similar to the comment made for policy makers, the third implication for practitioners from the WRMSHCP case suggests that rigid approaches to resolving implementation issues as they develop over time may not be effective, especially as political and economic cycles change. Development of innovative strategies for meeting agreed upon goals may be necessary throughout plan implementation.

The fourth implication for practitioners suggests that continued, long-term plans for outreach may assist the policy network in achieving implementation goals. Over time, not only do people in the formal and informal policy networks change, but individual members of the public change as well. In the case of both the SKR HCP and the WRMSHCP, a great deal of attention is paid by all parties during early phases of development and implementation of HCPs. For a number of reasons, as implementation moves forward, outreach may seem like a lower priority given other needs of the network. Feedback from the WRMSHCP suggests, however, that continued outreach to the policy network, affected stakeholders, elected officials, and members of the public may ultimately play a large role in documenting the incremental successes of the HCP

effort as well as developing an understanding of issues needing resolution in order to continue implementation activities.

The fifth implication from this research effort for practitioners is that care must be given to insure that the function of a given committee is congruent with the expertise and role of selected committee members. For example, within the WRMSHCP case, the RMOC is currently being restructured to allow technical experts to better perform technical functions while better enabling the elected officials to more appropriately fulfill their oversight function. Another example is the recently repopulated Stakeholder Committee. There is a substantial amount of distrust of the process and the parties implementing the WRMSHCP by some affected stakeholders. The intermittent nature of the Stakeholder Committee meetings and perceived lack of opportunity for feedback serve to reinforce distrust of the process.

At least within the WRMSHCP, fairness is a policy core belief and is seen as necessary in the execution of day-to-day business among signatories to the HCP and among stakeholders. A resulting implication for practitioners suggests that treating all members of the policy network and the public respectfully and fairly may contribute to perceived policy effectiveness.

Implementation energizers as characterized by Scheberle (2004) can be anyone within a policy network regardless of whether or not they play a formal role. The WRMSHCP case findings appear to support this. One implication for practitioners is to be aware of, and seek out the assistance of these energizers, regardless of their role in implementation. Energizers in fact, may be a key to the leadership conundrum.

Energizers' influence, by definition, may lead to measureable results and achievement of implementation outcomes.

Implications for Researchers

The primary implication for researchers resulting from this effort is the recognition that individual case studies utilizing elements common to multiple research efforts can provide valuable examples of real-world policy networks and their effect on implementation of long-term negotiated agreements like HCPs for managing environmental resources. Implications like those suggested above can be tested to either support or question various suppositions about the roles of formal and informal policy networks.

Linking Research Findings to the Literature, and Back Again

In order for findings from this work and others to be assimilated in a useful way, it is important to link them back to the literature associated with implementation of policy activities like HCPs and the policy network literature. These findings also suggest future research opportunities.

Returning to the implementation literature discussed in Chapter 2, Beierle and Cayford (2002) and Sabatier and Mazmanian (1980) explicitly recognize that implementation occurs in stages. A review of the WRMSHCP case supports this hypothesis. Beierle and Cayford's work provides a structure within which to observe these stages ranging from creation of the WRMSHCP agreement resulting from a public process, a commitment by the Wildlife Agencies and permittees, changes in law, regulation or policy including resolutions and other requirements agreed to by the various permittees, actions taken on the ground like selective land acquisition activities, and

finally, changes in environmental quality. In the case of the WRMSHCP, this includes preservation of selected habitat and specific habitat linkages between development projects. One way the WRMSHCP case study builds upon this literature is by identifying that, while these stages initially appear to be a quantifiable linear process, some stages will need to be revisited over time. With respect to the original agreement, for example, efforts are currently underway to re-establish the RMOC and the Stakeholder Committees in ways that better serve ongoing implementation activities based on policy network learning to date. In addition, the network has experienced major funding issues over the first ten years of implementation and is in the process of re-evaluating previously identified funding sources, and other sources of funding that could be utilized to continue the work started under the HCP. While some permittees seem to be embracing the benefits of the WRMSHCP, other permittees are dissatisfied with the perceived benefits to date. This may result in changes to permittee codes, zoning, or other regulations, or it may ultimately result in individual permittees withdrawing from the HCP. As the costs of land acquisition and management continue to grow, different on-the-ground strategies may be required. Like the uncertainty associated with the science of HCPs requiring adaptive management over time as more is learned, the same may be said for adaptive management of more administrative aspects of implementation.

Sabatier and Mazmanian (1980) also state that implementation of policy objectives is enhanced by including opportunities for participation by non-agency actors. The Implementing Agreement in the WRMSHCP case creates an institutional structure that addresses roles and responsibilities of signatories, identifies legal and financial resources, and demonstrates support by officials from signatory agencies, all of which are

recommendations made by Sabatier and Mazmanian and other authors referenced herein. It can be argued however, how well the current WRMSHCP structure creates opportunities for participation by others. Some of the most negative feedback of the implementation process to date focuses exactly on this question and therefore, supports the supposition that some form of public participation is necessary throughout the implementation phase for long-term negotiated environmental agreements. As noted above, one way the WRMSHCP policy network has an opportunity to address this is as it re-evaluates the role of the Stakeholder Committee.

Berry, et al. (2004), Pressman and Wildavsky (1984), and Sabatier and Mazmanian (1980) directly address the potential drawbacks associated with the extent of hierarchical integration and the number of veto points in a complex organizational structure. Berry, et al. (2004), Lubell and Fulton (2007), and Scheberle (2004) and note the benefits of hierarchical participation between federal, state, and local governments and others. The WRMSHCP case demonstrates that there is validity in both of these perspectives. The WRMSHCP demonstrates that complex problems like regional habitat management and economic development appear to focus on obviously conflicting biological, economic, and social goals. It is exactly these conflicting goals, however, that require a more complex organizational structure to achieve these goals simultaneously. Having multiple levels of government involved may allow more flexibility and support of long-term implementation activities. For example, as federal funding becomes more limited, funding and other resources from state and local governments, and other non-governmental organizations may be utilized to continue land acquisition activities. Innovative land ownership partnerships and land management strategies like conservation

easements may reduce funding needs. Future cases studied could focus on identifying more of the “how” to deal with hierarchical structures to maximize benefits.

One of the fundamental findings from Pressman and Wildavsky’s (1984) work that is explicitly supported by Beierle and Cayford (2002), Brogden (2003), Gruber (2010), Ostrom (1990), and Scheberle (2004) is the recognition that mechanisms for managing change throughout an implementation process are critical to its success. The WRMSHCP case is really just getting started. The plan is ten years into its 25-year acquisition phase and its 75-year anticipated life span. In addition to the organization’s structural changes currently being pursued, leadership changes and individuals participating in the process, like Tom Mullen and the revolving door of elected officials noted by interviewees, affect implementation progress as do the impacts of fundamental economic assumptions that must be anticipated and adapted to cyclic changes. The WRMSHCP Implementing Agreement allows for continued negotiation amongst the parties to adapt to these changing conditions over time.

One area rife with potential for future research relates to implementation energizers as described by Scheberle (2004). Are these formal and informal leaders within a network? What is it about implementation energizers that allow them to motivate others to overcome obstacles to achieving program success?

The analytical recommendation by Bardach (1977) that the success of implementation be defined from the sponsor point of view where the sponsor is part of the process was critical in laying out the research strategy for this case study effort. As discussed in more detail in Chapter 4, the USFWS recognizes both successes and barriers to achieving their agency goals in the WRMSHCP at this time. The same can be said for

permittees. Certainly habitat is being conserved as part of the WRMSHCP effort. Economic development goals are also making progress. The WRMSHCP case, however, demonstrates that focusing on only the idealistic sponsor perspective and the other perspective seeking non-programmatic benefits does not paint a complete picture related to the success or failure of policy implementation. If policy goals are being met at the expense of other social goals, then the lines become blurred with respect to policy success. Future case studies may wish to add a third element to the research strategy seeking impacts or benefits to others than the sponsor and the non-programmatic parties' perspectives.

Beierle and Cayford's (2002) work also played a central role in development of this research effort. Most significantly, they provided the structure for consideration of context, process, and results attributes. The WRMSHCP case demonstrates that this structure is a useful one when attempting to understand the history of the HCP, the progress that has been made to date, and the goals that have yet to be reached. One beneficial aspect of this structure is that it can be adapted to include other variables of interest within the three categories noted as was done for the WRMSHCP case. This makes the structure a very versatile way to compare and contrast many different cases. One of the lessons learned from the WRMSHCP effort is that, while *Relationships between Implementing Parties* was considered a Results attribute in this analysis, the relationships between various policy network participants, both signatories to the Implementing Agreement and others, are inherent in the descriptions of almost all the other attributes in Table B-1 in Appendix B. The specific *Relationships* attribute is also not sufficient for describing nuances in the variety of relationships between the

implementing parties including new coalitions that may develop throughout implementation of a long-term environmental agreement. Thought should be given in future case studies for better ways to manage research around these relationships based on their importance to other research questions. The WRMSHCP case attempts to summarize the relationships discussed by interviewees at a very coarse scale.

Beierle and Cayford (2002) conclude in their study that success or failure of implementation in the cases they studied was largely due to the process of public participation rather than its context. Comments in the WRMSHCP case support this finding. While pre-existing conflict between the parties, and the capacity of participants to navigate various aspects of the process define a starting point for relationships and activities prior to implementation of the WRMSHCP, it is the actions taken during the implementation process related to quality of deliberation, adequacy of communication networks, and procedures to manage change and conflict that have a direct impact on participants' perceptions of success. Examples include criticisms relating to lack of a venue or process to manage negative stakeholder effects outside the signatories to the Implementing Agreement, and observations by Wildlife Agencies about the potential missed opportunities from their perspective for public education, and for permittees to educate their citizenry. A large amount of study remains to be done documenting the connection between good public participation and good implementation. This seems especially important to long-term agreements like HCPs.

One theme addressed by multiple authors cited relating to policy networks is that of transaction costs associated with creating contracts between members of a network. Berry, et al. (2004), Lubell and Fulton (2007), Lubell et al. (2002), North (1990), Ostrom

(1990), and Williamson (1979) all explicitly note in their work that evidence supports the formation of groups or coalitions to lower transaction costs of an activity. The Phase I findings suggest that groups will not form unless explicitly needed to lower transaction costs. Additional research may be helpful in gaining insights into the relationships between the use of HCPs for simple vs. more complex habitat conservation or related development efforts and whether actors seeking ITPs choose to apply as an individual permittee, or as part of a group effort. A better understanding of these relationships may assist the USFWS in tailoring their HCP guidance to meet specific agency goals.

The number of HCPs increased significantly as more individual applicants applied for ITPs to complete short-term residential construction. What is the correlation between other types of land use and long-term HCP durations?

What factors explain the shift between the second and third generation plans toward categorical exclusions, and is this correlated with the increase in single applicants for HCP ITPs?

Analysis of the number of HCPs in California by generation suggests that the No Surprises Policy increased the number of HCPS in the second generation, particularly for single applicant ITPs. However, the development of third generation HCPs after inclusion of plan components including adaptive management seems to have slowed. One explanation could be that landowner aversion to financial risk was reduced by the No Surprises policy, but that adaptive management strategies are not perceived to be as beneficial for landowners in California. Additional research into other HCP cases or other negotiated environmental agreements could test this idea and identify other factors to explain changes in the use of HCPs as a tool for development by landowners. Does

adaptive management policy result in increased transaction costs, thereby reducing the attractiveness of HCPs as a viable development tool? If landowners avoid using HCPs as a tool because of concern over increased long-term costs perceived necessary as a result of adaptive management, are there better ways to meet USFWS policy goals?

Because achievement of habitat conservation goals is dependent upon landowner and community participation, identifying factors that encourage use of HCPs is fundamental to appropriately crafting policy changes.

Each of the questions above relate to transaction costs amongst participants in a political arena to meet multiple and often conflicting goals. Williamson's (1979) work brings together economic and organizational theory. As Williamson notes, "That simple governance structures should be used in conjunction with simple contractual relations and complex governance structures reserved for complex relations seems generally sensible" (1979, p. 239). Three characterizations of transactions he proposes include uncertainty, frequency of transactions, and the degree to which transaction-specific investments are incurred. Essentially, idiosyncratic exchanges, or those upon which the specific identify of the parties has cost-bearing consequences, built upon personal trust will survive greater stress and are more adaptable than other exchanges (1979, pp. 239-240). Familiarity permits communication economies to be realized. The benefits of building that personal trust, however, come at the costs associated with maintaining those relationships. A better understanding of the range of conditions that motivate groups to form and develop multiple applicant HCPs will continue to build upon the literature associated with transaction costs and may allow HCP policy to adapt where appropriate to better accomplish both species-related goals and social goals simultaneously.

The WRMSHP case study in Phase II demonstrates that the parties to the Implementing Agreement, many of whom were previously involved in the SKR HCP, believe it is important to obligate time and resources to the group efforts described in the WRMSHCP to accomplish the HCP's stated goals. As suggested in some of the interview comments, however, if parties and stakeholders to the Implementing Agreement believe that the costs of maintaining the policy network created to implement the WRMSHCP are increasing beyond the benefits they perceive, ongoing support for the WRMSHCP effort may change. This possible outcome mirrors those observed in the works noted above in addition to the research cited by Lubell (2003), and Weible and Sabatier (2009). Weible (2008) built upon this kind of observation in his research when he noted that unitary, collaborative, and adversarial policy system types can change within the same implementation effort over time.

While the concept of transaction costs is very well supported when it comes to creation of social contracts, there remains much to learn about the details of how people perceive benefits and costs of group participation. Lubell's work with others has begun isolating variables like problem severity, institutional opportunities, and political incentives in the studies cited to better describe transaction costs and benefits perceived (Lubell, 2003; Lubell and Fulton, 2007; and Lubell et al., 2002). In this case, the WRMSHCP interviewees talk about their individual goals and why they choose to participate in ITP activities. This case study did not attempt, however, to distinguish between the individual parties and their incentives for participating at any detailed level. Further research into this case study and other HCP cases may significantly inform the study of transaction costs in long-term social contracts for environmental management.

One conclusion from Lubell and Fulton's (2007) work regarding policy networks' role in implementing agricultural BMPs that bears further discussion is that the decisions of public managers at state and federal levels can directly affect the strength of local policy networks, and that local policy networks are crucial to efforts to solve collective action efforts requiring widespread change at an individual level. The WRMSHP was developed using the USFWS and the State of California's NCCP program. However, the problems desired for resolution are local issues related to regional transportation development and economic growth. In this context, both federal and state programs directly affect not only the strength of the local policy effort via funding and technical support, but the very existence of the local policy network in its current form.

Another variable from Lubell's (2003) works is his consideration of perceived effectiveness of a policy action. This concept was also central to the research strategy here for beginning to define measures of success. The WRMSHCP case study built on the idea of perceived effectiveness when considering differing measures of success as discussed with interviewees. And as Bardach suggested, much of what one perceives as success depends on where they are within the policy network (1977). Comments from WRMSHCP case study interviews are discussed in some detail above, and support the idea that at least for now, the WRMSHCP policy network members perceive some level of effectiveness based on their continued participation in the process. Signatories to the Implementing Agreement generally perceive the benefits of participating are greater than the costs. Members of the network like the RCA and the Wildlife Agencies generally perceive the effectiveness in a more positive way based on the congruency between their policy core beliefs and the WRMSHCP institutional structure. And as noted by Lubell,

institutions that successfully resolve conflict improve beliefs about policy effectiveness (2003). There remains a fair amount of conflict within the WRMSHCP policy network including both formal parties to the Implementing Agreement and among stakeholders. Comments made by interviewees in the case suggest that resolving this conflict would go a long way toward improving their perceived effectiveness of the WRMSHCP effort as a whole.

The WRMSHCP also builds upon the information gathered by Weible and Sabatier relating to adversarial vs. collaborative policy subsystems (2009). While this research effort did not delve into the 3-level belief system previously used by Weible and Sabatier, the context discussions providing the background for developing the WRMSHCP combined with comments made during the interviews by participants relating to deep core beliefs of individuals like their views of the importance of the welfare of present vs. future generations, their empirical and normative policy core beliefs relating to the relative priority of habitat management vs. economic development, and their secondary beliefs relating to the positive or negative impacts of development in urbanized areas or in non-urbanized areas to date suggest that the WRMSHCP is largely a collaborative policy subsystem at this point. As noted in Chapter 4, interview findings suggest that the coalitions can roughly be described as groups prioritizing habitat conservation over economic development, and groups prioritizing economic development over habitat conservation. Many individuals in both groups believe that both goals can be sought simultaneously, hence their participation in the WRMSHCP. However, the comments made during the interviews suggests that these coalitions remain distinct in their beliefs about which goal is more important.

Gruber (2010) refers to three necessary conditions for effective natural resource management; recognition of social values, market values, and nonmarket values. With respect to the WRMSHCP, social goals are identified in the HCP documents in addition to biological and economic goals, but interviews suggest they are not always the primary focus of policy network activities. Market values associated with the WRMSHCP may be considered negatively affected land prices that have resulted in some areas within the plan boundary. Nonmarket values are described by Gruber as the ability of local people to capture payments for ecosystem services received by others. The WRMSHCP does not seem to formally acknowledge or address these nonmarket values. Finding a way to reflect ecosystem services is an ongoing effort by researchers globally at this point in time. It would be very beneficial to formally integrate this question into future case studies to first identify if others are acknowledging the value of ecosystem services as they relate to habitat conservation activities, and if so, begin identifying how these services are valued as a part of HCP efforts.

Gruber's work with CBNRM specifically identifies resources and equity as one principle associated with effective environmental management efforts (2010). As discussed in Chapter 4, the WRMSHCP identified one equity issue as the perceived high fees being charged individual landowners to determine whether or not their land is affected by the WRMSHCP. Another issue could be deflated land prices and the disproportionate effects of those prices upon some landowners. These issues could be addressed should the policy network choose to do that. If they do not attempt to factor this into their review of financial resources or related actions by parties to the

WRMSHCP, failure to deal with this issue of concern could begin to affect political and public support for the WRMSHCP.

Concluding Comments

One of the more common critiques of HCPs is the tension between private property rights and public good. This is clearly an issue within the WRMSHCP. However, multiple parties and stakeholders of the WRMSHCP appear committed to finding ways to both preserve individual property rights and improve the quality of life within the geographic area of the plan. Policy networks may assist in creatively finding ways to accomplish both of these goals.

Another critique of HCPs is whether they ultimately result in protecting species. In the case of the WRMSHCP, parties talk about the habitat linkages that have been created or maintained while still allowing development of transportation corridors. It may be too early in the implementation process to ultimately answer the question about species protection. However, these linkages provide hope that species protection will ultimately be achieved.

One of the more written about critiques of HCPs relates to their “voluntary” nature. The WRMSHCP case study suggests that the signatories to the Implementing Agreement, at least initially, saw the HCP as a collaborative way to move forward with multiple and conflicting local, social goals. That said, the study also highlights that a number of individual landowners no longer perceive their ability to buy, sell, or develop their property as voluntary. Many of these individuals did not choose to participate in the HCP, but are instead mandated to participate as a result of permittee land use decisions. Finding ways for these individuals to successfully navigate their way through the HCP

process may go a long way toward the final determination of the success or of failure of the WRMSHCP, and of collaborative efforts by others to concurrently achieve environmental, economic, and social goals.

While formal policy networks are explicitly identified in negotiated agreements like HCPs, there are also informal networks that form to fill voids in institutional infrastructure. Callihan, et al. noted that often in HCPs there is no formal mechanism to resolve differences between the USFWS and permittees (2009, p. 7). Steps taken by the USFWS to encourage use of these mechanisms, at least in the case of the WRMSHCP, resulted in identification of formal conflict resolution strategies amongst signatories to the plan. What this case study specifically identifies, however, is an additional level of conflict resolution required to bridge between HCP participants and non-HCP participants; between the Wildlife Agencies and permittees, and the affected stakeholders. Parties in a policy network, either formal or informal, may highlight issues requiring resolution, and in developing innovative ways to resolve issues created during implementation of agreements like HCPs.

Continued study of individual HCP cases is necessary to be able to fully understand the relationships between members of policy networks and their role in the implementation of negotiated agreements to support environmental resource management.

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APPENDIX A
PHASE I ANALYSIS DETAILS

Table A-1

Habitat Conservation Plans by Generation in the State of California

HCP Generations	Frequency (HCPs)	Percent
First Generation (≤ 1994)	18	11.0
Second Generation ($1995 < x \leq 2001$)	74	45.1
Third Generation (> 2001)	72	43.9
Total	164	100.0

Table A-2

HCP Applicant Types in California Incidental Take Permits (ITPs) – First Generation

HCP Applicant Type	Frequency (HCPs)	Percent
1 local jurisdiction	2	11.1
2 or more local jurisdictions	3	16.7
2 or more local jurisdictions, other	1	5.6
Corporation	10	55.6
Other	1	5.6
State agency	1	5.6
Total	18	100.0

Table A-3

HCP Applicant Types in California ITPs – Second Generation

HCP Applicant Type	Frequency (HCPs)	Percent
1 local jurisdiction	13	17.6
1 local jurisdiction, corporation	2	2.7
1 local jurisdiction, corporation, private individual	1	1.4
2 or more local jurisdictions	1	1.4
2 or more local jurisdictions, corporation, other	1	1.4
2 or more local jurisdictions, private individual	1	1.4
2 or more local jurisdictions, state agency	1	1.4
Corporation	45	60.8
Corporation, other	1	1.4
Other	2	2.7
Private individual	5	6.8
State agency	1	1.4
Total	74	100.0

Table A-4

HCP Applicant Types in California ITPs – Third Generation

HCP Applicant Type	Frequency (HCPs)	Percent
1 local jurisdiction	10	13.9
1 local jurisdiction and corporation	2	2.8
2 or more local jurisdictions	3	4.2
2 or more local jurisdictions, corporation	1	1.4
2 or more local jurisdictions, non-governmental organization, other, state agency	1	1.4
Corporation	28	38.9
Non-governmental organization	1	1.4
Other	5	6.9
Other, private individual	1	1.4
Private individual	18	25.0
State agency	2	2.8
Total	72	100.0

Table A-5

Single vs. Multiple Listed Species HCPs in California ITPs – First Generation

Number of Listed Species	Frequency (HCPs)	Percent
No Listed Species	1	5.6
Single Listed Species	10	55.6
Multiple Listed species	7	38.9
Total	18	100.0

Table A-6

Single vs. Multiple Listed Species HCPs in California ITPs – Second Generation

Number of Listed Species	Frequency (HCPs)	Percent
Single Listed Species	43	58.1
Multiple Listed species	31	41.9
Total	74	100.0

Table A-7

Single vs. Multiple Listed Species HCPs in California ITPs – Third Generation

Number of Species	Frequency (HCPs)	Percent
No Listed Species	1	1.4
Single Listed Species	41	56.9
Multiple Listed species	30	41.7
Total	72	100.0

Table A-8

Single vs. Multiple Land Uses in California ITPs by Generation – First Generation

Land Use per HCP	Frequency (HCPs)	Percent
Single Land Use	10	55.6
Multiple Land Use	7	38.9
Unknown Land Use	1	5.6
Total	18	100.0

Table A-9

Single vs. Multiple Land Uses in California ITPs by Generation – Second Generation

Land Use per HCP	Frequency (HCPs)	Percent
Single Land Use	56	75.7
Multiple Land Use	18	24.3
Total	74	100.0

Table A-10

Single vs. Multiple Land Uses in California ITPs by Generation – Third Generation

Land Use per HCP	Frequency (HCPs)	Percent
Single Land Use	59	81.9
Multiple Land Use	13	18.1
Total	72	100.0

Table A-11

Types of Land Use for HCPs in California - First Generation

Land Use Description Combinations in ITPs	Frequency	Percent
Agricultural, business/commercial construction, residential construction, utility/infrastructure	1	5.6
Agricultural, business/commercial construction, residential construction, utility/infrastructure, water activities	1	5.6
Business/commercial construction	1	5.6
Business/commercial construction, residential construction	2	11.1
Business/commercial construction, residential construction, utility/infrastructure	2	11.1
Forest management activities	1	5.6
Gas and oil production	1	5.6
Mining or other extraction	1	5.6
Other	2	11.1
Recreational activities, residential construction	2	11.1
Residential construction	3	16.7
Water activities	1	5.6
Total	18	100.0

Table A-12

Types of Land Use for HCPs in California – Second Generation

Land Use Description Combinations in ITPs	Frequency (HCPs)	Percent
Agricultural, business/commercial construction, mining or other extraction, recreational activities, residential construction, utility/infrastructure, water activities	1	1.4
Agricultural, business/commercial construction, recreational activities, residential construction, utility/infrastructure, water activities	2	2.7
Business/commercial construction	8	10.8
Business/commercial construction, other, utility/infrastructure	1	1.4
Business/commercial construction, recreational activities, residential construction, utility/infrastructure	1	1.4
Business/commercial construction, recreational activities, residential construction, utility/infrastructure, water activities	1	1.4
Business/commercial construction, residential construction, utility/infrastructure	1	1.4
Business/commercial construction, water activities	1	1.4
Forest management activities	1	1.4
Forest management activities, mining or other extraction	1	1.4
Gas and oil production	6	8.1
Mining or other extraction	10	13.5
Other	9	12.2
Other, recreational activities	1	1.4
Other, recreational activities, residential construction, water activities	1	1.4

Land Use Description Combinations in ITPs	Frequency (HCPs)	Percent
Other, residential construction	1	1.4
Recreational activities	1	1.4
Recreational activities, residential construction	2	2.7
Recreational activities, residential construction, utility/infrastructure	1	1.4
Recreational activities, utility/infrastructure	1	1.4
Residential construction	14	18.9
Residential construction, utility/infrastructure	2	2.7
Utility/infrastructure	3	4.1
Water activities	4	5.4
Total	74	100.0

Table A-13

Types of Land Use for HCPs in California – Third Generation

Land Use Description Combinations in ITPs	Frequency (HCPs)	Percent
Agricultural	2	2.8
Agricultural, business/commercial construction, forest management activities, mining or other extraction, recreational activities, residential construction, utility/infrastructure, water activities	1	1.4
Agricultural, business/commercial construction, mining or other extraction, recreational activities, residential construction, utility/infrastructure	1	1.4
Agricultural, business/commercial construction, recreational activities, residential construction, utility/infrastructure	2	2.8
Agricultural, business/commercial construction, residential construction, utility/infrastructure, water activities	1	1.4
Agricultural, business/commercial construction, utility/infrastructure	1	1.4
Agricultural, forest management activities	1	1.4
Business/commercial construction	12	16.7
Business/commercial construction, mining or other extraction, recreational activities, residential construction, utility/infrastructure, water activities	1	1.4
Business/commercial construction, recreational activities, residential construction, utility/infrastructure, water activities	1	1.4
Business/commercial construction, residential construction	1	1.4
Business/commercial construction, residential construction, utility/infrastructure	1	1.4

Land Use Description Combinations in ITPs	Frequency (HCPs)	Percent
Mining or other extraction	1	1.4
Non-commercial	2	2.8
Other	5	6.9
Other, residential construction	1	1.4
Recreational activities	4	5.6
Residential construction	23	31.9
Utility/infrastructure	10	13.9
Utility/infrastructure, water activities	1	1.4
Total	72	100.0

Table A-14

Frequency of NEPA Types Completed in California ITPs – First Generation

NEPA Types	Frequency (HCPs)	Percent
Environmental Assessment	15	83.3
Environmental Impact Statement	3	16.7
Total	18	100.0

Table A-15

Frequency of NEPA Types Completed in California ITPs – Second Generation

NEPA Types	Frequency (HCPs)	Percent
Categorical Exclusion	14	18.9
Environmental Assessment	54	73.0
Environmental Impact Statement	6	8.1
Total	74	100.0

Table A-16

Frequency of NEPA Types Completed in California ITPs – Third Generation

NEPA Types	Frequency (HCPs_	Percent
Categorical Exclusion	43	59.7
Environmental Assessment	21	29.2
Environmental Impact Statement	8	11.1
Total	72	100.0

Table A-17

First Generation HCP Durations in California ITPs

Duration (Years)	Frequency (HCPs)	Percent
2	3	16.7
3	1	5.6
5	1	5.6
6	1	5.6
20	3	16.7
25	1	5.6
30	5	27.8
50	2	11.1
100	1	5.6
Total	18	100.0

Table A-18

Second Generation HCP Durations in California ITPs

Durations (Years)	Frequency (HCPs)	Percent
.5	1	1.4
2.0	10	13.5
3.0	5	6.8
4.5	1	1.4
5.0	9	12.2
8.0	1	1.4
10.0	11	14.9
15.0	2	2.7
20.0	3	4.1
30.0	13	17.6
50.0	13	17.6
55.0	1	1.4
75.0	2	2.7
80.0	1	1.4
100.0	1	1.4
Total	74	100.0

Table A-19

Third Generation HCP Durations in California ITPs

Duration (Years)	Frequency (HCPs)	Percent
1	3	4.2
2	1	1.4
3	14	19.4
5	17	23.6
6	2	2.8
10	9	12.5
15	1	1.4
16	1	1.4
20	1	1.4
25	2	2.8
30	6	8.3
40	1	1.4
41	1	1.4
50	9	12.5
60	1	1.4
75	3	4.2
Total	72	100.0

APPENDIX B
PHASE II CONSIDERATIONS

Table B-1.

Proposed Factors to Consider in Successful HCP Implementation (Based on similar study work from Beierle and Cayford, 2002; Gruber, 2010; Lubell, 2003; Lubell et al., 2002; Sabatier, 2007)

CONTEXT ATTRIBUTES	PROCESS ATTRIBUTES	RESULTS/IMPLEMENTATION ATTRIBUTES
Problem Complexity	Specific goals/objectives other than Biological Identified	Stage of Implementation
Pre-existing Conflict Between Permittees and/or Participants affecting levels of social capital	Identify Type of Actors Participating in addition to Permittees	Up-to-date monitoring plan and relevant metrics for other than biological goals
Capacity of Participants to navigate regulatory, political, social, economic, and technical issues	Accessibility for Actors other than Permittees to Participate (Open vs. Invitation Only, etc.)	Presence of forces negatively affecting implementation
	Role of Primary Actors (regulatory, political, technical, participatory, co-management)	Relationships between Implementing Parties
	Actors have Authority to Implement Plans	Overall Sense of Progress/Satisfaction
	Motivation of Participants	Likelihood of Implementation
	Quality of Deliberation, Collaboration, and Empowerment	
	Adequacy of Communication Networks	

CONTEXT ATTRIBUTES	PROCESS ATTRIBUTES	RESULTS/IMPLEMENTATION ATTRIBUTES
	Procedures to Manage Change, adaptive management in leadership Procedures to Manage Conflict	

Table B-2

WRMSHCP Permittees

County Agencies	Cities	Other
Western Riverside County Regional Conservation Authority (RCA)	Banning	California Department of Transportation (CDOT)
County of Riverside (RC)	Beaumont	California Department of Parks and Recreation (CDPR)
Riverside County Flood Control and Water Conservation District (RCFCWCD)	Calimesa	
Riverside County Regional Parks and Open Space District (RCRPOS)	Canyon Lake	
Riverside County Waste Management District (RCWMD)	Corona	
Riverside County Transportation Commission (RCTC)	Eastvale	
	Hemet	
	Jurupa Valley	
	Lake Elsinore	
	Menifee	
	Moreno Valley	
	Murrieta	
	Norco	
	Perris	
	Riverside	
	San Jacinto	
	Temecula	
	Wildomar	

APPENDIX C
PHASE II INTERVIEW QUESTIONS

Interview Questions

For Identifying the Role of Policy Networks in the Implementation of Habitat Conservation Plans

1. What does the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Implementation network look like?
2. What is your interest or that of your organization in the MSHCP? What role does your organization play in implementation of the MSHCP?
3. What is your view of nature of the relationship between USFWS and permittees? To the best of your knowledge:
4. Was there a relationship between USFWS and the permittees prior to initiation of work on the Western Riverside MSHCP? Does the USFWS engage with other stakeholders?
5. What kind of working relationship has each had with the other during implementation? What is the nature of trust between them and their levels of interaction? Has that changed over time? For example, has trust between the parties increased or decreased during plan implementation?
6. What is the specific role of USFWS is in implementation plans? Are they meeting the expectations of the permittees?
7. What is the specific role of the permittees in implementation plans? Are they meeting the expectations of the USFWS?
8. Is there congruency between the objectives of USFWS and the permittee(s)? Again, to the best of your knowledge:
9. To what extent are the USFWS objectives in synch with permittee objectives? Are these objectives sufficiently similar to assure both groups are moving in similar directions over time? Or are they tenuously related making them more vulnerable to political, social, or legal attack?
10. What are the roles and capabilities of other actors and coalitions in plan implementation, e.g., development of social capital and cultural behaviors and norms?
11. What other actors besides the USFWS and permittees play a major role in MSHCP implementation activities? Has that changed over time as difficulties are encountered in implementation? What role do those other actors play? What authority do they have with respect to implementation of specific MSHCP activities? Do any individuals stand out more than the rest with respect to dealing

- with changed conditions or setbacks? If so, is that a function of their organizational affiliation or their interpersonal skills and personal characteristics?
12. How does the nature of the relationships of other active actors affect the relationship between USFWS and the permittee(s), or the progress of MSHCP activities?
 13. How do parties interact during implementation activities? Has the institutional structure envisioned at plan approval stayed the same or changed over time? If it changed, what prompted the reconfiguration? How do members of the group communicate with each other? How does the group communicate with others outside the core policy network? Are public outreach activities included in the MSHCP? What are the characteristics of the major agencies and their role in implementation, e.g., state/county/federal, funding, legal support, volunteer labor, etc.? What are the characteristics of individual actors playing a major role in implementation?
 14. What are the barriers to MSHCP implementation from your perspective?
 15. In your opinion, how well is the Western Riverside County MSHCP implementation agreement working? Are each of the parties to the agreement performing the functions they are responsible for? If not, why not? (Lack of interest, funding, political support . . .?)
 16. Are the resources, especially public and private funding, sufficient to accomplish plan objectives? Are resources available in the timeframes anticipated? How does the group deal with a lack of resources like funding and political support?
 17. How well has the network been able to cope with changing conditions? As changed conditions arise, have the USFWS, permittees, and others involved in implementation been able to be flexible and creative at finding ways to work with change? Or has the process stalled? If so, what did it take to get things moving forward again?
 18. What events are affecting MSHCP implementation, either positively or negatively, as a result of external political, social, or legal influences? Do these influences tend to be more from a local or regional level, or from a national level?
 19. How do you or your organization define success and at what stages in the process?
 20. In what ways has the MSHCP implementation process been successful, and when relative to permit duration? What is the USFWS definition of success? At what point in the process? What is the permittee(s) definition of success? At what point in the process? In what ways has the implementation process been successful, and when relative to permit duration?

21. Is it appropriate to think of success in terms of multiple interim milestones?
22. Do you know how other network members and stakeholders consider success?
How successful is the plan implementation considered by those outside the process who know of its existence or may be affected to specific plan activities?
23. What is the overall sense of the success of the MSHCP implementation network and the factors contributing to that success?

APPENDIX D
ASU INSTITUTIONAL REVIEW BOARD PROTOCOL APPROVALS AND
CONSENT FORM



APPROVAL: CONTINUATION

Elizabeth Corley
Public Affairs, School of
602/496-0462
elizabeth.corley@asu.edu

Dear Elizabeth Corley:

On 5/28/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Continuing Review
Title:	Identifying the Role of Policy Networks in the Implementation of Habitat Conservation Plans
Investigator:	Elizabeth Corley
IRB ID:	1305009234
Category of review:	(7)(b) Social science methods, (7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none">• WRMSHCP_ConsentForm_Interviews_2014.pdf, Category: Consent Form;• WRMSHCP_RecruitmentLetter_email_2014.pdf, Category: Recruitment Materials;

The IRB approved the protocol from 5/28/2014 to 5/29/2015 inclusive. Three weeks before 5/29/2015 you are to submit a completed "FORM: Continuing Review (HRP-212)" and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 5/29/2015 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc:



Office of Research Integrity and Assurance

To: Elizabeth Corley
UCENT

From: Mark Roosa, Chair
Soc Beh IRB

Date: 05/24/2013

Committee Action: Expedited Approval

Approval Date: 05/24/2013

Review Type: Expedited F7

IRB Protocol #: 1305009234

Study Title: Identifying the Role of Policy Networks in the Implementation of Habitat Conservation Plans

Expiration Date: 05/30/2014

The above-referenced protocol was approved following expedited review by the Institutional Review Board.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date. You may not continue any research activity beyond the expiration date without approval by the Institutional Review Board.

Adverse Reactions: If any untoward incidents or severe reactions should develop as a result of this study, you are required to notify the Soc Beh IRB immediately. If necessary a member of the IRB will be assigned to look into the matter. If the problem is serious, approval may be withdrawn pending IRB review.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, or the investigators, please communicate your requested changes to the Soc Beh IRB. The new procedure is not to be initiated until the IRB approval has been given.

Please retain a copy of this letter with your approved protocol.

SAMPLE INFORMED CONSENT FORM-MINIMAL RISK, ARIZONA STATE UNIVERSITY

**CONSENT FORM FOR
Identifying the Role of Policy Networks in the Implementation of Habitat Conservation
Plans**

INTRODUCTION

The purposes of this form are to provide information that may affect your decision as to whether or not to participate in this research and to record your consent if agree to be involved in the study.

RESEARCHERS

Mary Reece, Public Administration PhD Candidate in the School of Public Affairs, Co-Investigator, and Dr. Elizabeth Corley, Principal Investigator, School of Public Affairs at Arizona State University have invited your participation in a research study.

STUDY PURPOSE

The purpose of the research is to help us better understand the groups of agencies and people that come together to implement Habitat Conservation Plans (HCPs) like (case study name). In particular, we are seeking to know who participates, why, and in what ways. We are looking for factors that play a role in your groups' successful HCP implementation, or identify barriers to success you may have encountered. We are also seeking to know how your group defines and measures successful HCP implementation at various stages over the life of the Plan.

DESCRIPTION OF RESEARCH STUDY

We will be reviewing the CASE STUDY HCP and any associated documentation. We will also be conducting individual interviews with people involved in implementation of the Plan, or those affected by the Plan. We are asking your participation in the research. If you decide to participate, we would like to interview you about your experiences and observations of plan activities. We are also interested in identifying others who may wish to participate as well and will ask for suggestions from you on who else may want to participate.

Your participation will last for approximately 45-60 minutes at a location and time convenient for you. We will ask questions about past and current HCP activities, what the HCP network of agencies and people look like, what you see as barriers to implementation, and your perspective on how you and other key members of this network define success and when.

RISKS

There are no known risks from taking part in this study, but in any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS

It is hoped your participation can offer an improved understanding of the role you and others plan in the implementation network by talking about your experiences. The overall goal of the research is to better understand policy network factors that lead to HCP success.

CONFIDENTIALITY

All information obtained in this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify you. In order to maintain confidentiality of your records, the researchers will protect both the audio-tapes and any transcripts developed from the interviews by storing them in an approved secure location. Transcripts will have personal information removed to protect confidentiality.

Audiotapes will be kept for up to 5 years after which they will be destroyed, or they will be kept until they are transcribed and will then be deleted. Interview responses will be coded and your name will not be linked to the code. Pseudonyms will be used as necessary in both my notes and reporting of the research.

WITHDRAWAL PRIVILEGE

Participation in this study is completely voluntary. It is ok for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time without penalty. If you withdraw, your audio-tapes and other data will be destroyed.

COSTS AND PAYMENTS

There is no payment for your participation in the study.

VOLUNTARY CONSENT

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by Mary Reece at 602-399-6117 or Dr. Elizabeth Corley at 602-496-0462.

If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk; you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at 480-965-6788.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be offered to you. Your signature below indicates that you consent to participate in the above study.

By signing below you give consent to participate in the above study.

Printed Name

Signature

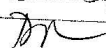
Date

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through XXXX, at (480)965-6788.

INVESTIGATOR'S STATEMENT

"I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature. These elements of Informed Consent conform to the Assurance given by Arizona State University to the Office for Human Research Protections to protect the rights of human subjects. I have offered the subject/participant a copy of this signed consent document."

Signature of Investigator _____ Date _____

ARIZONA STATE UNIVERSITY IRB
APPROVED BY IRB
DATE: 5/24/13 - 5/23/14
NAME: 

APPENDIX E

PROPERTY OWNER INITIATED HABITAT EVALUATION AND ACQUISITION
NEGOTIATION STRATEGY (HANS) AND EXPEDITED REVIEW PROCESS FOR
SINGLE FAMILY HOMES OR MOBILEHOMES TO BE LOCATED ON AN
EXISTING LOT WITHIN THE CRITERIA AREA

SECTION 6.0

MSHCP IMPLEMENTATION STRUCTURE

Implementation of the MSHCP will require coordinated actions among the local jurisdictions, the Wildlife Agencies, owners/managers of existing Public/Quasi-Public Lands, and the private sector. Generally, local jurisdictions will implement the MSHCP through their normal land use, planning and approval process as described in *Section 6.1.1* of this document. Local jurisdictions will also contribute to MSHCP implementation through management of contributed public lands. This section describes the overall implementation policies and structure of the MSHCP including the institutional arrangements among the various parties involved in MSHCP implementation.

6.1 LOCAL IMPLEMENTATION MEASURES

The Permittees have selected a legal mechanism to implement the terms of the MSHCP and the Implementing Agreement (“Implementation Mechanism”). The Permits shall become effective upon execution of the IA. If, however, within six months of execution of the IA the County, Cities and the RCA have not adopted an appropriate Implementation Mechanism, the Wildlife Agencies may initiate suspension or revocation proceedings pursuant to Section 23.5 of the IA. In that event, the Permittees’ obligations to fully implement the terms and conditions of the MSHCP and the IA commence upon execution of the IA. After adoption of an Implementation Mechanism, the Local Permittees will submit a copy of the appropriate documents to the RCA and the Wildlife Agencies.

A. Cities

1. The Cities shall adopt an ordinance imposing the Local Development Mitigation Fee as analyzed in the Nexus Fee Report. A model ordinance imposing such fees is included as Exhibit "G" to the MSHCP Implementing Agreement (IA). The Cities shall adopt ordinances in substantially the same form or at a minimum containing the same requirements as the model ordinance.
2. The Cities shall adopt an ordinance or resolution that adopts the MSHCP and establishes procedures and requirements for the implementation of its terms and conditions. A model resolution is attached as Exhibit "H" to the MSHCP IA. A model ordinance is attached as Exhibit "I" to the MSHCP IA. The Cities shall adopt an ordinance or resolution in substantially the same form or at a minimum containing the same requirements as the model ordinance or resolution. The ordinance or resolution shall contain, at a minimum, the following conditions:



6.0 MSHCP Implementation Structure

- a. Commitment to utilize the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or appropriate alternative method to ensure compliance with the Criteria.
- b. Imposition of all other terms of the MSHCP, including but not limited to requirements concerning riparian/riverine areas and vernal pools, Narrow Endemic Plant Species and appropriate surveys as set forth in *Sections 6.1.2, 6.1.3, and 6.3.2*. A complete summary of all MSHCP species survey requirements is provided in *Appendix E* to this document.
- c. Agreement to enforce all other terms and conditions of the MSHCP, Implementing Agreement and the Permits.

B. The County

1. The County shall implement the MSHCP through incorporation of the relevant terms and requirements into its General Plan, which is currently being updated. The Open Space Element of the County General Plan will establish general policies for compliance with the MSHCP, the Permits and the IA.
2. The County shall establish a development mitigation fee for the unincorporated area of the County to specifically provide for habitat acquisition pursuant to the MSHCP.

6.1.1 Property Owner Initiated Habitat Evaluation and Acquisition Negotiation Strategy (HANS)

A. Introduction

The HANS Process applies to property which may be needed for inclusion in the MSHCP Conservation Area or subjected to other MSHCP Criteria and shall be implemented by the County and those Cities that have agreed to implement the HANS process.

Under the incentive-based MSHCP program, the Western Riverside County Regional Conservation Authority (RCA), the County, Cities, or various State and Federal Agencies may obtain interests in



6.0 MSHCP Implementation Structure

property needed to implement the MSHCP over time (interest may be obtained in fee, conservation easement, deed restriction, land exchange, flood control easement or other type of interest acceptable to the RCA, the County, Cities, acquiring State and/or Federal Agency, and property owner). Fee ownership of property may not be required. If it is determined that all or a portion of property is needed for inclusion in the MSHCP Conservation Area, various incentives may be available to the property owner in lieu of or in addition to monetary compensation in exchange for the conveyance of a property interest. These incentives may include, but shall not be limited to, the waiver and/or reduction of certain development fees, monetary compensation for entering into an option agreement, fast track processing, density bonuses, clustering, density transfers (and property reassessment and tax credits if determined to be Feasible). The incentives are intended to provide a form of compensation to property owners who convey their property. As a property interest is obtained, it will become part of the MSHCP Conservation Area.

The establishment of Criteria Area boundaries is intended to facilitate the process by which the County or Cities will evaluate property that may be needed for inclusion in the MSHCP Conservation Area. The Criteria Area is an area significantly larger than what will be the MSHCP Conservation Area, within which property will be evaluated using MSHCP Conservation Criteria. The Criteria Area is an analytical tool which assists in determining which properties to evaluate for acquisition and Conservation under the MSHCP and does not impose land use restrictions.

The Process ensures that an early determination will be made of what properties are needed for the MSHCP Conservation Area, that the owners of property needed for the MSHCP Conservation Area are compensated, and that owners of land not needed for the MSHCP Conservation Area shall receive Take Authorization for Covered Species Adequately Conserved through the Permits issued to the County and Cities pursuant to the MSHCP.

Development of property outside of the MSHCP Conservation Area (both within and outside of the Criteria Area) shall receive Take Authorization for Covered Species Adequately Conserved provided payment of a mitigation fee is made (or any credit for land conveyed is obtained) and compliance with *Section 6.0* of the MSHCP occurs. Payment of the mitigation fee and compliance with the requirements of *Section 6.0* are intended to provide full mitigation under the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Federal Endangered Species Act, and California Endangered Species Act for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the U.S. Fish and Wildlife Service, the California Department of Fish and Game and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP. However, it is recognized

6.0 MSHCP Implementation Structure



that the MSHCP cannot provide mitigation for projects regulated by entities or agencies not participating in the MSHCP.

All proposed discretionary Development projects within the Criteria Area shall be subject to review under the HANS process and monitored through a uniform computerized tracking system. However, the issuance of a grading permit or site preparation permit for an individual single family home or mobile home on an existing legal lot shall not be subject to review under the HANS process but shall be subject to review under the procedures described in the *Expedited Review Process for Single-Family Homes or Mobile Homes To Be Located on an Existing Lot Within the Criteria Area*, presented at the end of this section. This HANS process will not be construed as a limitation on the County's or the Cities' ability to approve or deny a development application except that a project consistent with this HANS process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria.

B. Evaluation of Properties For Which a Development Application is Intended to be Filed

(1) **INITIAL APPLICATION REVIEW** - Applications for proposed projects which are within the Criteria Area shall be subject to an initial review to determine if all or part of the property is necessary for inclusion in the MSHCP Conservation Area. The initial review period will be up to 45 days. This period may be extended upon the mutual consent of the parties. The applicant for a proposed project shall be required to submit the following information/documents for purposes of conducting this review:

- a. a definition of the project area,
- b. a written project description with maps as appropriate,
- c. a written description of biological information available for the project site including the results of any available mapping or surveys,
- d. quantification of anticipated impacts to biological resources identified for the project, and
- e. an initial assessment of the relationship of the project as proposed to the MSHCP Conservation Criteria.

The County or Cities shall provide the applicant with any information in its possession which would assist the applicant in preparing the aforementioned information/documents for submittal.



6.0 MSHCP Implementation Structure

Surveys for riparian/riverine areas and vernal pools, Narrow Endemic Plant Species, and other species required pursuant to *Sections 6.1.2, 6.1.3, and 6.3.2* of the MSHCP and determined to be necessary during the initial application review period may be conducted during the time period set forth below for the negotiation of terms and incentives and must be completed before the time period for negotiation of terms and incentives can be concluded. In the event the presence or absence of Narrow Endemic Plant Species has not been confirmed by a survey of the property and it is ultimately determined that all or part of the property may be needed for inclusion in the MSHCP Conservation Area because of the potential presence of Narrow Endemic Plant Species, the 120-day time period set forth below may be reinitiated by the County or Cities.

If it is determined that all or part of the property is needed for inclusion in the MSHCP Conservation Area, then the property owner will be provided, prior to the end of the initial review period, with an initial determination as to which incentives may be subject to negotiation. Upon completion of the initial application review, a complete application for the proposed project may be filed on that portion of the land not required for inclusion in the MSHCP Conservation Area and processed concurrently during the time periods set forth below for the negotiation of terms and incentives and if necessary conflict resolution. When the initial project review process identifies the need for acquisition of a portion of the property proposed for development, the entitlement process may proceed on the portion of the property not proposed for Conservation concurrently with the acquisition process. The property owner may process a development application on the portion of the property under negotiation for acquisition prior to the completion of the acquisition period.

(2) NEGOTIATION OF TERMS AND INCENTIVES - When it is determined that all or part of the property is needed for inclusion in the MSHCP Conservation Area or subjected to MSHCP Conservation Criteria, then the parties may enter into negotiations on the terms under which the property or any part thereof shall be included and conserved. The negotiation period shall be up to 120 days (following the 45-day initial application review period). If at the end of this 120-day period, agreement between the parties is not achieved, each party shall submit in writing the party's proposed resolution of terms. Thereafter, the negotiation period may be extended upon the mutual consent of the parties for a longer period.

a. Partial Inclusion of Property - In those instances where only part of the property is needed for inclusion in the MSHCP Conservation Area, negotiations will focus on incentives in exchange for the conveyance of property. Such incentives may include

6.0 MSHCP Implementation Structure



monetary compensation. However, property owners shall not be provided monetary compensation (but may be eligible for other incentives) for property which would normally be set aside as part of the County's or Cities' entitlement process as this process occurs throughout the County of Riverside. As an incentive to convey property needed for inclusion in the MSHCP Conservation Area and for which monetary compensation shall not be provided, Take Authorization may be granted upon project approval. In order to obtain this early authorization of Take, the conveyance must occur within 45 days after project approval. Any subsequent suspension or revocation of Permits terminating Take Authorization shall not be applicable to the Take Authorization granted upon the project's approval.

- b. Full Inclusion of Property** - In those instances where all of the property is needed for inclusion in the MSHCP Conservation Area, negotiations will focus on the acquisition of the property including establishing a purchase price and the application of other non-monetary incentives which may compensate the property owner and assist with the acquisition. In no event shall the purchase price exceed the fair market value of the property. Unless otherwise agreed to by the parties, the fair market value for the property shall be determined by an appraisal ordered by the County or the Cities and conducted in accordance with the "Uniform Appraisal Standards for Federal Land Acquisitions" and the "Uniform Standards of Professional Appraisal Practice." In the event of any conflict between these standards, the "Uniform Appraisal Standards for Federal Land Acquisitions" will control. Fee title of property to be conveyed may not be required. The type of ownership to be conveyed will be taken into consideration when conducting the appraisal. Appraisal instructions shall be jointly prepared and agreed upon by the County or Cities and the property owner. Appraisal instructions will direct appraisers not to consider the MSHCP Criteria Area as relevant to the appraisal.

If it is determined at a staff level, during the course of negotiations that the property is not needed for inclusion in the MSHCP Conservation Area, then the proposed project may proceed through the normal project planning and design process. This determination shall not bind the Board of Supervisors' or any City Council's discretion concerning approval of the project.

A jurisdiction may subsequently decide that all or a portion of the property is necessary for inclusion in the MSHCP Conservation Area or that MSHCP Conservation Criteria

6.0 MSHCP Implementation Structure



are to be applied to the project. In that case, the project proponent may redesign the project accordingly on any portion of the property that is not needed for inclusion in the MSHCP Conservation Area, and may reinstate negotiations or commence the conflict resolution process (described below) on the portion of the property that is needed for inclusion in the MSHCP Conservation Area.

If the parties agree on the incentives and the terms prior to the expiration of the negotiation period, appropriate legal documents (development agreement, deed, lease agreement, etc.) shall be prepared for consideration and approval by the County or Cities (if applicable). Alternatively, if the parties are unable to reach agreement during the negotiation period, then the conflict resolution process (described below) may be commenced.

C. Evaluation of Properties For Which a Development Application is Not Intended to be Filed

- (1) **INITIAL REVIEW** - At the request of the property owner, property which is within the Criteria Area shall be subject to review in order to determine whether all or part of the property is needed for inclusion in the MSHCP Conservation Area. The initial review period will be up to 45 days. This period may be extended upon the mutual consent of the parties. The property owner shall submit for purposes of conducting this review a written description of biological information available for the property including the results of any available mapping or surveys. If appropriate mapping or surveys are unavailable, the County or Cities may require that a habitat assessment be performed in order to assist with the determination as to whether all or part of the property is needed for inclusion in the MSHCP Conservation Area. If it is determined that all or a part of the property is needed for the MSHCP Conservation Area, then the property owner shall be provided, prior to the end of the initial review period, with an initial determination as to which incentives may be subject to negotiation. The joint project/acquisition review process set forth in *Section 6.6* shall be complied with during this initial review period.
- (2) **NEGOTIATION OF TERMS AND INCENTIVES** - When it is determined that all or part of the property is needed for inclusion in the MSHCP Conservation Area or subjected to MSHCP Conservation Criteria, then the parties may enter into negotiations on the terms under which the property or any part thereof will be acquired. The negotiation period will be up to 120 days (following the 45-day initial review period). If at the end of this 120-day period,

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agreement between the parties is not achieved, each party shall submit in writing the party's proposed resolution of terms. Thereafter, the negotiation period may be extended upon the mutual consent of the parties for a longer period.

Negotiations will focus on establishing a purchase price and other incentives that may be available to assist with the acquisition and compensate the property owner. In no event shall the purchase price exceed the fair market value of the property. Unless otherwise agreed to by the parties, the fair market value for the property shall be determined by an appraisal ordered by the County or the Cities and conducted in accordance with the "Uniform Appraisal Standards for Federal Land Acquisitions" and the "Uniform Standards of Professional Appraisal Practice." In the event of any conflict between these standards, the "Uniform Appraisal Standards for Federal Land Acquisitions" will control. Fee title of property may not be required. The type of ownership to be conveyed will be taken into consideration when appraising the property. Appraisal instructions shall be jointly prepared and agreed upon by the County or Cities and the property owner.

If the parties agree on the incentives and the terms prior to the expiration of the negotiation period, appropriate legal documents (purchase agreement, deed, lease agreement, etc.) shall be prepared for consideration and approval by the County or Cities. Alternatively, if the parties are unable to reach agreement during the negotiation period, then conflict resolution may be commenced.

- (3) **RELEASE FROM MSHCP CONSERVATION CRITERIA** - If it is determined that all or a portion of the property is not needed for inclusion in the MSHCP Conservation Area, any subsequent development application covering the property released shall not be required to comply with the MSHCP Conservation Criteria. However, a subsequently submitted development application covering the property released shall be subject to a 45-day initial application review period. During this time, the County or Cities shall evaluate if circumstances have changed such that all or portion of the property may assist in compiling the MSHCP Conservation Area. The County or Cities shall not be prohibited from negotiating a voluntary acquisition of all or a portion of such property. The joint project/acquisition review process set forth in *Section 6.6* shall be complied with during this review period.

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➤ **Conflict Resolution Process**

A. Introduction

In order to address in a fair and consistent manner, disputes which may arise concerning the **(i)** application of MSHCP Conservation Criteria, **(ii)** available incentives, or **(iii)** the valuation of property, a conflict resolution process is necessary. Conflict resolution may be initiated by the property owner or the County or Cities and allows for a neutral third party to assist in resolving disputes concerning the aforementioned issues. This Process will not be construed as a limitation on the County's or Cities' ability to approve or deny a development application except that a project consistent with this Process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria.

B. Mediation

Mediation will initially be required to resolve differences between the parties over the proposed development options for the property (including the application of incentives) as well as differences regarding the application of MSHCP Conservation Criteria. Mediation may not be used to require the County or Cities to acquire property it has determined is not necessary for inclusion in the MSHCP Conservation Area.

If the dispute involves the application of MSHCP Conservation Criteria, the initiating party must consult with the U.S. Fish and Wildlife Service and the California Department of Fish and Game concerning the application of the Criteria prior to the initiation of mediation. The consultation period will be 30 days and may be extended with the consent of the initiating party.

The mediation period will be up to 90 days. This period may be extended upon the mutual consent of the parties. The parties shall also mutually agree to the appointment of a mediator. If the parties are unable to mutually agree to such an appointment, the Presiding Judge of the Riverside Superior Court shall be requested to appoint a mediator. All costs associated with the mediation shall be divided equally between the parties.

Upon completion of the mediation, the mediated resolution shall be complied with, and where a project is proposed, then the project may continue through the normal development review process.

Alternatively, the property owner may either **(i)** request review of any remaining dispute by the Board of Supervisors (in the case of property within the unincorporated area of the County) or the

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City Council (in the case of property within a City) or **(ii)** initiate arbitration solely for disputes concerning the application of MSHCP Conservation Criteria (as indicated below).

C. Appraisal Review

Should a party opt to commence the Conflict Resolution Process as a result of the parties' inability to resolve differences concerning the valuation of property, a second appraisal shall be conducted, at the expense of the property owner, in accordance with the "Uniform Appraisal Standards for Federal Land Acquisitions" and the "Uniform Standards of Professional Appraisal Practice." In the event of any conflict between these standards, the "Uniform Appraisal Standards for Federal Land Acquisitions" will control. Fee ownership of property to be conveyed may not be required. The type of ownership to be conveyed shall be taken into consideration when conducting the second appraisal.

Any discrepancies between this appraisal and the appraisal previously prepared by the County or the Cities shall be reviewed by a third appraiser mutually agreed to by both parties. Review by the third appraiser shall be completed within 90 days after the parties mutually agree to the selection of the third/review appraiser. If the parties are unable to agree upon the choice of a third/review appraiser, the Presiding Judge of the Riverside Superior Court shall be requested to select the third/review appraiser.

Upon completion of this review, the appraiser shall make recommendations as to which appraisal should be approved. If such a recommendation cannot be made, the third appraiser shall within 90 days conduct an appraisal in accordance with the aforementioned standards. The third appraisal shall then establish the fair market value of the property.

Any recommendations of the third/review appraiser upon completion of the third appraiser's review or if necessary any third appraisal shall be binding upon the parties solely with respect to the issue of establishing the fair market value of the property. Should any subsequent acquisition of the property involve state and/or federal monies, an update or review of the third appraisal may be necessary.

The cost for conducting this review and any necessary third appraisal shall be divided equally between the parties.



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D. Arbitration

If the parties are unable to resolve through mediation differences concerning the application of MSHCP Conservation Criteria, arbitration may be initiated by either party, with the consent of the property owner.

The arbitration period will be up to 180 days. This period may be extended upon the mutual consent of the parties. The parties shall also mutually agree to the appointment of an arbitrator. If the parties are unable to mutually agree to an appointment, the Presiding Judge of the Riverside Superior Court shall be requested to appoint an arbitrator.

The property owner, the County or Cities may submit to the arbitrator, evidence concerning the application of the MSHCP Conservation Criteria to the property in question. Any cost for such evidence shall be born by the party submitting said evidence. The decision of the arbitrator shall be based solely upon the Conservation Criteria as applied to the property in question and any evidence supporting the application of the Conservation Criteria. The arbitrator's decision shall be binding upon both parties.

► Completion of Acquisition

A. Completion of Acquisition If Funding is Available

Following conclusion of successful negotiations or appraisal review under the Conflict Resolution Process and any necessary action by the Board of Supervisors or City Council, the property shall be promptly purchased provided sufficient MSHCP funds are available. The General Fund of the County or Cities shall not be obligated to fund the purchase of property for inclusion in the MSHCP Conservation Area. In addition to the County and the Cities, it is anticipated and expected that State and Federal agencies may either purchase or provide funding to purchase property for inclusion in the MSHCP Conservation Area.

B. Completion of Acquisition or Submittal of Development Application if Funding is Not Immediately Available

- (1) CONVEYANCE OF PROPERTY (WITH PURCHASE PRICE OF \$100,000 OR LESS) AND FOR WHICH A DEVELOPMENT APPLICATION IS INTENDED TO BE PURSUED - If it is anticipated**

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that the property may not be purchased within one year after a purchase or option agreement is entered into (whether due to lack of funds or otherwise), then the County or Cities shall initiate an amendment to the MSHCP to remove the property from the Criteria Area at least nine months prior to the expiration of this one year period. The County or City shall confer with the property owner when drafting the proposed amendment to the MSHCP, and use its best efforts to insure completion of the amendment within this one year time period or any longer period of time agreed to by the parties. Because the USFWS must conduct an internal formal consultation under Section 7 of FESA for any such amendment to the MSHCP, the USFWS shall provide a draft copy of its internal biological opinion for review and comment to the County or City prior to approval or denial of the permit amendment. The County or City shall share the draft biological opinion with the property owner and provide any comments from the property owners along with the County's or City's comments to the USFWS. The property owner shall have an opportunity to meet and confer with the USFWS with regard to the effects of the proposed amendment. The County or City shall use its best efforts to insure completion of the amendment within this one year time period or any longer period of time agreed to by the parties. Thereafter, if the property is not purchased or removed from the Criteria Area within one year after a purchase or option agreement is entered into, then the property owner may request that the County or Cities process a development application for the property intended to be acquired without further consideration of the MSHCP Conservation Criteria. However, payment of the impact mitigation fee shall be required as a condition of any approval. This process shall not be construed as a limitation on the County's or Cities' ability to approve or deny a development application except that a project consistent with this Process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria. Prior to issuance of a grading permit which would result in ground disturbance, the RCA, County, Cities or appropriate State or Federal Agency may negotiate with the property owner and enter into a new purchase or option agreement to purchase the property.

Any development application subsequently approved by the County or Cities that precludes compliance with the MSHCP Conservation Criteria shall result in suspension or revocation of the Permits terminating Third Party Take Authorization under the MSHCP and Implementing Agreement. Such suspension or revocation may occur entirely or only as to specified Area Plans, Covered Species, Covered Lands, or Covered Activities, and future development applications affected by the suspension or revocation shall no longer be subject to the MSHCP Conservation Criteria.



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In the alternative, if the property is not immediately purchased, then at the request of the property owner, the purchase agreement may be renegotiated and the property shall be placed on a priority list for acquisition. This list will be established in order to provide some level of assurance to the property owner that the property shall be purchased when funding is available. Placement on the list will be based solely upon the date a property owner requests to be placed on the list. Funding for the acquisition of properties on the priority list will be provided through a separate designated fund (percentage of MSHCP funds received will be included in this fund). This fund will provide funding solely for the acquisition of property for which a development application is intended to be filed.

The provisions of this section shall not be applicable to the conveyance of adjoining property (or property within the same subdivision) by the same owner which if considered together would exceed \$100,000. Any such conveyance shall be subject to the provisions involving the conveyance of property with a purchase price of more than \$300,000 or the total value of the lands together, whichever is less.

- (2) **CONVEYANCE OF PROPERTY (WITH PURCHASE PRICE OF \$200,000 OR LESS) AND FOR WHICH A DEVELOPMENT APPLICATION IS INTENDED TO BE FILED** - If it is anticipated that the property may not be purchased within two years after a purchase or option agreement is entered into (whether due to lack of funds or otherwise), then the County or Cities shall initiate an amendment to the MSHCP to remove the property from the Criteria Area at least nine months prior to the expiration of this two-year period. The County or City shall confer with the property owner when drafting the proposed amendment to the MSHCP, and use its best efforts to insure completion of the amendment within this one year time period or any longer period of time agreed to by the parties. Because the USFWS must conduct an internal formal consultation under Section 7 of FESA for any such amendment to the MSHCP, the USFWS shall provide a draft copy of its internal biological opinion for review and comment to the County or City prior to approval or denial of the permit amendment. The County or City shall share the draft biological opinion with the property owner and provide any comments from the property owners along with the County's or City's comments to the USFWS. The property owner shall have an opportunity to meet and confer with the USFWS with regard to the effects of the proposed amendment. The County or City shall use its best efforts to insure completion of the amendment within this two-year time period or any longer period of time agreed to by the parties. Thereafter, if the property is not purchased or removed from the Criteria Area within two years after a purchase or option agreement is entered into, then the property owner may request that the County or Cities process a

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development application for the property intended to be acquired without further consideration of the MSHCP Conservation Criteria. However, payment of the impact mitigation fee shall be required as a condition of any approval. This process will not be construed as a limitation on the County's or any participating City's ability to approve or deny a development application except that a project consistent with this Process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria. Prior to issuance of a grading permit which would result in ground disturbance, the RCA, County, Cities or appropriate State or Federal Agency may negotiate with the property owner and enter into a new purchase or option agreement to purchase the property.

Any development application subsequently approved by the County or Cities that precludes compliance with the MSHCP Conservation Criteria shall result in suspension or revocation of the permits terminating Third Party Take Authorization under the MSHCP and Implementing Agreement. Such suspension or revocation may occur entirely or only as to specified Area Plans, Covered Species, Covered Lands, or Covered Activities and future development applications affected by the suspension or revocation shall no longer be subject to the MSHCP Conservation Criteria.

In the alternative, if the property is not immediately purchased, then at the request of the property owner, the purchase agreement may be renegotiated and the property shall be placed on a priority list for acquisition. This list will be established in order to provide some level of assurance to the property owner that the property shall be purchased when funding is available. Placement on the list will be based solely upon the date a property owner requests to be placed on the list. Funding for the acquisition of properties on the priority list will be provided through a separate designated fund (percentage of MSHCP funds received will be included in this fund). This fund will provide funding solely for the acquisition of property for which a development application is intended to be filed.

The provisions of this section shall not be applicable to the conveyance of adjoining property (or property within the same subdivision) by the same owner which if considered together would exceed \$200,000. Any such conveyance shall be subject to the provisions involving the conveyance of property with a purchase price of more than \$300,000 or the total value of the lands together, whichever is less.



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- (3) **CONVEYANCE OF PROPERTY (WITH PURCHASE PRICE OF \$300,000 OR LESS) AND FOR WHICH A DEVELOPMENT APPLICATION IS INTENDED TO BE FILED** - If it is anticipated that the property may not be purchased within three years after a purchase or option agreement is entered into (whether due to lack of funds or otherwise), then the County or Cities shall initiate an amendment to the MSHCP to remove the property from the Criteria Area at least nine months prior to the expiration of this three-year period. The County or City shall confer with the property owner when drafting the proposed amendment to the MSHCP, and use its best efforts to insure completion of the amendment within this one year time period or any longer period of time agreed to by the parties. Because the USFWS must conduct an internal formal consultation under Section 7 of FESA for any such amendment to the MSHCP, the USFWS shall provide a draft copy of its internal biological opinion for review and comment to the County or City prior to approval or denial of the permit amendment. The County or City shall share the draft biological opinion with the property owner and provide any comments from the property owners along with the County's or City's comments to the USFWS. The property owner shall have an opportunity to meet and confer with the USFWS with regard to the effects of the proposed amendment. The County or City shall use its best efforts to insure completion of the amendment within this three-year time period or any longer period of time agreed to by the parties. Thereafter, if the property is not purchased or removed from the Criteria Area within three years after a purchase or option agreement is entered into, then the property owner may request that the County or Cities process a development application for the property intended to be acquired without further consideration of the MSHCP Conservation Criteria. However, payment of the impact mitigation fee shall be required as a condition of any approval. This process will not be construed as a limitation on the County's or Cities' ability to approve or deny a development application except that a project consistent with this Process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria. Prior to issuance of a grading permit which would result in ground disturbance, the RCA, County, Cities or appropriate State or Federal Agency may negotiate with the property owner and enter into a new purchase or option agreement to purchase the property.

Any development application subsequently approved by the County or Cities that precludes compliance with the MSHCP Conservation Criteria shall result in suspension or revocation of the Permits terminating Third Party Take Authorization under the MSHCP and Implementing Agreement. Such suspension or revocation may occur entirely or only as to specified Area Plans, Covered Species, Covered Lands, or Covered Activities and future development applications affected by the suspension or revocation shall no longer be subject to the MSHCP Conservation Criteria.



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In the alternative, if the property is not immediately purchased, then at the request of the property owner, the purchase agreement may be renegotiated and the property shall be placed on a priority list for acquisition. This list will be established in order to provide some level of assurance to the property owner that the property shall be purchased when funding is available. Placement on the list shall be based solely upon the date a property owner requests to be placed on the list. Funding for the acquisition of properties on the priority list will be provided through a separate designated fund (percentage of MSHCP funds received will be included in this fund). This fund shall provide funding solely for the acquisition of property for which a development application is intended to be filed.

The provisions of this section shall not be applicable to the conveyance of adjoining property (or property within the same subdivision) by the same owner which if considered together would exceed \$300,000. Any such conveyance shall be subject to the provisions involving the conveyance of property with a purchase price of more than \$300,000.

- (4) **CONVEYANCE OF PROPERTY (WITH A PURCHASE PRICE OF MORE THAN \$300,000) AND FOR WHICH A DEVELOPMENT APPLICATION IS INTENDED TO BE FILED** - If it is anticipated that the property may not be purchased within four years or any shorter period of time as may be authorized by the RCA after a purchase or option agreement is entered into or any longer period of time which may be agreed to by the property owner and the County or Cities (whether due to lack of funds or otherwise), then the County or Cities shall initiate an amendment to the MSHCP to remove the property from the Criteria Area at least nine months prior to the expiration of this 4-year period or any longer period of time set forth in an option agreement. The County or City shall confer with the property owner when drafting the proposed amendment to the MSHCP, and use its best efforts to insure completion of the amendment within this one year time period or any longer period of time agreed to by the parties. Because the USFWS must conduct an internal formal consultation under Section 7 of FESA for any such amendment to the MSHCP, the USFWS shall provide a draft copy of its biological opinion for review and comment to the County or City prior to approval or denial of the permit amendment. The County or City shall share the draft biological opinion with the property owner and provide any comments from the property owners along with the County's or City's comments to the USFWS. The property owner shall have an opportunity to meet and confer with the USFWS with regard to the effects of the proposed amendment. The County or City shall use its best efforts to insure completion of the amendment within this four-year time period or any longer period of time agreed to by the parties. Thereafter, if the property is not purchased or removed from the Criteria Area within four years after a

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purchase or option agreement is entered into, then the property owner may request that the County or Cities process a development application for the property intended to be acquired without further consideration of the MSHCP Conservation Criteria. However, payment of the impact mitigation fee shall be required as a condition of any approval. This process will not be construed as a limitation on the County's or Cities' ability to approve or deny a development application except that a project consistent with this process may not be denied solely because a development application does not comply with the MSHCP Conservation Criteria. Prior to issuance of a grading permit which would result in ground disturbance, the RCA, County, Cities or appropriate State or Federal Agency may negotiate with the property owner and enter into a new purchase or option agreement to purchase the property.

Any development application subsequently approved by the County or Cities that precludes compliance with the MSHCP Conservation Criteria shall result in suspension or revocation of the Permits terminating Third Party Take Authorization under the MSHCP and Implementing Agreement. Such suspension or revocation may occur entirely or only as to specified Area Plans, Covered Species, Covered Lands, or Covered Activities and future development applications affected by the suspension or revocation shall no longer be subject to the MSHCP Conservation Criteria.

If the property is not immediately purchased, then at the request of the property owner, the purchase agreement may be renegotiated and the property shall be placed on a priority list for acquisition. This list will be established in order to provide some level of assurance to the property owner that the property will be purchased when funding is available. Placement on the list shall be based solely upon the date a property owner requests to be placed on the list. Funding for the acquisition of properties on the priority list will be provided through a separate designated fund (percentage of MSHCP funds received will be included in this fund). This fund shall provide funding solely for the acquisition of property for which a development application is intended to be filed.

- (5) **CONVEYANCE OF PROPERTY FOR WHICH A DEVELOPMENT APPLICATION IS NOT INTENDED TO BE FILED** - If the property is not immediately purchased after a purchase agreement is entered into, or after expiration of an option agreement, or any longer period of time which may be agreed to by the parties (whether due to the lack of funds or otherwise), then the property will be placed on a priority list for acquisition. This list will be established in order to provide some level of assurance to the property owner that the property shall be purchased when funding is available. Placement on the list shall be based solely upon the date a



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purchase or option agreement was entered into or any longer period of time which may have been agreed to by the parties. Funding for the acquisition of properties on the priority list will be provided through a separate designated fund (percentage of MSHCP funds received will be included in this fund). This fund will provide funding solely for the acquisition of property for which a development application is not intended to be filed. The property owner may at any time remove his/her property from this list.

- (6) **POTENTIAL ANNUAL PAYMENTS** - Options or other mechanisms that would allow RCA to make annual payments to property owners for purposes of payment of property taxes or other carrying costs during the acquisition period will be considered as part of the HANS Process. In addition, Local Permittees and the RCA will advocate for property tax relief measures when lands are pending acquisition for conservation as appropriate.

► **Expedited Review Process for Single Family Homes or Mobilehomes to Be Located on an Existing Lot Within the Criteria Area**

Currently, the location of a single family home or mobile home on an existing legal lot is determined by a number of factors. These factors include, but are not limited to, access, topography/terrain, zoning development standards including setbacks, soil types, presence of earthquake fault lines, leach fields, presence of oak trees and location of a lot within a high fire hazard area. Consequently, applicants for permits to construct or locate such homes are not allowed to build or site the home anywhere the applicant chooses on the existing legal lot. With this understanding, the following expedited review process has been developed to assist in determining the appropriate location of a single family home or mobile home on an existing legal lot within the Criteria Area.

An application for the issuance of a grading permit for an individual single family home including associated secondary structures on an existing legal lot or a site preparation permit for a mobile home including associated secondary structures on an existing legal lot within the Criteria Area shall be subject to review against the MSHCP Conservation Criteria solely in order to determine the appropriate location of a building foot print area and any necessary access road(s) on the least sensitive portion of the lot. The time period for this review will be 90 days. This time period may run concurrently with the time period that the grading or site preparation plans that are subject to plan check review and may be extended upon the mutual consent of the parties. The joint project/acquisition review process set forth in *Section 6.6* shall be complied with during this review period. A habitat assessment for certain species may be required in order to assist in determining the most appropriate location for the building footprint area and any necessary access road(s).

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Nothing in this section should be construed to mean that the building footprint area shall be required to be sited adjacent to any necessary access road. Similarly, nothing in this section should be construed to mean that the least sensitive portion of the site would be adjacent to an access road. Upon completion of the 90-day review period, the County or Cities shall determine the location of the building footprint area, and the location of any necessary road(s). Any necessary firebreaks shall be included within the building footprint.

If during the 90-day review period it is determined that all or part of the property may benefit assembly of the MSHCP Conservation Area, the County or Cities may negotiate with the property owner to acquire the entire lot or portion thereof or determine which incentives may apply in order to acquire a conservation easement over that portion of the property not necessary for access road(s) and outside of the building footprint area. If the County or City is unable to reach agreement with the property owner concerning the acquisition of the entire lot or a conservation easement over a portion of the lot upon completion of the review period, the property owner may proceed with the processing of the grading or site preparation permit application. Neither the County or City shall require property to be dedicated as a condition of issuance of any necessary construction permit if a mutually agreed upon acquisition of all or a portion of the property is not achieved. However, compliance with the location of the building footprint area as well as the location of any necessary road(s) shall be required.

The number of grading or site preparation permits for the construction or location of a single family home or a mobilehome on an existing legal lot located within the Criteria Area shall be monitored and reported on at least an annual basis in order to insure that appropriate assembly of the MSHCP Conservation Area is occurring.