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**PUBLIC PARTICIPATION AND BIOLOGICAL SOUNDNESS IN
HABITAT CONSERVATION PLANS**

**A Thesis
Presented to
The Faculty of the Department of Environmental Studies
SAN JOSE STATE UNIVERSITY**

**In partial Fulfillment
Of the Requirements for the Degree
Master of Science**

**by
Barbara Pederzoli
December 1999**

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ABSTRACT

PUBLIC PARTICIPATION AND BIOLOGICAL SOUNDNESS IN
HABITAT CONSERVATION PLANS

by Barbara Pederzoli

The Endangered Species Act of 1973, prohibits the "taking" of endangered or threatened species and their habitats. In 1982 the Act was amended by Section 10 to allow the negotiation of Habitat Conservation Plans (HCPs) to resolve conflicts between species protection and private developers. Public involvement, an important element of environmental planning, is little required by law in the development of these plans.

This thesis analyzed the effect of public involvement on the biological soundness of the design of 30 HCPs prepared for California. Most plans analyzed allowed little effective participation and were not especially biologically sound. These low scores were attributable to a reduced participation during early stages of the process and to a lack of data at different stages of the HCPs' design. However, a significant correlation ($r=0.404$, $P=0.03$, $n=30$) suggests that effective participation in the process may result in more biologically sound plans.

Keywords: habitat, conservation, endangered, species, public, participation.

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I hope this study serves to clarify the Habitat Conservation Plan process and benefits the protection of endangered and threatened species.

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CHAPTER 1

INTRODUCTION

Background

Endangered species in the U.S., by definition, are close to extinction and the strength and use of the Endangered Species Act (ESA) will determine their fate. Species protection may be achieved by the application of one aspect of the Act, Section 10, which allows the development of Habitat Conservation Plans (HCPs). Public participation in the development of these plans may be an important tool to ensure better outcomes for species preservation and habitat conservation.

Passed in 1973, the ESA was re-authorized with amendments in 1978, 1982, and 1988. In 1999, Congress is considering a re-authorization of the ESA, and much of the attention is focused on Section 10. This Section allows non-federal landowners to obtain an incidental taking permit (ITP) in exchange for an Habitat Conservation Plan (HCP) that mitigates and minimizes the impact of the incidental taking, and will not appreciably reduce the likelihood of the survival and recovery¹ of the species.

Essentially, HCPs represent agreements between a non-federal landowner and the Secretary of Interior or the Secretary of Commerce that allows the landowner to take (harm, harass, or kill) endangered species, in exchange for a land management plan that includes some protections for the affected endangered species and their habitats (Na-

¹ Recovery refers to all action relating to the planning, implementation, and achievement of recovery of listed species, leading to their removal from the endangered and threatened species list.

tional Wildlife Federation 1998). These agreements are negotiated between the federal government and private landowners or state and local governments, and sometimes other stakeholders such as environmental groups, recreational groups, non-applicant landowners, and business organizations (Beatley 1994).

Seeking to balance the needs of endangered and threatened species with those of the non-federal landowner through voluntary agreements, HCPs have become a prevalent land management tool. Since 1982, over 400 HCPs covering millions of acres of habitat have been proposed and at least 200 HCPs have been approved and implemented. They range in scope from small, single-species, local projects of a few acres to regional, multi-species programs that encompass over a million acres, and extend in duration from one to one hundred years (Kareiva 1998; Beatley 1994).

The role of HCPs in species conservation in the U.S. is likely to increase as conflicts between development and endangered species continue to occur in private lands. According to a 1994 report by the General Accounting Office, over 80% of listed species reside in habitat on non-federal lands (U.S. General Accounting Office 1994).

Despite their popularity, the effectiveness of HCPs in preserving threatened and endangered species is a matter of considerable debate. According to advocates of the approach, HCPs encourage the voluntary participation of private landowners and provide flexibility in managing non-federal lands. Critics contend that HCPs are being developed without adequate public participation and scientific review, and that they are likely to increase the risk to many species (Mann and Plummer 1997). Therefore, a comprehensive and systematic description and evaluation of existing HCPs is necessary to deter-

mine the long term implications of their application as a tool for conserving biodiversity (Kareiva 1998).

Given the tremendous growth in the number and scope of HCPs, their large potential impact on species, and the limited research material that exists on their performance, the American Institute of Biological Sciences (AIBS) and the National Center for Ecological Analysis and Synthesis (NCEAS) are sponsoring research to synthesize information available on HCPs and evaluate their effectiveness as a tool for conserving endangered species. One of these studies was conducted by Peter Kareiva of the University of Washington and focuses primarily in assessing the plans' design based on biological parameters.

Research is also needed to document the role of public participation in the drafting of HCPs. At the first-ever National Conference on HCPs held in May 1997 in Washington, DC, and sponsored by the National Wildlife Federation (NWF), most participants agreed on the need for more public involvement in HCPs. The Conference was attended by 300 participants, including endangered species experts from science, academia, environmental organizations, landowners, developers, government agencies, NWF affiliates, grassroots organizations, and the Canadian Wildlife Federation. During the session dedicated to citizen participation, the groups unanimously agreed that the current level of citizen participation in HCPs is insufficient, and that early citizen involvement is imperative (National Wildlife Federation 1998).

This research study focused primarily on public participation in HCPs and the nature and strength of the relationship between public involvement and the biological soundness of the plans' design.

Regulatory Background

Under Section 9 of the ESA it is illegal to "take" a listed species. This prohibition applies to private and public lands and has been interpreted to include habitat destruction or alteration. Private landowners are subject to criminal and civil penalties for undertaking activities leading to a "taking" of a listed species on their lands (Beatley 1994). Section 10(a) of the Act, included in the amendments of 1982, allows non-federal landowners who plan to develop their lands to "incidentally take" a listed species if they qualify for and obtain an incidental take permit (ITP) from the U.S. Fish and Wildlife Services (USFWS) or National Marine Fisheries Service (NMFS)². The ITP process is established under section 10(a)(1)(B), and it exempts landowners from the Section 9 prohibition against a take. To obtain an ITP, among other requirements, landowners must prepare an HCP. The HCP must at minimum specify: "the impact which will likely result from their proposed incidental take; what steps they will take to minimize and mitigate impacts and the funding that will be available to implement such steps; the alternative actions the applicant considered and why they are not being used; other measures required by the agency; and procedures to deal with future unforeseen circumstances that may affect the health of the species or the success of the HCP" (ESA [50 CFR 17.22(B) and 17.32(b)]).

² USFWS and NMFS are the designated agencies by the Secretary of Interior and the Secretary of Commerce.

HCPs are produced in three general phases as defined by the USFWS and NMFS: (1) the development phase, (2) the permit and approval phase, and (3) the post-issuance or implementation phase. During the development phase, data are collected and analyzed to create a scientific baseline³. This phase is often conducted by outside consultants hired by the applicant, while the USFWS or NMFS office provide technical assistance and feedback (USFWS and NMFS 1996; Aengst et al. 1997). During this phase, parties also negotiate the terms of the agreement. Most HCPs share the strategy of identifying and protecting certain high value habitat areas by setting aside portions of their land for conservation, or by purchasing habitat conservation areas and setting them aside in perpetuity as habitat preserves. Other habitat preservation techniques typically included in HCPs are actions such as public education campaigns, habitat restoration⁴, and land-use restrictions using local jurisdictional zoning powers. These controls allow the transfer of development rights to designated nodes preserving important habitat or, cluster future developments in lands owned by the developers or other parties involved in the plan, setting aside, in perpetuity, conserved habitat areas (Beatley 1994).

The approval phase involves both internal agency analysis and external public review. This phase begins when the applicant submits the following four documents to the agency: the permit application form, stating the specific amount and rate of incidental take; a completed HCP, which must include the scientific information and details of the

³ Baseline data are information reflecting the conditions of resources prior to the proposed activities.

⁴ Habitat restoration or enhancement is the process of intentionally altering a degraded habitat area to establish a defined ecosystem. The goal is to emulate the structure, function, diversity and dynamics of the specific ecosystem.

mitigation plan⁵; a draft National Environmental Policy Act (NEPA) document (Environmental Assessment), if required; and an implementing agreement, which specifies how the elements of the contract will be carried out, paid for, and monitored. If necessary, the agencies will amend the NEPA documents and publish notice of the HCP in the Federal Register for a 30-day public comment period. The agency then evaluates whether the proposed plan is in compliance with Section 7 of the ESA⁶. State endangered species laws and environmental reviews, as well as local zoning or planning regulations may require additional documentation or public review (USFWS and NMFS 1996; Aengst et al. 1997). The USFWS or NMFS will issue the permit if it determines that, after considering public comment, the HCP is complete and satisfies the permit issuance criteria (USFWS and NMFS 1996).

The last phase, implementing the HCP, involves carrying out the prescribed mitigation actions, monitoring, and the proposed funding programs. The ESA requires from the HCP a detailed description of available funding for the implementation of the pro-

⁵ Often prepared by outside consultants hired by the applicant, the HCP should include: identification of the impacts of the project on the affected species and their habitat, the species list, biological studies and data to assess the impacts to the species, project modifications that would minimize the take and reduce the impacts, design of mitigation programs, methods for monitoring impacts on affected species, biologically acceptable take limits and how to define them, and criteria to determine success of the plan (USFWS and NMFS, 1996, p. 3-6).

⁶ Issuance of an ITP by USFWS or NMFS is a Federal action subject to section 7 compliance. The agencies must conduct an internal or intra-Service formal consultation on permit issuance. Formal consultation can be conducted for the USFWS with the Ecological Services Office, and for the NMFS with the Field Office. Consultation terminates with the preparation of a biological opinion providing the agencies with the determination of whether the proposed action will jeopardize the existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Critical habitat are specific geographic areas, occupied by listed species or not, that are determined to be essential for the conservation and management of listed species. Internal Consultation on a section 10 action ensures that issuance of the ITP meets ESA standards under section 7, representing the last "internal check" that the fundamental standard of avoiding jeopardy has been satisfied (USFWS and NMFS, 1996).

posed mitigation and monitoring programs. Measures typically requiring funding are pre-construction surveys, biological monitors, exclusion fences, re-vegetation of disturbed areas, acquisition of mitigation lands, and biological monitoring (USFWS and NMFS 1996). The funding source for small projects is usually the permittee. However, for large or regional HCPs, funding often involves a combination of federal, state, local, and private sources. Funding strategies can include: per-unit fees on new development, community taxes, contribution by non-profit or private interests (e.g., The Nature Conservancy), state wildlife funds, issuance of city bonds, and Federal Land and Water Conservation funds appropriations (Beatley 1994; USFWS and NMFS 1996). USFWS or NMFS are required to monitor the permittee's compliance with the program and other terms and conditions of the permit, and the HCP's long-term progress and success, involving the preparation of periodic reports (USFWS and NMFS 1996; Aengst et al. 1997).

When introduced, Congress suggested that HCPs be developed jointly between the appropriate federal agency and the private sector or local or state governmental agencies. It did not explicitly foresee an extensive participatory role in the HCP planning process for the interested publics. The only related requirement in the statute is a public notice in the Federal Register for the 30-day comment period during the second phase of the process, prior to the issuance of the permit. No requirement for public involvement exists during the first and third phases of the HCP process.

As a result, in some cases, HCPs have been negotiated only between the agency and the landowner, while in other cases, outside stakeholders have participated on an HCP steering committee and have had more influence over the development of the plan

(Aengst et al. 1997; USFWS and NMFS 1996). Steering committees are not required by law, but they are encouraged by the agencies during the pre-application phase. When a steering committee is considered inappropriate by the applicant, the agencies encourage the petitioner to inform parties interested in the proposed HCP through less participatory methods, such as formal or informal meetings and newsletters (USFWS and NMFS 1996).

An HCP steering committee is a group of people that represents the affected parties in an HCP planning area. According to the USFWS and NMFS (1996), the committee should ideally include representatives from all affected interests, especially for large or regional HCPs (i.e. the applicant, state and Federal agencies with statutory authority for endangered species and managing public lands within or near the HCP area, tribal interests where applicable, affected industries and landowners, civic or non-profit groups or conservation organizations with interest in the outcome of the process). The steering committee usually develops a Memorandum of Understanding (MOU) or similar document to record the goals of the HCP, the composition of the committee, expectations of HCP participants, and other information defined by the committee which is included in the HCP document (USFWS and NMFS 1996).

Permit applicants ultimately must weigh the risks of establishing a steering committee with the expected benefits. State and local governments typically embrace the steering committee idea because of their desire to obtain consensus from the community. Private landowners may feel that the creation of a steering committee will lead to confrontation or intrusion of outside interests into proprietary matters. However, according

to the agencies, steering committees have potential benefits for the private developer as well, including: 1) identification and resolution of issues before they cause delay later in the process⁷; 2) development of an HCP with support of the community; and 3) perhaps, most important, the facilitation of cooperation from agencies and private conservation organizations that may be needed to help implement and fund the program (USFWS and NMFS 1996).

The National Environmental Policy Act (NEPA) in the HCP process

In November 1996, the USFWS and NMFS released the Habitat Conservation Planning Handbook containing a number of procedural changes aimed at shortening the permit processing time by reducing the number of permitting steps and combining regulatory measures. According to Aengst et al. (1997), the main focus of the handbook is to consolidate the process to the maximum extent allowable by law. This consolidation has included two features. First, it combines the required NEPA period of public comment with the HCP required period to reduce the overall permit processing time, thereby potentially further reducing the opportunity for public involvement. Second, it creates a “low effect” category of HCPs that are “categorically excluded” from full NEPA review. Under the 1996 procedures of the USFWS and NMFS, NEPA requirements can be satisfied by one of the following three documents or actions: 1) a categorical exclusion; 2) an Environmental Assessment; or 3) an Environmental Impact Statement. When a categori-

⁷ The process could be subject to legal challenges if comments received by the agencies during the 30-day public comment period were not accounted for the design of the HCP and the issuance of the ITP permit.

cal exclusion is not possible, an Environmental Assessment (EA) is required. The 30-day period for public comment required by the EA is “combined with the 30-day public notice” period that is required by section 10 of HCPs. Since HCP mitigation measures usually reduce significant impacts, Environmental Impact Statements (EIS) are not usually required. However, if a conclusion is reached that an EIS is required for a particular HCP, the 45-day comment period required for the draft EIS is combined with the 30-day comment period for the HCP. Graphic representations of the procedures for low effect processes, processes requiring an EA, and processes requiring an EIS are provided in Appendix A.

All involved agencies in states with laws parallel to NEPA are required to cooperate in reducing duplication between NEPA, state and local requirements, and ESA requirements by conducting joint public hearings and producing joint environmental documents. Therefore, the 1996 USFWS and NMFS Handbook streamlines the process by minimizing the total period for public comment on HCPs, consequently reducing the ability of the community to review and comment on the plan.

Recent Controversies Concerning HCPs

HCPs have been perceived as procedurally difficult, costly, and risky. Therefore, they were not pursued frequently by non-federal landowners until the Clinton administration promoted them through various policies. Most notably, in 1994 the Secretary of the Interior, Bruce Babbitt, gave assurances that landowners would have “no surprises” in complying with the Act. This propelled HCPs from less than a dozen to the nearly 400

currently completed or under way (Reichardt 1997; Barth 1997). In 1996, the USFWS and the NMFS published regulations regarding pre-listing agreements and the "safe harbor" policy encouraging landowners to improve habitat in exchange for a pre-listing agreement which precludes future listing of an imperiled species. Both policies, "no surprises" and "safe harbor," have been widely criticized by the scientific community and general public (Barth 1997; Reichardt 1997; Aengst et al. 1997).

Through the "no surprises" policy, the USFWS and NMFS assure that for the length of the approved HCP, non-federal landowners will remain exempt from any further conservation obligations due to new land-use restrictions or financial commitments beyond those agreed previously in the plan. Critics argue that management adjustments beyond the terms agreed upon the HCP are almost impossible, and that there is no provision for addressing circumstances not anticipated in the original plan by the landowner (Barth 1997). Thus, if "unforeseen circumstances" reduce the likelihood that a species covered by the plan will survive, then the agencies agree to bear the entire responsibility, financial and logistical, of all recovery efforts beyond those required by the HCP (Barth 1997). According to Tim Cullinan of the National Audubon Society in Washington DC, this policy is especially troubling when applied to multi-species plans since it won't allow changes in the future if it is determined that some species are detrimentally impacted (Kaiser 1997). Approximately 74 of the HCPs issued after 1994 are thought to contain the "no surprises" assurance (Aengst et al. 1997). The inclusion of the "no surprises" policy in every HCP, according to Walley (1996), would reduce the opportunity of affected individuals, conservation groups, and scientists, either at a steering committee

level or during the public comment period required for approval, to comment on whether such a guarantee is biologically advisable or not. For example, commentators criticized the adequacy of applying this policy specifically to California's multi-species plan, the Natural Communities Conservation Plan (NCCP).

The "safe harbor" policy encourages landowners to improve habitat for listed species on their property. In exchange for their conservation efforts, the agencies approve pre-listing agreements that preclude later listing of an imperiled species. For example, if a landowner's conservation effort increases a listed species population of a particular site above the habitat baseline condition previously determined by the appropriate federal agency, this would not increase the landowner's regulatory responsibility or affect future land-use decisions. This policy may also allow landowners who enhance habitat on their property to attract an endangered species, recover it, and to later on destroy the created habitat. By 1997, twenty-five Safe Harbor agreements covered more than 21,000 acres of private lands (Aengst et al. 1997). Some conservationists applaud these agreements, however others, such as Dr. Jerome Jackson of Mississippi State University, caution that these new habitats may attract animals away from ESA-protected private lands leaving those owners free to develop. Then, when the "safe harbor" landowners later develop their lands the animals will have lost some habitat (Kaiser 1997).

In addition to the criticism of the "no surprises" and "safe harbor policies," other aspects of the HCPs have drawn the attention of environmentalists, ecologists and conservation biologists who say that HCPs are ceding too much. An article by Kaiser (1997) summarizes the opinions of diverse scientists in the field. Dennis Murphy, conservation

biologist at Stanford University, warned that many HCPs have been developed without adequate scientific guidance; the Society for Integrative and Comparative Biology asked for a moratorium on new HCPs; Michael Bean, of the Environmental Defense Fund, observed that HCPs are not good for the species since they only prevent further decline instead of promoting recovery; Craig Pease, ecologist at the University of Texas, explained that an HCP in Travis County, Texas, looks like it promotes local extinction instead of protection of the species it was designed for; Gary Meffe, ecologist of the Savannah River Ecology Laboratory in Aiken, S. Carolina, noted that numerous small HCPs have been scattered across the landscape with little regard for whether the fragmented assemblage does much good for threatened species, and even when HCPs cover large areas they may not protect most species of the ecosystem; and Tim Cullinan of the National Audubon Society in Washington, noted that multi-species planning barely makes the effort of grouping species, but scientists haven't yet reached consensus on how to best group species.

Finally, an important concern among reviewers of the process is related to the amount of public participation involved in the process. The 30-day public comment period, required under section 10 (c) of the law during the second phase of the process, may prove insufficient to fulfill the purpose of Congress to allow interested parties to submit written data, views, and arguments related to the plan, to assure HCPs' compliance with the law in protecting the public interest in biotic resources. According to the literature on participation, not only is the 30-day public comment period too short for effective public involvement, but it is also required at an inappropriate point in the process. Thomas

(1995) indicates that timing of public involvement in a decision-making process is significant for the outcome and suggests that early participation during the *first* phase of the plan can be more influential than during the *second* phase.

The Role of Public Participation in Public Decisions

Public interest in supporting species conservation and to ensure the preservation of imperiled species suggests that public participation is an important tool to ensure a better outcome for the environment and that HCPs should be multi-party collaborative processes that enhance public participation. A survey by certified wildlife biologists of the University of Arizona, Dr. Brian Czech, and Dr. Paul Krausmann (1997), concluded that species and habitat conservation had great support among respondents, comparable to property rights and economic growth; that the ESA is highly valued because of public concern about the extinction of species; and that the ESA dissuades activities that deplete resources for the future. In conclusion, the public generally favors policies that would eliminate subsidies to resource extractors, promote population stabilization, and temper the consumption of natural resources⁸. Respondents in the study also supported two statements: “landowners should not have the right to use their property in ways that endanger a species;” and “landowners prevented from developing their property because of endangered species laws should be paid for any lost income by respondents” (Czech and Krausmann 1997, 15). Also significant is the finding that only 5% of respondents would

⁸ On a scale from 0-100, respondents rated the importance of conserving species at 76.5, property rights at 76.3, economic growth at 75.4, ecosystem health at 80.5, and the availability of resources for future generations at 85.8 (Czech and Krausman, 1997).

like the ESA revoked and 11% would like it weakened, while 35% want it retained as written and 49% want the ESA strengthened.

Additional literature reinforces the importance of public participation in environmental decisions. According to Abbott (1996), community participation is relevant to every sector of development, and successful participation can transform programs as well as provide the critical component to promote a sustainable development. Thomas (1995) suggests that public participation, when successful, brings substantial benefits: more effective public decisions, a satisfied and supportive public, and a stronger democracy. Evidence from Wandersman (1984) suggests that participation can lead to empowerment that can ultimately produce community improvements.

Problem Statement

Literature reviewed on public participation and the biological soundness of the HCPs' design suggests that, to more effectively achieve the ESA's main goal of conservation and recovering of imperiled species, Habitat Conservation Plans should be required to be more participatory processes where adequate levels of empowerment of all the affected stakeholders are ensured, especially during the first phase of the process when the habitat conservation plan is drafted and negotiated.

This project examines the nature and strength of the relationship between public participation in HCP processes and the biological soundness of the plans' designs focusing on the relationship of two main variables: *levels of public participation* and the *biological soundness* of approved HCPs' designs. The parameters used to measure each of

these variables are documented in the Related Research section and explained in detail in the Research Design section.

Implications

The results of this research study were used to propose recommendations related to the role of public participation and degree of empowerment needed to promote a positive outcome for the environment from the negotiation of HCPs.

The results may also be useful to citizens' groups interested in preserving endangered and threatened species, and to State and Local Governments at promoting effective public participation in the HCP process.

CHAPTER 2

RESEARCH OBJECTIVES

The main goals of this research study are to analyze the nature of public participation in HCPs, to assess the biological soundness of the HCPs' design, and to test the strength of the relationship between levels of public participation and the biological soundness of plans' designs. Information available from documentation on HCPs was used to describe the level of participation and the biological soundness of the HCPs. However, data obtained exclusively from the documents did not reflect the entire extent of public participation. Additional documentation, provided by the participants themselves, was considered significant to this study to assess the perceived level of participation. Rationales behind the research objectives are explained in the Related Research section. The following are the specific objectives addressed by this research study:

Objective 1

Describe a set of Habitat Conservation Plans from the State of California according to their general characteristics such as size and duration of the plan, type of applicant, HCP location, USFWS lead field office in charge, amount of habitat affected by the HCP, approach of the plan, taxonomic group of the primary species covered, number of species covered, coverage of listed, candidate, and/or species of special concern, type of NEPA/CEQA document required (if any), primary permit motivating activities, primary preparer of the HCP, and presence of the no surprises clause.

Objective 2

Determine the nature and level of public participation in HCPs from existing documentation. Literature reviewed on participation suggests that *levels of public participation from documentation* can be explained by three main components:

- a) Time of participation
- b) Form of participation
- c) Influence of participation

Objective 3

Document and analyze the biological soundness of the HCPs' design based on existing documentation. *Biological soundness* according to literature reviewed and related research can be assessed by the following components:

- a) Habitat affected
- b) Species status
- c) Take estimation
- d) Impact assessment
- e) Mitigation measures
- f) Monitoring plan
- g) Alternatives analyzed
- h) Funding methods

Objective 4

Assess the *perceived level of public participation* in the sample HCPs. Literature reviewed indicates that it can be assessed with regard to:

- a) Access to information
- b) Access to decision-making

Objective 5

Using the information gathered from objectives 2, 3, and 4, assess the nature and strength of the relationship between public participation and the biological soundness of the plans. To achieve this objective, the researcher tested four central and two secondary hypotheses. A graphical representation of the relationships among the variables and the hypotheses testing is illustrated in Figure 1.

Central Hypotheses

H1: Higher levels of participation as documented by the researcher (measured by form, time and influence) will be significantly positively correlated to the biological soundness of the plans' designs.

H1-a: Earlier public participation during phase I of the plan is significantly positively correlated with the biological soundness of the plan.

H1-b: More interactive forms of public participation in HCPs are significantly positively correlated with the biological soundness of the plan.

H1-c: There is a significantly positive correlation between the level of influence of participants in decision-making and the biological soundness of the plan.

Figure 1. Diagram of Variables and Hypotheses Testing

Secondary Hypotheses

H2: Higher levels of participation as perceived by the participating public (measured by access to information and decision-making) are significantly correlated to the biological soundness of the plan's design.

H3: The perceived level of participation by the participating public is significantly correlated to the level of participation provided by the documentation.

Objective 6

Assess whether managers adopted “risk-averse” practices as determined by the presence of the following management actions in the plan: to reduce the duration of the plan, to reduce or avoid impact, to restrict the damage to reversible impacts, to apply mitigation measures before impact occurs, and to require adaptive management⁹.

⁹ Adaptive management is a flexible long-term management directed over time by the results of ongoing monitoring activities and other information.

CHAPTER 3

RELATED RESEARCH

Research on Public Participation

The literature on public participation in environmental decisions indicates that levels of participation can be documented both by reviewing existing documentation on HCPs (Cuthbertson 1983; Thomas 1995) and by surveying the participants in the process (Potter and Norville 1983).

From existing documentation, levels of participation can be assessed via the following components: the timing of the process when public is involved; the form of participation, which, ideally should include representatives of all affected groups; and the extent of participation or level of empowerment that each one of the involved parties had in decision-making. These components, time, form, and influence of participation, were used as parameters to measure *levels of participation from documentation*.

From the standpoint of the participating public, the *perceived level of participation* is better explained in terms of access to information and access to decision-making.

Time of Participation

Thomas (1995) indicates that the timing of public involvement in a decision-making process is significant for its outcome. Early participation during the first phase of the plan can be more influential than during the second phase. By the second phase, the plan is already designed and changes to it become more complicated and expensive,

therefore, changes to the plan are more likely to be incorporated into the plan during the first phase of the process.

Duerksen et al. (1997, 52) observed in their report that, “involving citizens in the process from the beginning can reduce the administrative and financial burden and increase the public acceptance of conservation planning,” and that “citizen participation should be initiated at the outset of a habitat protection program.”

Form of Participation

Participation methods that involve two-way communication and shared decision-making are preferable compared to those that only allow one-way communication or none at all (Force and Williams 1989; Cuthberston 1983; Grima 1983; Thomas 1995; Stiftel 1983). Two-way communication methods allow direct interaction between the participants and the decision-makers, while one-way communication methods are unidirectional and therefore, do not provide for such interaction. More participatory processes like advisory committees, advisory boards, and steering committees followed by public meetings, public hearings, presentations and workshops are two-way communication methods with higher or lower levels of interaction. Less participatory methods like surveys of citizen attitudes and opinions, written comments and mailing of materials are one-way communication methods (Force and Williams 1989; Cuthberston 1983; Grima 1983; Thomas 1995). A list of all forms of participation in National Forest planning developed by Force and Williams (1989) is provided in Table 1.

According to Force and Williams (1989), the most desirable methods for respondents with environmental and preservation interests are citizen representatives on policy making bodies, formal public hearings, open public meetings, workshops, surveys, and letter writing.

Table 1. Forms of Participation in the US Forest Service Planning Process (Force and Williams 1989).

Forms
Open public meetings
Meeting for residents of a specific community
Surveys of citizen' attitudes and opinions
Informal contacts with decision-makers
Direct mail of materials
Presentations
Formal public hearings
Letter-writing
Show-me trips
Citizen representatives on policy-making bodies
Workshops
Nominal group processes
Liaison groups
Citizens' advisory committees
Open houses
Direct negotiations
Telephone calls
Use of toll-free numbers
Television programs
Citizen training
Radio programs
Adult education courses
Lectures at colleges
Interactive television programs
Private meetings
Computer-based techniques
Game simulations
Arbitrators or mediators

Source: Ellen Force and Kevin L. Williams. "A profile of National Forest Planning Participants," *Journal of Forestry* 87, no. 1 (January 1989): 33-38.

Influence of Participation

“Effective citizen participation is necessary to accurately gauge public opinion” (Duerksen et al. 1997, 52), and is “undoubtedly one of the most important aspects of participation” (Potter and Norville 1983, 35). According to Cuthbertson (1983), Grima (1983), and Thomas (1995), the presence in the process of a participatory form considered to be open and fair does not necessarily imply that public involvement in the process was either adequate or successful. Even when steering committees are formed, public participation may not influence the decision-making. HCPs should be flexible processes that include all parties with an interest in the outcome, and each party should have an equal opportunity to participate (Clark and Brunner 1996; Beatley 1994; Shilling 1997; Bean et al. 1991).

According to Beatley (1996) and the USFWS and NMFS Handbook (1996), a diverse range of stakeholder groups is expected to participate in these plans: land developers, the development community, landowners and property owners, affected industries, environmentalists, the environmental community, representatives of the local government, federal and state wildlife agencies, state and federal land management agencies, recreational land users, and tribal interests.

A large number of participants makes it more likely, but does not guarantee, that the parties will have an effect on the decision-making. Cuthbertson (1983) assessed participation in terms of effectiveness, adequacy, appropriateness, timeliness, and efficiency. The study concluded that the quality of contributions rather than the quantity of participation was more important to decision-making. Participation without the power to influ-

ence pertinent decisions is meaningless, even when the level of participation is high. An intention to use citizen participation to enhance planning processes should focus on the degree to which citizen participants are empowered to participate in the decision-making process (Julian et al. 1997). Therefore, interested parties should be included not just as informants, but as partners with some share of power in the negotiation to ensure that the decision taken will reflect public concerns (Street 1997; Julian et al. 1997; Clark and Brunner 1996).

Access to Information and Access to Decision-making

Levels of participation have been classified by many researchers in terms of access to information and access to decision-making by the participant. This type of assessment can only be accomplished by surveying the participating public. To allow this classification, Arnstein (1969) developed a “Ladder of Participation” with eight rungs, each rung corresponding to a level of participation (Table 2).

Table 2. Arnstein’s Ladder of Citizen Participation.

Degrees of Participation	Level of Classification
<i>Citizen Power</i>	8 Citizen Control
Citizen is Informed and has	7 Delegated Power
Influence in Decisions	6 Partnership
<i>Tokenism</i>	5 Placation
Citizen is Informed but has no power or	4 Consultation
Influence in Decisions	3 Informing
<i>Non-Participation</i>	2 Therapy
	1 Manipulation

Source: Arnstein, Sherry R. “A Ladder of Citizen Participation.” *Journal of the American Institute of Planners* 35, (July 1969): 216-224.

More recent studies have incorporated those levels into a reduced number of levels of participation. For instance, Julian et al. (1997), classifies participation into three categories (Table 3), and Thomas (1995) developed a Decision-making Model (Table 4) identifying five decision-making approaches based on the extent of shared information and influence of public involvement in the decision-making.

Table 3. Levels of Participation by Julian et al. (1997).

Level of Participation	Access to Information	Access to Decision-making
High	YES	YES
Moderate	YES	NO
Low	NO	NO

Source: Julian, David A., Thomas M. Reischl, Richard V. Carrick, and Cathy Katrenich. "Citizen Participation - Lessons from a Local United Way Planning Process" *Journal of the American Planning Association* 63, no. 3 (Summer 1997) : 345-355.

Table 4. Forms of Public Involvement and Approach of Decision-making.

Approach of Decision-making	Description of Decision-making	Form of Public Involvement
Autonomous Managerial Decision	The decision is taken alone without public involvement	None
Modified Autonomous Managerial	The decision is taken alone, but information is sought from the public	Survey/Citizen Contacts
Segmented Public Consultation	The problem is shared with segments of the public separately, getting ideas and suggestions. The decision should reflect the groups influence	Survey/Meetings
Unitary Public Consultation	The problem is shared with the public as a group, getting ideas and suggestions. The decision should reflect the groups influence	Advisory Committee/Public Meetings
Public Decision	The problem is shared with the public, and the decision should reflect a solution based on an agreement of all parties.	Advisory Committees/Public Meetings

Source: Thomas, John Clayton. *Public Participation in Public Decision*. San Francisco, California: Jossey Bass Publishers, 1995.

Thomas' model was tested using 30 case studies where the effectiveness of public decisions was assessed. The effectiveness was measured in terms of how well the decision works and encompassed correspondence to quality requirements, success of implementation, citizen or public satisfaction with the eventual decision, managerial satisfaction with the decision, and eventual achievement of the intended goals.

Research on the Biological Soundness of HCPs

HCPs are complicated tools, and their biological soundness is not easy to assess. To achieve the purpose of Section 10 of the ESA, the NMFS and the USFWS identified mandatory elements to be included in an HCP and the criteria for approval by the USFWS. These elements are illustrated in Table 5.

Table 5. Mandatory Elements of an HCP and Criteria for Approval.

Mandatory element to be included in an HCP	Criteria for approval of the HCP
Detail the impacts likely to result from the taking of the species for which permit is requested.	The taking will be incidental to an otherwise lawful activity.
Measures that the applicant will undertake to mitigate, minimize, and monitor the impacts	The applicant will, to the maximum extent practicable, minimize and mitigate impacts
Funding that will be made available	There will be adequate funding to carry out the HCP
Procedures to deal with unforeseen circumstances	The taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild.
Alternatives actions to the taking, and the reasons why such alternatives are not being utilized	
Additional measures USFWS or NMFS may require as necessary for the purpose of the plan	The landowner agrees to include other measures required, including reporting to check compliance.

Source: NMFS and USFWS. *Endangered Species Habitat Conservation Planning Handbook*. Washington DC.: Government Printing Office. November 1996.

A plan might be defensible under these terms but still be scientifically inadequate if the data are insufficient to make a biologically sound decision (Kareiva et al. 1999).

It is very difficult to do a scientifically defensible judgement of the overall scientific quality of each HCP. However, the literature suggests that it is feasible to assess the *biological soundness* of the plan by analyzing the presence or absence of several types of scientific information in the design of the plan.

Adequacy of the information used in the HCP

Many researchers agree on the importance of incorporating “as complete and as thorough as possible biological and scientific basis” (Beatley 1994, 215). Shilling (1997) identified as crucial for the performance of HCPs the need to gather more baseline information regarding the population size needed for the species to survive and recover and the importance of obtaining more technical documents describing species and habitat requirements. Kareiva et al. (1999), in a recent study to assess the overall adequacy of the scientific analysis of HCPs, divided the plan into six stages of analysis: status of the species, habitat loss and habitat fragmentation, amount of take, impact of take, mitigation measures adopted, and monitoring program proposed. According to Kareiva et al. (1999), failure to adequately address any of these stages with pertinent data compromises the adequacy of the plan, even if all other stages are addressed extremely well. Two stages of analysis, additional to the six identified by Kareiva et al. (1999), are crucial to the biological soundness of HCPs: the alternatives analyzed and the adequacy of the funding to implement the plan (Bean et al. 1991; Beatley 1994).

The information used at any stage of the HCP is to be considered as scientifically inadequate if insufficient data were available to justify the action even though legally the plan might be defensible. “Data must exist, be accessible, and be explicitly summarized in the HCP to be credible” (Kareiva et al. 1999, 43).

When information is poor or lacking, according to the precautionary principle, risk-averse strategies should be adopted. HCPs should be limited to small areas or of short duration, impact should be avoided or at least be restricted to reversible impacts, mitigation measures should be applied before the take, and HCPs should include an adaptive management program (Kareiva et al. 1999).

The following is a description of the finding of each stage of analysis significant to the biological soundness of HCPs.

Habitat Loss and Habitat Fragmentation

When species habitat is impacted, it is important that the HCP maintains connections among wildlife habitats by identifying and protecting corridors for movement (Duerksen et al. 1997). “The location and context of protected habitat within the landscape and its degree of connection with adjacent open space plays major roles in the biological viability of an HCP” (Bean et al. 1991, 32). When habitat loses connections it becomes fragmented and the level of habitat fragmentation can be assessed using percolation ideas. If there are clear connections over the whole landscape then fragmentation is minimized, but if any species covered by the plan cannot move between habitat areas then the habitat has undergone fragmentation (Kareiva et al. 1999). To reduce habitat

fragmentation, HCPs should guide development towards areas of landscape containing “common” features (Duerksen et al. 1997, 52), and incorporate “contiguous corridors and landscape linkages” (Beatley 1994, 200).

Creation of buffers between areas dominated by human activities and core areas of wildlife habitat are also important features to minimize human contact with wildlife and to protect the preserved habitat (Duerksen et al. 1997; Kareiva et al. 1999; Beatley 1994).

Species Status

An accurate determination of the status of the covered species is necessary to justify the HCPs’ procedures and to provide baseline data. According to Kareiva et al. (1999), fundamental aspects to adequately assess the status of a species are the knowledge of the critical threats to the species viability, the estimated trend in the number of individuals of the species populations, trends in habitat availability and trends in the quality of most remaining habitat.

Take Estimation

The implementation of HCPs can result directly or indirectly in the death or displacement of individuals of an endangered species or in any type of harassment or harm to species as well as the destruction or modification of species habitat (NMFWS and USFWS 1996). Data to estimate the take should be based on known information of population densities, amount of habitat lost, habitat size, and population sizes and trends

in population (Kareiva et al. 1999). Take should be estimated quantitatively, either as the total number of individuals lost or as a percentage of the affected population taken (Kareiva et al. 1999).

Impact Assessment

Take is not the same as impact. Impacts can be defined as the combined effects of take and habitat modification on the viability of endangered species. HCPs should include some indication of the proportion of population (locally and globally) that corresponds to a given take and of whether the take represents a loss for the species' range that is the major source of its population growth and vitality (Kareiva et al. 1999). The complexity of estimating a take requires, beside an accurate estimate of the take, a clear understanding of population dynamics (population size and trends in population), species requirements and demographic thresholds that apply in each individual case (Kareiva et al. 1999).

Mitigation Measures

Crucial to the HCPs is to specify mitigation measures that minimize the threats to the species produced by the impacts. Scientists have criticized mitigation plans proposed in HCPs arguing that they have more political and economic basis than empirical data on the species and their requirements (Beatley 1994). To be adequate, mitigation measures should be supported by data documenting that the proposed procedure is likely to be effective (Kareiva et al. 1999; Bean et al. 1991). Mitigation should address the primary

threats to the main species covered in the HCP and reduce their impacts. If appropriate, the proposed mitigation should minimize to the maximum extent practicable the impact to the species (Kareiva et al. 1999; Beatley 1994). An important determinant of the success of mitigation is the adequate implementation of the proposed measures. For the maximum success it is important that the measures be implemented before a species is severely affected by the activities proposed in the HCP. Mitigation measures should start at the time of the take or preferably before any take occurs increasing the probability to detect and correct unsuccessful mitigation measures (Kareiva et al. 1999).

Monitoring Plan

A clear monitoring program is a critical component of HCPs because there is no other way to evaluate the performance of an HCP without it. A monitoring program is considerably clearer if the plan provides sufficient information to document it. The next question is if the proposed monitoring program would allow the evaluation of the HCP. To allow such evaluation, a scientifically adequate monitoring program should include factors such as number and location of sample sites, frequency of sampling, and nature of data recorded (Kareiva et al. 1999). A plus of any HCP is to include adaptive management. Adaptive management and monitoring are interconnected because adaptive management requires monitoring data to evaluate the success or failure of alternative management actions (Kareiva et al. 1999). A plan should include specifically stated and measurable indicators for success and failure and provide for contingent actions in the event of failure (Duerksen et al. 1997; Bean et al. 1991).

Alternatives Analyzed

The analysis of alternative actions to the proposed action and the reasons why such alternatives are not being utilized is a required element in any HCP. To comply with this formality, many plans engage exclusively in the discussion of a “no action” alternative. The “no action” alternative focuses on proposing no development and most of the times is deemed as impracticable, economically not viable, and/or less beneficial for the species covered in the plan.

Bean et al. (1991) assessed the alternatives analyzed in many HCPs and concluded that the appropriate focus of the alternatives should not be on the “no action” alternative, but on those development alternatives that can avoid at least some incidental taking. Plans that focus on alternatives other than the “no action,” may reduce the impact to the species. Kareiva et al. (1999) also concluded that plans that considered alternatives other than the “no action” did a better job in the biological assessment.

Funding Methods

Funding is important to adequately implement the proposed plan, especially the mitigation and monitoring plans proposed. Mitigation is one of the most expensive steps in the development of HCPs, therefore it is important to determine the cost of the proposed measures, the sources of funding, and the time period over which those funds will be available (Kareiva et al. 1999; Beatley 1994). An equitable long term funding program is important, and ideally the source of those funds should be determined prior to implementing the plan and not as the impacts occur in the course of the development (Kareiva

et al. 1999; Beatley 1994). Provisions for contingency adjustments to ensure adequacy of funding to carry out the plan in the event of shortfalls of funds and to cover contingency mitigation measures should the original ones fail is also important to the success of the plan (Bean et al. 1991).

Risk Aversion

Risk-aversion relates to the “precautionary principle,” which states that “in face of poor information or great uncertainty, managers should adopt risk-averse practices” (Kareiva et al. 1999, 40). Management actions should be specified to compensate for the uncertainty underlying the decision to be taken. According to Kareiva et al. (1999), in the context of the HCPs, such compensatory actions should include the following four precautionary approaches: 1) reduce the duration of the plan, 2) reduce or avoid the impact, 3) restrict the damage to reversible impacts, and 3) implement mitigation measures before impacts occur. The extent to which the precautionary principle is analyzed and adopted can be assessed by contrasting risk-aversion strategies adopted in HCPs, with the overall adequacy of the data (Kareiva et al. 1999).

Other Findings

The literature gives several other factors that may useful in evaluating the biological soundness of HCPs. These factors are described below.

Biological Approach. HCPs can address conservation of single-species, multiple species or habitats. Single- species plans are species specific. Multi-species are scaled-up

versions of single-species plans. They may address multiple species simultaneously but are still specie-specific. Habitat-based plans focus on a more holistic protection of the habitat, protecting the ecological integrity of a natural habitat at the same time they protect the many species within that habitat (Kareiva et al. 1999; USFWS and NMFS 1996).

According to Beatley (1994), Shilling (1997), and Bean et al. (1991), plans that include multiple species are preferable than those focusing in one, single species. Kareiva et al. (1999), found that the science used in multi-species designs was as sound as that of single-species designs. The more recent approach, the habitat-based approach, according to Kareiva et al. (1999) seems to be preferable over the most traditional species-based ones, however, at the moment this approach has only been used in few plans.

Size of the plan. Beatley (1994) and Bean et al. (1991) suggest that addressing general areas and the integration of local and regional long-range plans is better than developing small plans. However, Kareiva et al. (1999) concluded that medium sized HCPs had the best scientific grounding whereas the larger and smaller plans contained the poorest analysis.

No surprises. Shilling (1997) advocates banning the “no surprises” policy, however, there is no analysis on the effect of this clause in the quality of the plan.

Scope. According to Bean et al. (1991), HCPs should not only include all listed animal species that occur in the area of the HCP and are likely to be taken as a result of the activities covered by it, but should also give attention to candidate species, species of special concern, and listed plants likely to be affected by activities authorized by the ITP.

The HCP process should provide a means for acquiring the information needed to resolve the status of candidate species (prior to the approval of the ITP) where the area of the HCP represents a substantial portion of the known range of the species and the activities may result in the incidental taking of such species. If the USFWS lacks information “to decide whether a species should be listed, it almost certainly also lacks the information needed to make an intelligent judgement about the merits of a particular HCP for that species” (Bean et al. 1991, 23).

Summary of Related Research

Findings from literature corresponding to public participation and biological soundness parameters used in this study are summarized in Tables 6 and 7.

These tables also show the relationships between the questions in the data-sheet and the survey to the components used to assess each main variable. Questions corresponding to the survey are identified with a letter “S” preceding the number and questions of the data-sheet by a letter “D.” For example, S-1 corresponds to question 1 of the survey and D-4 to question 4 of the data-sheet.

Table 6. Summary of Related Research on Public Participation.

	Question No.	Beatley (1994)	Armstrong (1969)	Julian et al (1997)	Shilling (1997)	Duerksen et al (1997)	Street (1997)	Force and Williams (1989)	Thomas (1995)	USFWS and NMFS Handbook (1996)
Form	D-74 To D-77				HCPs should be more participatory, negotiated agreements that allow a more extensive review from biologists external to the negotiation.			Forms of participation include all or some of the following: open public meetings; meetings for residents of the community; surveys; direct mail; presentations; public hearings; letter writing; show-me trips; citizen representatives on the negotiation; workshops; advisory committees; mass media like television, radio, lectures, newsletters, etc.; arbitrators or simulators.	Forms of participation may be classified in three categories: • No form of involvement, the decision is taken alone; • surveys and meetings where the problem is shared with the public and some information is sought from the public but the decision is taken alone and may or not reflect the influence of the public; • advisory committees and public meetings where the problem is shared with the public and the decision should reflect an agreement of all parties.	Steering committees are encouraged during the pre-application phase. If no steering committee is formed, informal meeting with the community, or newsletters are encouraged during phase I.
Timing	D-73					Early participation at the outset of the plan.			Early participation can be more influential than during phase II.	

	Question No.	Beasley (1994)	Armstrong (1969)	Julian et al. (1997)	Shilling (1997)	Duerksen et al (1997)	Street (1997)	Force and Williams (1989)	Thomas (1995)	USFWS and NMFS Handbook (1996)
Influence	D-78 To D-86	Include into the process representatives of all stake holder groups to incorporate a complete as possible biological and scientific basis. Stakeholders that should participate are: land developers, the development community, landowners and property owners, affected industries, environmentalists, the environmental community, local government federal and state wildlife agencies, federal state and federal land management agencies, recreational land users, and tribal interests.				Promote effective participation with an adequate share of power in the decision-making.	Include all affected parties in the negotiation as partners with shared power.			Participants in the HCP process should include: State and federal agencies with statutory authority for endangered species, tribal interests, affected industries and landowners, civic or non-profit groups and conservation organizations.

	Question No.	Beatty (1994)	Arnestein (1969)	Julian et al (1997)	Shilling (1997)	Duerksen et al (1997)	Street (1997)	Force and Williams (1989)	Thomas (1995)	USFWS and NMFS Handbook (1996)
Access to information and decision-making	S-7 To S-10		<p>Participation may be classified in 8 levels:</p> <ul style="list-style-type: none"> • Levels 1 and 2: No participation • Levels 3 to 5: Citizen is informed but has no power to influence decisions. • Levels 6 to 8: Citizen is informed and has influence in decisions. 	<p>Participants must have power to influence pertinent decisions.</p> <p>Participation may be classified into 3 Levels :</p> <ul style="list-style-type: none"> • Low Level: Participant had no access to information or decision-making • Moderate Level: Participant had access to information but not to decision-making • High Level: Participant had access to information and decision-making. 						

Table 7. Summary of Related Research on the Biological Soundness of HCPs.

	Question No.	Beatley (1994)	Shilling (1997)	Bean et al. (1991)	Duerksen (1997)	Kareiva et al. (1999)
Quality of Information	All	Plans should incorporate as complete and as thorough as possible biological and scientific basis.	Gather more baseline information (technical documents) regarding population needed for the species to survive and recover. Incorporate recovery programs greater than the minimum viable population			Data must exist, be accessible and explicitly summarized in the HCP to be credible. Failure to address adequately any of the stages of the HCP's design compromises the adequacy of the plan. The overall adequacy of information used in the plan can be better assessed by observing the presence or absence of it at the five stages of the plan: status of population, habitat affected, take, impact of take, mitigation, and monitoring.
Species Status	D-41 To D-44					HCP should include and analyze the following information/data: <ul style="list-style-type: none"> • Primary threats to the covered species • Population size and trends in population • Habitat quality and trends in habitat quality The data/information gathered be at global and local (in the HCP area) levels.

Question No.	Beatley (1994)	Shilling (1997)	Bean et al. (1991)	Duerksen (1997)	Kareiva et al. (1999)
Habitat loss and fragmentation			Location and context of protected habitat and its connection with adjacent open space play major roles in the biological viability of the HCP	<p>Maintain large patches of native vegetation intact</p> <p>Protect rare landscape features and guide development towards areas with common features</p> <p>Maintain connections among wildlife habitats by identifying and protecting corridors for movement</p> <p>Maintain buffers between areas dominated by human activities and areas of wildlife habitat</p> <p>Mimic features of the natural local landscape in the development areas</p>	<p>Fragmentation exists if any species covered by the plan cannot percolate through.</p>
Take	D-45 To D-51				<p>Take must be predicted in terms of estimated number of individuals that will be displaced or killed. Data to estimate the take should be based on known information of:</p> <ul style="list-style-type: none"> • Population densities • Amount of habitat lost • Habitat size • Population size and trends in population

	Question No.	Beatley (1994)	Shilling (1997)	Bean et al. (1991)	Duerksen (1997)	Kareiva et al. (1999)
Impact	D-52 To D-54					<p>Temporary impact activities rather than permanent ones may have a lower level of impact on the species.</p> <p>To adequately estimate the impact it is necessary to assess:</p> <ul style="list-style-type: none"> • Take accurately • Population dynamics • Species requirements • Demographic thresholds <p>The data/information gathered be at both, global and local (in the HCP area) level.</p>
Mitigation Measures	D-55 To D-58			<p>Stiffer mitigation measures should be required in HCPs for small, individual land parcels</p> <p>Detrimental effects of the incidental taking must at minimum be balanced by the beneficial effects of other features of the plan.</p> <p>Stringent mitigation measures must be required for interim development (if such is allowed)</p>		<p>Mitigation measures should be supported by data that document the effectiveness of the proposed procedure.</p> <p>Mitigation measures should address the primary threats to the species.</p>

	Question No.	Beatty (1994)	Shilling (1997)	Bean et al. (1991)	Duerksen (1997)	Kareiva et al. (1999)
Monitoring	D-59 To D-66			<p>Include specific and measurable indicators of success or failure.</p> <p>Provide contingent actions in the event that success is not achieved</p>	<p>Make plans adaptable by evaluating the consequences of actions</p>	<p>Should include number and location of sample sites; frequency of sampling; and nature of data recorded.</p> <p>Adaptive management should be required to evaluate the success and failure of alternative management actions.</p>
Alternatives	D-67 To D-68			<p>Focus on development alternatives that can avoid some incidental taking, not only on the "no action" alternative</p> <p>Minimize the taking as much as possible to reduce needs for mitigation.</p>		<p>Plans that considered alternatives other than the "no action" did a better job in the biological assessment.</p>
Funding	D-69 To D-72	Equitable long term funding		<p>Include a plan to account for contingent adjustment of funding</p>		
Risk-Aversion	D-28 To D-30					<p>In face of poor information or lack of information, HCPs should:</p> <ul style="list-style-type: none"> • reduce duration; • reduce area impacted; • avoid impact or restrict it to reversible impact; • mitigation should be applied before take occurs; • include contingencies, adaptive management.

	Question No.	Beatley (1994)	Shilling (1997)	Bean et al. (1991)	Duerksen (1997)	Kareiva et al. (1999)
<i>Approach</i>	D-18	Protect habitat for multiple species.	Focus on a multi-species approach instead of a single-species one.			The science used in multi-species designs is as sound as that of single-species designs. The habitat-based approach is preferable over the most traditional species-based ones.
<i>Size</i>	D-14 To D-16	Integrate HCPs into local and regional long range planning		Address larger areas to encompass as much of the target species' range as possible. Mini-plans should add another land parcel to the already existing HCP		
<i>No Surprises</i>	D-26		Eliminate "no surprises"			
<i>Scope</i>	D-19 D-20 D-21 D-25			Include all listed animal and plant species that occur in the area for which there is reasonable certainty of incidental take. Include candidate species of Categories I and II as if they were already listed and where the area of the HCP represents a substantial portion of the known range of the candidate	Contribute to regional persistence of rare species protecting some of their habitat locally	

CHAPTER 4

METHODS

This study is based on nominal and ordinal data, which was obtained by means of pre-coded questions from a survey sent to participants in HCPs and a data-sheet used to collect the information from existing documentation. Most of the questions in the survey required a rating from the respondent¹⁰, and values from the data-sheet were ranked by the researcher in terms of more or less positive for the environment according to the standards given in the literature (Tables 6 and 7).

Population and Sample

This study focuses on plans that have already been approved in the State of California by the US Fish and Wildlife Services (USFWS). According to a list of HCPs provided by the USFWS, of the 201 plans approved in the U.S. by October 1998, 59 had been approved in California. Given the tremendous differences in the area covered by the plans, the 59 HCPs were classified into three general categories that encompass the range from 0 to 582,243 acres. The categories are as follows:

Category I: 0 to 100 acres.....	27 plans
Category 2: 101 to 10,000 acres.....	21 plans
Category 3: 10,001 to 582,243 acres.....	11 plans

¹⁰ Potter and Norville (1983) used a similar (Likert) scale to assess the effectiveness in environmental decision-making.

A list of these plans is available in Appendix B.

Ten plans from each category were randomly selected using a table of random digits (Watts and Halliwell 1996, 472) completing a stratified random sample of 30 plans. The minimum sample size is considered to be thirty individuals for any test to be statistically reliable (Watts and Halliwell, 1996). This size study meets cost and time constraints while still providing adequate data for qualitative and quantitative analyses. A list of the sample HCPs and their corresponding code number used in this research study is provided in Appendix C.

Data and Information Collection

A data-sheet and a survey were the principal methods used to obtain data. Questions in both the data-sheet and the survey relate to the components identified in the literature as significant for explaining the main variables, public participation and biological soundness. Relationships of the questions in the data-sheet and the survey to the components used to assess each main variable are specified in Tables 6 and 7. Questions corresponding to the survey are identified with a letter "S" preceding the number and questions of the data-sheet by a letter "D." For example, S-1 corresponds to question 1 of the survey and D-4 to question 4 of the data-sheet.

The information to complete the data-sheet and to create the mailing lists for the survey was gathered from existing documentation on each HCP that in most cases included: the plan itself, the implementation agreement, the findings of significance, the NEPA or CEQA document required which can be an EIR/EIS or an IS/EA, and copies of

the comments sent by the public. The documents were obtained from different sources: the Reference Service of the USFWS, the main office for the Region at Portland, local USFWS offices in the State of California, and different county offices. Telephone interviews with the USFWS lead field office responsible for the plans were also necessary to complement data about public participation (objective 2 and 4) especially in those plans where an EIS/EIR document was not required.

The data were collected between March and June of 1999 and were analyzed to answer the main objectives of this research. The following is a description of both instruments for data collection, the data-sheet and the survey.

The Data-Sheet

To document objectives 1, 2, 3, 5 (hypotheses 1, 1a., 1b., and 1c), and 6, a data-sheet with 86 questions about participation and biological soundness of the plans was prepared to gather data from existing documentation related to each HCP. The questions were designed to generate a detailed profile of the plan and answer the research objectives. The purpose was to go through articulated sets of steps that would clarify the documented level of participation and the biological adequacy of each plan. The number of questions was large to minimize the possibility of missing information and to open the opportunity for unexpected findings.

The data-sheet was divided into four main sections: General Information, Risk Aversion, Biological Soundness, and Levels of Participation. These sections allowed classification of information related to the main variables and calculation of a score for

each component and each main variable in the plan. A copy of the data-sheet can be found in Appendix E.

Data from the General Information section were not rankable and were used only for the descriptive analysis. Data from the sections Biological Soundness and Levels of Participation described and measured two main variables of this research study. Data from the Risk Aversion section were treated in a similar fashion as the Biological Soundness and Levels of Participation.

Each main variable in the data-sheet, levels of participation and biological soundness, is explained by a number of components, which subsequently are described by a number of questions in the data-sheet. The following is a brief description of the questions used to describe each variable and its components. Detailed descriptions of how scores were calculated to measure each component and the main variables are provided later in this section.

Level of Participation form Documentation

The main variable, *levels of public participation from documentation*, was measured with the three components described below:

a) Time of public participation. One single question was used to describe time of participation: the phase(s) of the plan when participation occurred (Thomas 1995; Duerksen et al. 1997).

b) Form of participation involved in the process. Four questions were used to measure this component: the form(s) of participation used in the HCP in general, and the

form(s) of participation used at each phase of the plan in particular (Beatley 1994; Shilling 1997; Force and Williams 1989; Thomas 1995; USFWS and NMFS 1996).

c) Influence of participation. Six questions were used to measure the degree to which people were able to influence the final decision of the plans' design. These questions refer to: the composition of stakeholders involved in the HCP process in general, the composition of stakeholders involved in the steering committee, requests of information, comments received, substantial issues raised by the comments, and the influence of the comments on the final draft of the HCP (Duerksen et al. 1997; Street 1997; Julian et al. 1997).

Biological Soundness

The main variable, *biological soundness*, was assessed by a large number of components based on specific observations and comments from biologists in the field on what constitutes a "good," i.e. biologically sound, HCP. The analysis of each component focused mostly on the presence or absence of information relative to the primary species covered used in the design of the HCP (Kareiva et al. 1999). Plans that covered listed and non-listed species were assessed on the basis of the listed species alone. Following is a description of the eight components of this variable.

a) Habitat loss. Ten questions described this component: amount of habitat impacted, amount of habitat restored on site, fragmentation level, connectivity to open space, protection of native habitat, protection of rare elements developing common fea-

tures, creation of buffers, and duration of habitat protected (Kareiva et al. 1999; Bean et al. 1991; Duerksen 1997).

b) Species status. This component was measured by four questions: assessment of the status, data used in the assessment, type of data used in the assessment (global or local data), and primary threats to the species (Kareiva et al. 1999; Shilling 1997).

c) Take estimation. Seven questions measured this component: quantification of take, estimation of life-stage and sex of individuals to be taken, data used to estimate the take, if a monitoring of the take was required, and data to be collected for the monitoring (Kareiva et al. 1999).

d) Impact assessment. This component was described by three questions: quantification of impact to the species, data used to estimate the impact, and type of data used in the assessment (global or local) (Kareiva et al. 1999).

e) Mitigation measures. Four questions described this component: the existence of supporting evidence on the effectiveness of mitigation measures, if the mitigation measures addressed the primary threats to the species, types of mitigation measures, and duration of the mitigation efforts (Kareiva et al. 1999; Bean et al. 1991).

f) Monitoring plan. This component was described by eight questions: Whether a clear monitoring program is proposed, if monitoring provides for the evaluation of the mitigation measures proposed, if contingent actions are specified in the event of failure, type of data to be collected to monitor the mitigation, duration of the monitoring efforts, if the monitoring includes a long term adaptive management, if unforeseen circumstances

are considered, and if mitigation actions are proposed in the event that unforeseen circumstances are specified (Kareiva et al. 1999; Bean et al. 1991; Duerksen 1997).

g) Alternatives analyzed. Two questions described this component: if other alternatives than the “no action” were analyzed, and if the alternatives analyzed focused on avoiding some of the incidental take (Kareiva et al. 1999; Bean et al. 1991).

h) Funding methods. This component was described by four questions: whether a clear funding is proposed, the funding method proposed, if most funds are provided before impact occurs, and if future adjustments are specified (Bean et al. 1991; Beatley 1994; Kareiva et al. 1999).

Scores Calculation for the Main Variables in the Data-Sheet

Not all the questions explaining each component were used to measure it, only rankable questions were used for this purpose. The remaining questions were used in the descriptive analysis. Rankable questions were assigned scores from 0 to 10 based on their importance in explaining the component. A detailed description of points assignment for each question is available in Table A1, Appendix F. Each components' score was obtained by adding all the values of the questions that explained it and dividing the total by the maximum of possible points achievable for that component. Thus, each component received an overall score between 0 and 1.00. Since all components explaining the main variable are considered equally significant, a mean value was calculated to obtain the final score for the main variable. See a graphic representation of point calculation in Figure 2.

Figure 2. Diagram of Variable Measurement

To eliminate decimals, after calculating the scores for the main variables and its components, scores were then multiplied by 100. Therefore, the scores for the main variable and its components in this study ranked from 0 to 100. These final scores, continuous numeric values, represented the level of participation and biological adequacy according to documentation for each plan and were used in the Spearman's rho correlation analysis to test the hypotheses formulated in Objective 5.

To further describe the relationships among the main variables and to compare the main variables to other categorical variables, these scores were categorized by converting the continuous numeric data into two discrete categories for each variable, representing low and high scores. Given the small number of samples it was necessary to create dichotomies if measures of association and contingency tables were to be attempted. Data were categorized based on percentile ranks. This means that a *low* value was assigned to cases below the 50th percentile, and *high* to those cases above the 50th percentile. Scores falling exactly in the 50th percentile were assigned to the high category if the score was greater than the mean value for the sample, to the low category if the score was smaller than the mean value of the sample, and assigned randomly if the score coincided exactly with the mean of the sample. No score was exactly the same as the mean; therefore, this situation never occurred in this study. It is necessary to point out that high scores in each category do not necessarily represent a “good” performance of HCPs. These low and high categories only indicate that (within a variable) some plans did better than others, and were used to perform a comparative cross-analysis.

Data from the Risk Aversion section were treated in a similar fashion as for the main variables. Risk-Aversion was explained by two questions: type of risk aversion management actions, and actions taken. Scores obtained for the risk aversion were categorized in the same way as explained for the main variables and used to analyze its association to other variables.

See Tables 6 and 7 in the Related Research section for a more detailed description of the components and questions selected to explain Levels of Participation and the Biological Soundness of the plan.

The Survey

To document objectives 4, and 5 (hypotheses H3 and H4), a survey containing fifteen (15) questions based on the findings from literature was developed and mailed to people that participated at different levels in each HCP.

The survey is composed of two sections. Section one, questions 1 to 6, requires the respondent to choose among a list of possible responses to state the plan in which they participated, the interest(s) they represented, the time and form of participation, and the sources of information. Section two, questions 7 to 15, required the respondent to rate each question on a Likert scale from 1 to 9. Questions 7 to 11 assessed the main variable, the *perceived level of participation*, in terms of access to information and decision-making as suggested by Julian et al. (1997), Arnstein (1969), and Thomas (1995). Questions 12 to 15 assessed the opinion of the respondents in relation to species protection and general public concerns. The questionnaire had no open ended questions due to time constraints of the researcher, however many respondents were allowed to write additional comments on the last page of the survey. A limited qualitative analysis was extracted from those comments.

Mailing Lists

Similar to a study by Potter and Norville (1983, 35-44), mailing lists were obtained by reviewing the existing documentation related to the plan: HCPs, NEPA and CEQA documents, mailing lists, and comment letters. The questionnaire was tested with participants from three small plans in California, since no more large sized plans were available. Given that the number of participants in these plans was very low, the survey was tested with participants of a larger plan in the state of Nevada. Comments were also required from the USFWS lead biologists involved in the drafting of the plans. Minor changes were performed to the survey as a result of the test and the consultation processes.

The complete mailing list included 989 participants in twenty-three plans. An individual was considered a participant in a plan if he or she was involved in any form of participation ranging from requisition of materials to active participation in a steering committee. Individuals that participated in more than one plan were sent one questionnaire for each plan in which they participated. Ten plans, identified as 101,102,103,105, 108, 203,204, 207, 210,301 in the survey had no comments from the public. A human subject permission was requested and granted prior to mailing the questionnaire. A copy of the Human Subjects Review Board approval letter is included in Appendix G. The survey was mailed along with a pre-paid and self-addressed envelope. A copy of the survey can be found in Appendix D.

Data Limitations

Most limitations came from the survey, particularly in relation to the statistical analysis. The first of these limitations refers to the closed-ended and pre-coded nature of the questions in the survey. The restriction in the range of responses permitted may have biased the responses received. The specified responses may not correspond to those that the respondents would have said unconstrained. However, this bias from restricting the range of permissible answers was minimized by allowing the respondent to select the “other” option and specify the response. Special attention was given to the design of the survey to avoid this bias and to ensure that the data obtained were applicable to the data analysis.

Since respondents were asked to rate the questions in a scale, a second limitation of the survey was the meaning of the answer. What one person means by rating one question a 5 may be completely different from what another respondent means; therefore, a potential bias exists for the researcher when interpreting these data. However, it is possible to assume that the intervals between the points on the rating scale have absolute value. That is, a rating of 1 is worse than one of 2 and the difference between the two is the same as the difference between 3 and 4 (Watts and Halliwell 1996). Therefore, ratings are acceptable and provided the opportunity to carry out analysis with the data.

Another limitation of the survey relates to the number of respondents per plan and to the number of plans in which people participated. The response level was very low and/or nonexistent in some of the plans in the sample. This last limitation might compromise the statistical significance of the research questions related to this variable.

However, only two of the six hypotheses depended partially or entirely to the data obtained from the survey. The hypotheses central to this study are based on data obtained primarily from the data sheet, which are expected to be more reliable since they depend only on existing documentation.

Some questions in the data-sheet could not be responded to from the documentation gathered, and some data collected were not useful for the analysis. Nevertheless, the data collected by the data-sheet were sufficient to respond to the main objectives of this research study and to develop a detailed analysis of the strengths and limitations of HCPs.

Since the primary objective of this study was to document and analyze public participation and biological soundness of HCPs in a discursive manner, biases and limitations produced by the data obtained from the survey, as well as from the data-sheet, did not invalidate the central focus of this study.

Data Analysis

The analysis of this study focuses primarily on describing public participation in HCPs, the biological adequacy of HCPs, and the correlation between both variables. However, other interesting relationships were found in the descriptive analysis that will also be discussed.

The data obtained was both, nominal and ordinal. Most of the nominal data were used for the discursive analysis. Some nominal data were used for the contingency tables (cross-tabulations) and measures of association (chi-square, phi, gamma) of the cross-

analyses. Ordinal data are rankable and therefore used for quantitative statistical tests, as well as for the discursive analysis. The unit of analysis was the HCP (Kareiva et al. 1999).

The data gathered were reviewed to eliminate possible incongruences. The data were then compiled into an SPSS file. All analyses were performed with the corrected data. Although descriptive statistics were mostly used to analyze the variables, quantitative statistic analysis was applied to the data to test the hypothesis formulated in objective 5. Two types of statistical analysis were applied to the data, correlation tests and measures of association. Correlation tests were only used to test the relationship between variables expressed as continuous numeric values; tests of association were applied to the data expressed in categorical groups. Since all of the scores in this study are in the form of ranks or ratings, the more adequate test of correlation to be used is Spearman's rho. This test is also recommended when there is the possibility that the data are not normally distributed.

Cross-analyses were used to establish the association between variables. For this purpose, contingency tables (cross-tabulations) were created and the chi-square measure of association was applied. Symmetric measures (phi coefficient for nominal data and gamma for ordinal data), were also applied to 2x2 tables and other symmetric tables. Correction for continuity (Yates's correction) was not applied to chi-square when dealing with 2x2 tables, since although some books advocate for it, given the nature of the data, some others do not recommend its use (Howell 1995). Despite the creation of dichotomies to attempt measures of association, some cross-tabulations still reported counts of

less than five for one cell or more. Cross-tabulations that showed up to 25 percent of the cells with counts of less than 5 are still reported in this analysis as significant. The significance level of the association is compromised in these situations. Therefore, whenever this occurred, a footnote indicating the low cell counts is attached to the chi-square (χ^2) score. Nevertheless, statistics provided a general panorama of similarities and differences in the sample, and helped explain some of the possible relationships.

The statistical significance level for this study was $\alpha=0.05$ (Kareiva et al. 1999; Potter and Norville 1983; Force and Williams 1989).

Coding

The Data-Sheet

The questions in the data-sheet allowed four possible types of answers: (1) a numeric value (size, duration, etc.), (2) a nominal value (location, lead office, etc.), (3) a yes-no answer, and (4) a selection among possible responses for a specific question.

Numeric (1) values and nominal (2) values, like size of the plan in acres, or location of the HCP, were entered into SPSS without coding. Yes-No (3) responses were coded and labeled as follows: "1 = Yes" and "0 = No." Questions that allowed a choice among a group of possible responses (4) were coded assigning positive numeric integers to each possible response, for example in question 8 "type of NEPA-CEQA document requested" were assigned "1=EA-IS", "2=EIS-EIR", "0=None required."

For all the questions in the data-sheet:

- Questions that could not be answered because the data information did not exist or could not be found in the existing documentation were entered as “-1” and labeled “Could not be Determined.”
- Questions that could not be answered because they were not applicable to the plan were entered as “-2” and labeled “Not applicable.”

The Survey

Questions from the survey allowed three types of responses: (1) “check all that apply,” (2) “check only one,” and (3) “please rate.”

Questions where the respondent was requested to “check all that apply (1),” each possible answer was entered separately into SPSS as a Yes-No response, and coded and labeled as follows: “1 = Yes,” and “0 = No.” Questions where the respondents were requested to “check only one (2)” response among a group of possible answers were coded assigning positive numeric integers to each possible response as describe previously for the data-sheet. If the respondent checked more than one option the response was considered invalid. Ratings (3) were entered without any coding into SPSS. Ratings were considered invalid if more than one value was selected.

For all responses in the survey:

- Invalid responses were labeled as “No answer or void” and coded with a “999.”
- Unanswered questions were labeled as “No answer or void” and coded as “999.”

CHAPTER 5

RESULTS AND DISCUSSION

Response Rates

The data-sheet was completed for all thirty plans in this study.

The survey was returned by 204 individuals. Of the 989 envelopes mailed, 815 reached their destination. The remaining 174 were undeliverable and returned by the postal office unopened. The 204 individuals, represented a response rate of 25 percent (calculated on the basis of the 815 envelopes that reached their destination). This rate was considerably high considering that postal questionnaires typically receive a response rate no higher than the 25 percent of the sample (Watts and Halliwell 1996) and that nearly 33 percent of the samples' HCPs were developed prior to 1994. Respondents were offered a copy of the results of the survey upon request. Thirty respondents requested to receive a copy of the survey mailed to them.

Results

Results are presented in the order of the objectives identified in the Research Objectives section of this study. Each objective will be described first in terms of the responses to the questions, either from the data-sheet or the survey. This general description will be followed, when applicable, by a description of the scores obtained by each main variable in this study and its components.

Four points must be kept in mind while reading this section:

1) All frequency tables are provided in Appendix I. All chi-square tables and cross-tabulations can be found in Appendix J.

2) For all objectives analyzed, with the exception of objective 4, the sample size for all statistical and discursive analyses is $n=30$ cases, unless otherwise indicated.

3) The cross-analysis, as explained in the Methods Section, required the creation of low and high categories for each variable. These low and high categories do not represent a poor or good performance of the HCP, they only indicate that some plans did better than others at a specific variable.

4) For the correlation analyses, a sample correlation of $r \geq 0.361$ is significant at the $\alpha=0.05$ for a sample size of $n=30$ and a two-tailed test, and a sample correlation of $r \geq 0.138$ is significant at the $\alpha=0.05$ for a sample size of $n=200$ and a two-tailed test.

Objective 1: Habitat Conservation Plans in the State of California

Described According to their General Characteristics

Size

The 30 HCPs studied ranked in size from 0.003 acres to 582,243.00 acres, covering a total area of approximately 2,905,781.40 acres. The clustered sampling based on the USFWS figures did not ensure an equal representation of all plans, since plan 103, a small plan according to the USFWS listings, accounted for 391 acres and was re-categorized into the medium size group. Therefore, the final sample consisted of 9 small

plans, 11 medium plans, and 10 large plans. Plans were subsequently reclassified into two groups of 15 plans each, small and large, to perform measures of association and cross-tabulations.

Duration

The plans' duration ranked from 2 years up to 120 years. When divided into three categories similar to Kareiva et al. (1999), 23 percent of the plans are short (up to 5 years), 13 percent are medium (6 to 20), and most HCPs (63%) are long (more than 20 years). Large and moderate sized plans in general have longer duration than small ones. Most plans are renewable.

Lead Offices

Three lead offices, Sacramento, Carlsbad and Ventura supervised the plans in the sample. Only recently the management of two plans in the sample were transferred from the Sacramento office to the newly created Arcata location. Most of the plans in general were supervised by the Carlsbad (30%) and Sacramento offices (50%). These two offices also account for all of the large plans in the sample. Medium sized plans were distributed more evenly among the three different offices being Ventura and Sacramento responsible for 36 percent each, and Carlsbad for 27 percent. Small plans were largely supervised by the Sacramento office, which accounted for 57 percent. Figure 3 shows the distribution of small, moderate and large plans according to the lead office.

Figure 3. Frequencies of USFWS Lead Offices by Size of the Plan.

Location

The counties with the highest frequency of plans were Kern County with 7 plans, Riverside with 4, and San Bernardino with 3. Large plans were all developed among the counties of Kern (3 plans), Riverside (2 plans), San Diego (2 plans), Humboldt (1 plan), Orange (1 plan), and Sacramento (1 plan).

NEPA-CEQA

With the only exception of a small plan, all plans required a NEPA-CEQA document to be prepared. EIS-EIR documents were required only for 26 percent of the plans, while 70 percent required an EA-IS document. EIS-EIR documents were required almost as frequently in large plans (4) than in small (2) or medium (2) ones.

Permit Requesters and Preparers

Twenty-five HCPs involved the private sector, twelve involved local government, and only one involved state government. As can be seen in Figure 4, most large plans involved private and local government.

The most frequent plan preparers were private consulting firms (63%). The employees of the permittee prepared a smaller amount (23%) and employees of the local government prepared only 10 percent. Medium and small sized plans were mostly (80%) prepared by a private consulting firm. Large plans were prepared in similar numbers by either group.

Permit Motivating Activities

Urbanization, including development and the associated services, were the primary permit motivating activities, accounting all together for 67 percent of the plans. Other activities frequently triggering an HCP were mining and oil exploration. Figure 5 illustrates the frequencies of the permit motivating activities in the sample HCPs.

Habitat Covered

Of the 2,905,781 acres covered by the 30 HCPs, 964,851 acres (33%) were habitat supporting the primary species covered in the HCPs. Three plans alone, 304, 310, and 305, accounted for 748,527 acres of habitat. Grouped into categories according to the amount of habitat covered under each plan, 19 plans accounted for amounts between 0

and 1,000 acres each, 7 plans accounted for amounts between 1,001 to 10,000 acres each, and 3 plans accounted for amounts between 10,000 to 400,000 acres each.

Figure 4. Frequencies of the Interests Requesting the Incidental Taking Permit (ITP) (a) and Plan Area Categories by Interests Requesting the ITP (b).

Ecological Approach

As described previously in the Related Research section, HCPs can address conservation of single species, multiple species or habitats. Most of the HCPs in the sample, in contrast to the sample analyzed by Kareiva et al. (1999), were not single-species plans. Single-species plans accounted for 40 percent of the sample while multi-species plans accounted for a 50 percent. Having been developed only recently (in 1993), habitat-based plans accounted only for a 10 percent of the sample.

Figure 5. Frequencies of the Primary Permit-Motivating Activities.

Species Covered

The sample HCPs covered different numbers of listed species, ranking from one species only (in single-species plans) up to 17 species (in habitat-based plans). Some

plans also covered candidate species, species of special concern, and for the habitat-based plans, all species that occur in the area. All plans covered listed species that occur in the area which are likely to be taken, but only 11 plans (36%) covered all the listed species in the area, likely to be taken or not. Twelve plans (40%) also covered candidate species, eleven plans (36%) covered species of special concern, and only three plans (10%) covered all species that occur in the area (the habitat-based plans) (Figure 6).

Figure 6. Frequencies of Listed, Candidate, and Sensitive Species Covered.

Taxonomic Group

The most frequently targeted animal taxonomic group was that of reptiles/amphibians with 19 occurrences, followed by birds with 12 occurrences, and inver-

tebrates and mammals with 11 occurrences each. Nine plant species were also covered by some plans, even though the ESA does not mandate such protection on non-federal lands. Figure 7 shows all taxonomic groups covered by the HCPs and their frequencies. A list of species covered by the sample HCPs can be found in Appendix H.

Figure 7. Frequencies of the Taxonomic Groups Represented by the Covered Species.

Reversibility

Impacts of the HCPs were either reversible or irreversible. Reversible impacts are those that are expected to diminish substantially in 100 years or less, such as livestock grazing. Irreversible impacts are those that have a permanent effect on species or their

habitats, as building of homes (Kareiva et al. 1999). Temporary, rather than permanent activities have a lower level of impact on the species (Kareiva et al. 1999). Disregarding their sizes, most HCPs in the sample (83%) have already or will have a permanent and irreversible impact. Nine out of the ten plans that contain the no-surprise clause also have a permanent impact on the habitat area.

No Surprises

Ten plans (33%) included the “no surprises” clause, two small plans, four medium sized plans, and four large sized plans.

Objective 2: Levels of Participation from Documentation in Terms of Time, Form and Influence of Participation

Levels of Participation from Documentation

Scores for the main variable *levels of participation from documentation* were calculated as a composite of the individual scores of the three components of this variable, *time*, *form*, and *influence* of participation (a detailed explanation is provided in the Methods Section). The individual scores of each component are explained later in this Section, but a summary of the scores of the main variable and its components is provided in Table 8.

Table 8. Scores for Level of Participation from Documentation and its Components, Time, Form, and Influence of Participation.

Main Variable:		Scores Range (points)	Scores (mean)	Categories (number of plans)	
				High	Low
<i>Levels of Participation</i>	<i>from Documentation</i>	0 to 91	32.80	14	16
Components	<i>Time</i>	0 to 100	43.33	8	22
	<i>Form</i>	0 to 83	21.90	9	21
	<i>Influence</i>	0 to 90	30.20	15	15

Overall scores for the main variable *levels of participation from documentation* ranked from 0 to 91, showing a positively skewed distribution (0.898) as can be seen in Figure 8. Most plans (63%) scored low, between 0 and 30 points. No plan scored the maximum, 100 points. The mean value of all scores was 32.8 and the standard deviation equaled 25.57. The median and the mode both scored 20. When categorized into low and high score groups, sixteen plans scored low and fourteen plans scored high. Data were categorized based on 50th percentile ranks as explained in the Methods Section.

The three components of this variable, time, form, and influence, showed significant positive correlation values. Significant correlation values between time of participation and form of participation ($r=0.860$, $P=0.000$), time and influence ($r=0.622$, $P=0.000$), form and influence ($r=0.768$, $P=0.000$) reinforce the findings on participation from the literature reviewed that pointed to early participation and more open forms of participation to allow for a higher level of influence in the decision-making.

Figure 8. Score Distribution of Levels of Participation from Documentation.

The cross-analysis with the size of the plan showed that the level of participation from documentation is significantly higher for large plans than for small ones ($\chi^2=8.571$, $P=0.003$; $\phi=0.535$, $P=0.003$; $\gamma=0.833$, $P=0.001$). The cross tabulation shows that 73 percent (11/15) of large plans scored high at levels of participation from documentation compared to only a 20 percent (3/15) of small plans. The clustered bar chart in Figure 9 illustrates this association.

Although the association was not significant ($\chi^2=3.160$, $P=0.075$, $\phi=-0.330$, $P=0.075$, $\gamma=-0.660$, $P=0.063$), most plans (13/21=62%) that required an EA-IS document scored low in levels of participation while the majority (6/8=75%) of plans that required an EIS-EIR document scored high.

Figure 9. Levels of Participation from Documentation by Size of the Plan.

Analyzing this tendency within the context of the variable's components (time, form, and influence) indicates that requiring an EIS-EIR document allows for an early and open form of participation but does not ensure that participants will have the power to influence the decision taken. An association with the type of NEPA-CEQA document was only observed for time ($\chi^2=12.433^a$, $P=0.000$, $\phi=-0.655$, $P=0.000$, $\gamma=-0.932$, $P=0.001$) and form of participation ($\chi^2=9.977^a$, $P=0.002$, $\phi=-0.587$, $P=0.002$, $\gamma=-0.895$, $P=0.003$), not for influence of participation ($\chi^2=0.514$, $P=0.474$, $\phi=-0.133$,

^a 1 cell (25%) has expected count less than 5

$P=0.474$, $\gamma=-0.294$, $P=0.467$). Figure 10 shows the relationship between the type of NEPA-CEQA document with the levels of participation and its components.

The location of the plan did not make much difference either, however it is to be noted that six of the plans (86%) located at Kern County, all scored low at levels of participation. Of the two offices responsible for most plans, Carlsbad and Sacramento, 56 percent (5/9) of the plans supervised by the Carlsbad office scored high while only 47 percent (7/15) of the plans supervised by the Sacramento office did. Only 33 percent (2/6) of plans supervised by the Ventura office scored high.

The following is a detailed description of the components of level of participation: a) time, b) form, and c) influence of participation. Figure 11 compares the scores obtained by each one of these components and will serve as reference for future analyses. The highest scores corresponded to time, while both form and influence scored very low in general terms.

a)Time of Participation

Participation during the design phase of the plan, phase I, occurred only in eight plans (27%), six in large plans with only two occurrences in small and medium plans. Early participation was mostly observed in plans in which an EIS-EIR document was required. Only 25 percent of the plans in which participation was allowed during phase I corresponded to plans where an EA-IS document was required. Only a 28 percent of HCPs involving the private sector allowed early participation, compared to a 67 percent of HCPs that involved local government.

Figure 10. Type of NEPA-CEQA Document Required by the Level of Participation from Documentation (a) and its Components (b), (c), and (d).

Figure 11. Components of Level of Participation from Documentation Compared.

Mean Values (a) and Boxplot (b).

Score calculation. Question 73 in the data-sheet measured this component. The scores in the sample ranked from 0 points to 100. The values polarized around three scores, 0, 25, and 100 with no intermediate values. Since most (20) plans scored low, at 25, the general distribution was positively skewed (.981) as can be seen in Figure 12. The mean value was 43.33 with a standard deviation of 35.31. Only eight HCPs scored 100

and corresponded mostly to large sized plans. Since participation during the early phases of the plan received higher scores, the low scores were mostly due to the lack of participation during Phase I of the plan. Two categories, low and high, were created from these scores. Twenty-two plans scored low and only eight plans scored high.

Figure 12. Score Distribution of Time of Participation.

Ninety three percent of small plans scored low suggesting that there is a stronger tendency for small plans to not allow less participation at the early stages of the process than large sized plans. Large plans scored either high or low in almost the same percentages ($\chi^2=6.136^a$, $P=0.013$; $\phi=0.452$, $P=0.013$; $\gamma=0.849$, $P=0.005$).

^a 1 cell (25%) has expected count less than 5

Although most plans required an EA-IS document only, there is a significantly greater tendency to allow earlier participation when an EIS-EIR document is required than when an EA-IS document is required ($\chi^2=12.433^a$, $P=0.000$; $\phi=-0.655$, $P=0.000$; $\gamma=-0.932$, $P=0.001$). Plans in which an EIS-EIR document was required accounted for 75 percent (6/8) of the plans that scored high in time of participation, while 90 percent (20/22) of those that scored low were in the group that required an EA-IS document (Figure 10).

b) Forms of Participation

Comments during the comment period (20) and mailing of materials (26) were the most frequent forms of participation. Less frequent were more interactive forms of participation such as steering committees (8) and public hearings (7). Figure 13 compares the frequencies of the different forms of participation.

To facilitate analysis, the different forms of participation were re-categorized into three groups, high, moderate, and low interactive forms, according to the level of interaction that they allow between the participant and the decision-makers. High interactive forms of participation include steering and advisory committees. Moderate interactive forms include public meetings, public hearings, presentations, and workshops. Low interactive forms include comments, letter writing, and mailing of materials.

^a 1 cell (25%) has expected count less than 5

Figure 13. Frequencies of Forms of Participation.

Higher forms of participation were equally frequent at any phase of the plan.

However, moderate and low interactive forms of participation were more frequently used during the second phase of the plan than during the first. Most plans, 56 percent allowed only low interactive forms of participation, and only 27 percent allowed high forms of participation. A majority of large plans, 60 percent (6/10), allowed high interactive forms of participation. Only an 11 percent (1/9) of small and 9 percent (1/11) of medium sized plans did.

Score calculation. Form of participation was measured by question 74. The sample scores ranked from 0 points to 83. Higher forms of participation allowing more interaction, such as steering committees, received higher scores, while less interactive forms

of participation like mailing of materials received the lowest. The mean value of the sample was 21.90 with a standard deviation of 23.63. The scores were very low in general and clustered around 11, generating a positive skewness in the distribution (1.382) that can be observed in Figure 14. Two categories, low and high, were created from these scores. Twenty-one plans scored low and nine plans scored high.

Figure 14. Score Distribution of Forms of Participation.

Similar to time of participation small plans have a significant tendency to not allow a more open participatory process than large ones required ($\chi^2=7.778^a$, $P=0.005$; $\phi=0.509$, $P=0.005$; $\gamma=0.882$, $P=0.001$). The cross tabulation showed that 93 per-

cent (14/15) of the small plans also scored low in form of participation. Large plans scored in similar percentages both, low (7/15=47%) and high (8/15=53%).

Plans where an EIS-EIR document was required allowed significantly more open participation from the public than plans that required an EA-IS document required ($\chi^2=9.977^a$, $P=0.002$; $\phi=-0.587$, $P=0.002$; $\gamma=-0.895$, $P=0.003$). A majority of plans (6/8=75%) that required an EIS-EIR document to be prepared allowed high forms of participation, while only 10 percent (3/21) of plans that required an EA-IS document did (Figure 10).

c) Influence of Participation

The most frequent involved interests in the sample HCPs were the State personnel (16), local government (15), and environmental organizations (15). However, the interest represented by the largest number of individuals was the independent community, which accounted for 416 participants in all plans together. Other interests with high number of representations were the local government (197) and the environmental organization (165) (Figure 15).

According to the existing documentation, people requested information for 23 plans (77%), and comments were received for 18 plans (60%). The number of comments received varied from plan to plan ranking from 1 to 190. Although requests for information were received for plans of all different sizes, people commented more on large plans

^a 1 cell (25%) has expected count less than 5

(9) and medium sized plans (7) than on small ones (2). Large plans also received more comments in overall number than small or moderately sized plans, which accounted generally for one or two comments in total per plan.

People commented on all plans in which an EIS-EIR document was required, but only commented on 62 percent of plans that required an EA-IS document. The larger number of comments were received for plans where an EIS-EIR was required.

The ability of commentators to effect changes to the draft HCPs was in general minor or not at all. Comments raised substantial issues in ten plans, however for only two plans the influence of the comments was considered significant. Those HCPs are, plan 209 (120 comments received), and plan 205 (only two comments received).

Score calculation. Influence of participation was measured by questions 78, 80, 82, 83, 85, and 86. The sample scores ranked from 0 points to 90. The sample was distributed more normally than time and form of participation, however it was still positively skewed (0.621) since most plans (60%) scored low between 0 and 25, and only one plan scored the maximum of the sample, 90 points. The modal score was 0 and the median equaled 24.50. The sample mean was 30.20 with a standard deviation of 26.80, which explains the wide spread of the scores shown in Figure 16. Two categories, low and high, were created from these scores. Fifteen plans scored low and fifteen plans scored high.

Figure 15. Frequencies of Interests Represented (a) and Total Number of Participants per Interest Represented (b).

Large plans and small plans show opposite distributions in relation to the influence of participation. Most large plans (10/15=67%) scored high, while the same per-

centage (10/15) of small plans scored low. Although not significant, the cross analysis shows that there is a tendency for participation in large plans to have a higher level of influence in the decision-making than in small plans ($\chi^2=3.333$, $P=0.068$; $\phi=0.333$, $P=0.068$; $\gamma=0.600$, $P=0.053$).

Figure 16. Score Distribution of Influence of Participation.

The requirement of a specific NEPA-CEQA document did not show any particular association to the level of influence ($\chi^2=0.514^a$, $P=0.476$; $\phi=-0.133$, $P=0.474$; $\gamma=-0.294$, $P=0.467$) (Figure 10).

^a 1 cell (25%) has expected count less than 5

Objective 3: Biological Soundness of the Plan from Documentation

According to the Components: Habitat, Species, Take, Impact,

Mitigation, Monitoring, Alternatives, and Funding

Biological Soundness

Scores for the main variable *biological soundness* were calculated as a composite of the individual scores of the eight components of this variable, *habitat*, *species*, *take*, *impact*, *mitigation*, *monitoring*, *alternatives*, and *funding* (a detailed explanation is provided in the Methods Section). The individual scores of each component are explained later in this Section, but a summary of the scores of the main variable and its components is provided in Table 9.

Overall scores for this variable (as a result of the eight factors that compose it) ranked from 36 to 77. Figure 17 illustrates that the sample distribution is quite normal with a slight positive skew (0.637) due to the clustering of the data at the lowest values of the sample (between 40 and 59). The sample mean is 53.1, the median is 51.50, and the standard deviation equaled 11.82. Two categories were created from these scores, 15 plans scored high and 15 scored low. Data were categorized based on 50th percentile ranks as explained in the Methods Section.

**Table 9. Scores for the Biological Soundness and its Components,
Habitat, Species, Take, Impact, Mitigation, Monitoring,
Alternatives, and Funding.**

Main Variable:		Scores Range (points)	Scores (mean)	Categories (number of plans)	
				High	Low
<i>Biological Soundness</i>		36 to 77	53.10	15	15
Components	<i>Habitat Loss</i>	0 to 80	40.50	14	16
	<i>Species Status</i>	50 to 100	82.73	16	14
	<i>Take Estimation</i>	0 to 93	35.70	15	15
	<i>Impact Assessment</i>	0 to 100	29.07	15	15
	<i>Mitigation Measures</i>	50 to 100	58.30	5	25
	<i>Monitoring Plan</i>	0 to 80	44.10	16	14
	<i>Alternatives Analyzed</i>	0 to 100	75.00	20	10
	<i>Funding Methods</i>	0 to 100	58.60	20	10

The size of the plan ($\chi^2=0.133$, $P=0.715$; $\phi=0.067$, $P=0.715$; $\gamma=0.133$, $P=0.714$), the type of NEPA-CEQA document required ($\chi^2=0.514^b$, $P=0.474$; $\phi=-0.133$, $P=0.474$; $\gamma=-0.294$, $P=0.467$), and the plan's duration ($\chi^2=0.195^b$, $P=0.907$; $\phi=0.081$, $P=0.907$; $\gamma=0.143$, $P=0.674$) made no difference on the biological soundness of the plan. Figure 18 shows how high and low scores were distributed in a similar fashion in small and large sized plans, short and long plans, as well as in plans

^b 2 cells (50%) have expected count less than 5

that either required an EA-IS or an EIS-EIR document. Of the 19 plans that will last longer than 20 years, 10 scored high and 9 low.

Analyzed within the context of the lead offices, the two offices that supervised most of the plans had opposite tendencies. Six out of nine plans (67%) at Carlsbad scored high at the overall biological soundness, while only five out of fifteen plans (29%) at Sacramento did. At Ventura, four out of six (67%) scored high.

Figure 17. Score Distribution of the Biological Soundness of the Plans.

An association, although not was observed when analyzing the ecological approach of the plan. A cross-analysis including all three possible approaches of the plans, single-species, multi-species, and habitat-based plans showed a strong tendency for

habitat-based and single-species plans to do a better job than multi-species plans ($\chi^2=7.600$, $P=0.022$; $\phi=0.503$, $P=0.022$; $\gamma=-0.181$, $P=0.554$). All habitat based (3/3) and most (8/12=67%) of single-species plans scored high while most multi-species plans (4/15=76%) scored low. However, this association cannot be considered significant given the low number of occurrences for the habitat-based approach which resulted in 33 percent of the cells in the cross-tabulation with counts less than 5.

Nevertheless, a partial cross-analysis exclusively of the single-species and multi-species categories shows a significant association between the variables. HCPs that used a single-species approach have significantly higher biological soundness than those that used a multi-species approach ($\chi^2=4.320$, $P=0.038$; $\phi=-0.400$, $P=0.038$; $\gamma=-0.692$, $P=0.025$). Figure 19 shows a graphic representation of both analyses.

Only one of the eight components of this variable, habitat loss, was influential in the association with size of the plan ($\chi^2=4.821$, $P=0.066$; $\phi=0.401$, $P=0.028$; $\gamma=0.692$, $P=0.017$). Monitoring and mitigation correlated significantly positively when the Spearman's rho test of correlation was applied ($r=0.408$, $P=0.025$) suggesting that plans with adequate mitigation measures also have clear monitoring proposed.

Following is a detailed description of the components of this variable, a) habitat loss, b) species status, c) take estimation, d) impact assessment, e) mitigation measures, f) monitoring plan, g) alternatives analyzed, h) funding methods. Figure 20 compares the scores obtained by each one of these components. The highest scores were for species status and alternatives analyzed. All other components in general scored very low.

Figure 18. Biological Soundness by Size of the Plan (a), Plan's Duration (b), and Type of NEPA-CEQA Document Required (c)

a) Habitat Loss

Of the 2,340,781 acres covered by the HCPs analyzed, 964,851 acres are habitat area supporting the HCPs' primary target species. Of this habitat area, 319,848 acres (33%) were or will be impacted by the proposed activities in those HCPs. Most of the impacts will be permanent, thus non-reversible. Only 180,792 acres of land will be impacted temporarily. The remaining 139,056 acres of land permanently impacted by the

plans will be lost. The chart pie in Figure 21 shows a graphic representation of the amounts described above.

Figure 19. Ecological Approach of the Plan by the Biological Soundness, original (a) and modified (b).

Figure 20. Components of Biological Soundness Compared.

Mean Values (a) and Boxplot (b).

Of the 25 plans for which the impacted habitat area on site could be computed, 11 plans impacted 100 percent of the habitat area on site. The remaining 14 plans preserved some habitat on site in different amounts. Nine plans protected more than 50 percent of

the habitat area on site, while five plans protected between 20 and 50 percent of the existing habitat. Most habitat protected on site was protected longer than the duration of the HCP (254,2200 acres) or in perpetuity (47,177 acres).

Figure 21. HCPs Area Covered and Areas of Existing and Impacted Habitat (in acres). General (a) and Detailed (b) Diagrams.

Although 70 percent of the HCPs protected large patches of habitat, only 53 percent of the plans focused on protecting the highest habitat quality on site by developing areas of more common features. Connections to surrounding open space were proposed for 81 percent of the plans, and in 65 percent of the plans the level of fragmentation produced by the plan did not seem to increase the existing fragmentation. Buffers between developed areas and wildlife habitat were described only for 50 percent of the HCPs that protected habitat on site.

Restoration of habitat on site was required only in eight HCPs, covering approximately 9,173 acres.

Score calculation. Questions 31, 33, 34, 35, 36, 37, 38, 39, and 40 in the data-sheet measured this component. The sample scores ranked from 0 points to 80. No plan scored 100 points. Most plans (73%) scored less than 50 points, and only 7 plans scored high (between 67 and 80). Figure 22 illustrates the distribution of the sample, which is almost normal and clustered toward the mean value of 40.5 (standard deviation = 22.70). The modal score was 47 and the median 40. Two categories, low and high, were created from these scores. Sixteen plans scored low and fourteen plans scored high in these categories.

Although not significant for chi-square ($\chi^2=4.821$, $P=0.066$; $\phi=0.401$, $P=0.028$; $\gamma=0.692$, $P=0.017$), there is a tendency for large plans to be more protective of habitat on site than small ones. Sixty percent of large plans scored high at habitat loss while only 47 percent of the small ones did. Furthermore, a cross tabulation of the “per-

centage of habitat impacted on site” by the size of the plan shows that 91 percent of small plans impacted 50 percent or more of the existing habitat on site, while only 33 percent of large ones did.

Figure 22. Score Distribution of Habitat Loss.

Plans that required an EA-IS document tended to score low versus the plans that required an EIS-EIR. Although not significant ($\chi^2=3.160^a$, $P=0.075$; $\phi=-0.330$, $P=0.075$; $\gamma=-0.660$, $P=0.063$), 38 percent of plans that required an EA-IS scored low, while 75 percent of plans that required an EIS-EIR scored high.

^a 1 cell (25%) has expected count less than 5

b) Species Status

Most plans (27) clearly described the status of all the species covered in the plan, and for most plans (80%) both global and local data were used in the analysis. Only six plans used exclusively one or the other types of data. Large plans did a better job at addressing population size, trends in population and quality of most remaining habitat, while small plans did better at identifying the primary threats to the species.

Only four plans failed to clearly assess the species status of all species covered in the plan required. Those plans required only an EA-IS document to be prepared. In particular, five plans that required an EA-IS failed to address population size, six failed to address trends in population, and one failed to address the primary threats to the species. Only one plan that required EIS-EIR failed to clearly address the quality of most remaining habitat and its trends.

Almost all plans clearly identified the primary threats to the covered species, and the quantity of most remaining habitat and its trends. Nearly 80 percent of the plans also assessed the size of population, trends in population, and quality of remaining habitat and its trends. Of the HCPs analyzed, only one (plan 301), lacked information regarding the status of the species.

The most common primary threat to the species is habitat loss identified for the species covered in 29 plans. Other major threats are habitat degradation (19 plans), fragmentation (14 plans), and the presence of predators (10 plans). Figure 23 shows the frequencies of the primary threats described in the sample HCPs.

**Figure 23. Frequencies of the Primary Threats to the Species Covered
in the Sample HCPs.**

Score calculation. Species status was measured by questions 41, 42, and 44. The sample scores ranked from 50 to 100 points. The mean value was 82.73, the median was 89, and the standard deviation 14.80. The modal response was 94 with 43 percent of the observations which skewed negatively the distribution of the sample (-1.311). The histogram in Figure 24 illustrates this distribution. Two categories, low and high were created from these scores. Fourteen plans scored low and 16 plans scored high.

The cross-analysis shows that plans where an EIS-EIR document was required did a better job at analyzing the status of a species than those in which an EA-IS was required

($\chi^2=4.668^a$, $P=0.031$; $\phi=-0.401$, $P=0.031$; $\gamma=-0.806$, $P=0.013$). The cross-tabulation indicates that 88 percent (7/8) of the plans that required an EIS-EIR document scored high at analyzing the status of the species, while only 43 percent (9/21) of plans that required an EA-IS did.

Figure 24. Score Distribution of Species Status.

c) Take Estimation

Take occurred for all species covered in 17 plans and only for some of the species covered by 10 plans. For most HCPs (57%) the plan did not clearly quantify the take suggesting little emphasis in most plans on accurately estimating the consequences of the

^a 1 cell (25%) has expected count less than 5

proposed activities. Data pertinent to life stages or sex of the individuals likely to be taken were not estimated for 83 percent of the plans.

Take estimation can be quantified by calculating the total number of individuals lost or by calculating the percentage of the affected population taken (Kareiva et al. 1999). Most plans, 60 percent, calculated the take as a percentage of the affected population, while 17 percent estimated the take by calculation of loss or displacement of individuals. Most of the data used in estimating take were related to loss of general habitat and declines in general population densities. See Figure 25 for the frequencies of data types used in estimate the take.

Figure 25. Frequencies of the Data Types Used to Estimate the Take.

Score calculation. Take was measured by questions 46, 47, 49, and 50. The sample scores ranked from 0 points to 93. No plan scored 100. Most plans (66%) scored between 10 and 40. Few plans (10%) scored between 70 and 93. That is, only 10% of the plans did a good job at estimating take. The distribution, as shown in Figure 26, is positively skewed (0.811). The sample mean score is 35.7 and the standard deviation 24.02 explaining the spreadness of the scores. The modal score is 40 and the median 34. Two categories, low and high, were created from these scores. Fifteen plans scored low and 15 plans scored high.

Figure 26. Score Distribution of Take Estimation.

Small plans had a very strong tendency to estimate take, thus scoring higher than large ones. Although not significant ($\chi^2=3.333$, $P=0.068$; $\phi=-0.333$, $P=0.068$; $\gamma=-0.600$, $P=0.053$), the majority (67%) of small plans scored high, while only a minority (33%) of large plans did.

The type of NEPA-CEQA document did not have any association to the take estimation ($\chi^2=0.514^a$, $P=0.4674$; $\phi=0.133$, $P=0.474$; $\gamma=0.294$, $P=0.467$).

d) Impact Assessment

Most HCPs (77%) did not clearly quantify the projected impact of the proposed activities on species population numbers and dynamics. Although most plans used in the analysis both, global and local data, most data used for the assessment did not correspond to population dynamics. For most plans, the data used were the same as those used for estimating the take, quality and quantity of remaining habitat and primary threats to the species. Data on population size, number of individuals killed, and trends in population were only observed in four plans. Figure 27 shows the frequencies of the different types of data used to perform this analysis.

Score calculation. Questions 52, 53 and 54 in the data-sheet measured this component. The sample scores ranked from 0 points to 100. Most plans scored low between 0 and 20. Ten plans (33%) scored at the mode, 0, and only one scored 100, therefore the distribution is somewhat positively skewed (0.781) as illustrated by the histogram in Figure 28. The mean score is 29.07, the standard deviation is 30.65, and the median 19.50.

^a 1 cell (25%) has expected count less than 5

Two categories, low and high, were created from these scores. Fifteen plans scored low and fifteen plans scored high.

Figure 27. Frequency of the Data Types Used to Assess the Impacts to the Primary Species.

Most small plans (9/15, 60%) did a better job at assessing the impacts to the primary species than most large plans which generally (9/15, 60%) did a worse job. However, given the counts in the cells this relationship cannot be described as significant. A partial cross-analysis shows an association to the ecological approach of the plan. Single-species plans show a significant tendency to assess the impacts to the species better than

multi-species plans ($\chi^2=4.636^a$, $P=0.031$; $\phi=-0.414$, $P=0.031$; $\gamma=-0.714$, $P=0.018$).

Seventy five percent (9/12) of single species plans scored high, while only 33 percent (5/15) of the multi-species plans did.

Figure 28. Score Distribution of Impact Assessment.

e) Mitigation Measures

All plans proposed mitigation and minimization measures that “legally” addressed the primary threats to the species covered by the plan and in most (90%) cases these measures would last in perpetuity or at least as long as the HCP. However, 25 plans (83%) did not provide evidence that the proposed mitigation and minimization measures

^a 1 cell (25%) has expected count less than 5

would work for each species covered by the plan. The most frequently proposed mitigation measure is restoration (19 plans). Other frequent mitigation measures were conservation easements (16 plans), minimization of impacts (12 plans), and habitat banks (11 plans). Figure 29 shows a graphic representation of the frequencies of the mitigation measures used in the sample plans.

Figure 29. Frequencies of the Mitigation Measures Adopted in the Sample HCPs to Compensate for the Impacts to the Covered Species.

Score calculation. Questions 55 and 56 in the data-sheet measured this component. Figure 30 shows the sample scores were polarized between 50 and 100 points. Most

plans (83%) scored at 25. Two categories, low and high, were created from these scores.

Twenty-five plans scored low and five plans scored high.

Figure 30. Score Distribution of Mitigation.

f) Monitoring Plan

A clear monitoring plan was only proposed in 18 plans. For half of the plans, the proposed monitoring did not provide for the evaluation of the mitigation efforts and contingency actions were not provided in the event of failure. A long-term adaptive management was only proposed for 14 plans (47%). In the plans where clear monitoring was proposed, the monitoring efforts were designed to last for the same duration of the plan. In only for 6 plans would monitoring efforts last longer than the plan or in perpetuity.

The proposed monitoring gathered diverse types of data. See the representation in Figure 31 of the data types to be collected as proposed in the monitoring plans.

Figure 31. Frequencies of the Proposed Data Types to be Collected for Monitoring Mitigation Measures.

Score calculation. Questions 59, 60, 61, 64, 65, and 66 in the data-sheet measured this component. The sample scores ranked from 0 points to 80 and clustered at low and high values with few occurrences in the middle scores. Fifty percent of the plans scored more than 60 and almost 40 percent scored less than 20. Although the distribution shows a very slight skew (-0.195), the scores are polarized in the upper and lower values (Figure 32). The mean value is 44.1 with a std. deviation of 32.11 indicating a large degree of

spreadness in the scores. The median was 60 and the modal score equaled 80. Two categories, low and high, were created from these scores. Fourteen plans scored low and sixteen plans scored high.

Figure 32. Score Distribution of Monitoring.

g) Alternatives Analyzed

For 25 plans (83%), the alternatives analyzed did not focus only on the “no action” alternative. For 20 plans (80%) the alternatives focused on avoiding some of the incidental take, but in 13 cases these alternatives were rejected for economic reasons. Figure 33 shows the frequencies of the reasons for rejecting an alternative that reduced the impact to the species covered.

Figure 33. Frequencies of the Reasons for Rejecting Alternatives that Reduced the Impact to the species.

Score calculation. Questions 67, and 68 in the data-sheet measured this component. The sample scores ranked from 0 points to 100. As shown in Figure 34, the values polarized around three scores, 0, 50, and 100 with no intermediate values, and the general distribution was negatively skewed (-1.182) due to a clustering of scores at 100. The mean value was 75.00 and the standard deviation was 38.84, indicating spreadness in the scores. Most plans (20) scored high at 100, and five plans scored 0. These high scores indicate that most plans did consider alternatives that minimized the impacts of the de-

velopment. Two categories, low and high, were created from these scores. Ten plans scored low and twenty plans scored high.

Figure 34. Score Distribution of Alternatives Analyzed.

h) Funding Methods

Twenty-five plans provided a clear funding program for monitoring and mitigation. However, 15 plans required the funding to be established before impacts occur. Future adjustments in the event of unforeseen circumstances were mentioned in 9 plans. The most frequent methods of funding proposed were a one-time development fee (24 plans) and continuing development fees (16 plans). Federal funds were observed for 7

plans. Figure 35 shows a graphic representation of the funding methods used and their frequencies.

Figure 35. Frequencies of the Funding Methods proposed.

Score calculation. Questions 69, 71, and 72 in the data-sheet measured this component. The sample scores ranked from 0 points to 100. Most plans (47%) scored at 67. Figure 36 shows that the distribution was quite normal with a slight negative skewness (-0.511). The mean score was 58.6, the median and the mode coincided at 67, and the standard deviation was 29.0. Two categories, low, and high were created from these scores. Ten plans scored low and twenty plans scored high.

Figure 36. Score Distribution of Funding Methods.

Objective 4: Levels of Participation Perceived by the Participants with regard to Access to Information and Access to Decision-making

A general description of the results and findings of the survey is necessary before proceeding to analyze this variable and its components. It is important to state that the total number of frequency counts for those questions where multiple-choice was allowed may exceed the 204 participants and the percentages may exceed the 100 percent. For example, people who participated during phase I of the plan also may have participated during phase II, and therefore they would have been counted twice.

Some responses were re-categorized into groups that shared similar characteristics to facilitate the analysis. For example, similar to those used in the data-sheet, form of

participation was re-grouped into three categories, high, moderate, and low, depending on the level of interaction that they allow to the participants in the decision-making. High interactive forms are considered steering committees, advisory committees, advisory boards, and individuals directly involved in the negotiation. Moderate interactive forms are public meetings, public hearings, presentations and workshops. Low interactive forms are letter writing, comments, mailing of materials, and surveys.

When HCPs responses were re-categorized according to the small, medium and large plan sizes, the data showed that most respondents (133) participated in large plans. Forty-two respondents participated in moderately sized plans and very few people (17) in small plans. Therefore, the results of the survey may be particularly accurate for the respondents of large plans.

Survey Results

Part I (questions S-1 to S-6). Most respondents (174) participated during the second phase of HCPs, however a large number also participated during phase I (149) and phase III (120). The interest group most frequently represented was the environmental one with 90 respondents, second were land and property owners with 53 respondents, and local government was third with 50 respondents. Some interests were represented by a very low number of respondents, like the affected industry and tribal interests with only five counts. Figure 37 shows the various interests involved in the sample HCPs.

Figure 37. Frequencies of the Different Interests Groups Involved in the HCPs.

The most frequently used forms of public participation were public meetings (123), and public hearings (113), public comments (98), and letter writing (81). When groups were created for this category, frequencies look evenly distributed among all groups. One hundred and ten respondents participated in high interactive forms of participation, 136 participated in moderate forms, and 125 participated in low forms. Figure 38 shows both the frequencies of the different forms of participation and the frequencies once the categories were created.

Figure 38. Frequencies of the Forms of Participation Involved in the HCPs (a) and frequencies of the Categories Created According to their Level of Interaction (b).

The clustered bar charts shown in Figure 39 describe the differences between the interests of the respondents and the forms of participation used. Land developers used

almost evenly all forms of participation. Property owners and the affected community members participated mostly through comments (letter writing) and public meetings. Industry representatives as well as most of the academics participated in steering committees and public meetings. Environmentalists participated mostly through letter writing.

Figure 39. Interests Represented by Categories of Forms of Participation.

Some significant associations were encountered between the forms of participation used by the respondents and the phase of the plan in which they participated. Respondents who participated in high interactive forms of participation also participated significantly more during the initial phase of the plan ($\chi^2=42.751$, $P=0.000$, $n=204$),

while respondents that participated in moderate ($\chi^2=6.331$, $P=0.012$, $n=204$) or low ($\chi^2=6.709$, $P=0.001$, $n=204$) forms participated significantly more during the second phase of the plan. These associations are illustrated in Figure 40.

Figure 40. Forms of Participation Used by Phase of the Plan in Which Participated.

The information source most frequently used was the mailing of materials (169), but also significant were public meetings and public hearings, which accounted for 107 occurrences. The least used sources of information were the radio, web-sites and TV. However, it is necessary to point out that web-sites have only recently been implemented which may explain the observed low frequencies for this category. Figure 41 shows the frequencies of all sources of information used by the respondents.

Figure 41. Frequencies of Sources of Information.

Part 2 (questions S-7 to S-15). Many associations were observed among the responses to these questions. The box-plot in Figure 42 compares the distributions of the different responses. The most significant associations are described below.

Respondents tended to consider information to be more accessible from sources other than from the USFWS. In a scale of 1 to 9, the mean value of all scores for “access to information provided by the USFWS” was 5.08 (n=182) with a standard deviation of 2.38 while “other sources of information” obtained a mean of 6.11 (n=184) and a standard deviation of 2.12. “Access to information provided by the USFWS” scored in the upper values (7,8,and 9) for 32 percent (58/182) of the respondents, while “other sources

of information” scored in the upper three scores (7,8, and 9) for 50 percent (92/184) of the respondents.

Figure 42. Responses to Survey’ Questions Compared.

The left end of the shaded box indicates the 25th percentile of scores, the right end indicates the 75th percentile, and the black bar inside the box indicates the 50th percentile (median). The lines that extend from the shaded box indicates values that fall 1.5 box lengths from the left and right edges of the box. This values represent the highest and lowest values of the sample but exclude *outliers* and *extremes*.

The symbol “O” represents *outlier* values that fall between 1.5 and 3 box lengths from the left or right edges of the box.

The symbol “*” represents *extreme* values that fall more than three box lengths from the left or right edges of the box.

Although “other sources of information” were in general less accessible than “information provided by the USFWS,” the cross-analysis of these variables with each category of forms of participation suggests that information from the USFWS was used to the

same extent by people participating in high, moderate and low interactive forms of participation while other sources of information were more exclusive to those who participated in high interactive forms than those who participated in less interactive forms.

“Access to information provided by the USFWS” cross tabulated to each category of forms of participation showed a significant association with each of the three groups, high interactive forms ($\chi^2=18.253$, $P=0.019$, $n=182$), moderate interactive forms ($\chi^2=20.212$, $P=0.010$, $n=182$), and low interactive forms ($\chi^2=11.067$, $P=0.034$, $n=182$).

The same cross-analysis for “other sources of information,” showed that only those who participated in high interactive forms of participation were likely to feel that they had access to this information ($\chi^2= 30.086$, $P=0.000$, $n=184$).

Respondents who rated their access to information as high, disregarding the source, also perceived their level of influence as higher. Both sources of information, the USFWS ($r=0.266$, $P=0.01$, $n=180$) and other sources ($r=0.417$ $P=0.01$, $n=182$), correlated positively to the perceived level of influence.

The perceived level of influence on the final version of the plan was, in general, moderate to low. The mean value of the sample on a scale from 1 to 9 was 4.72 with a standard deviation of 2.51. The most frequent response was 5 accounting for 21 percent of valid responses. Respondents that participated in small plans perceived their level of influence higher (mean=6.36, $n=19$) than those that participated in moderate (mean=5.05, $n=40$) and large plans (mean=4.33, $n=131$). In relation to the type of participants, the perceived level of influence was quite varied. According to their mean val-

ues, those who perceived their level of influence as the lowest values were the affected community (mean=3.57, n=28) and the property owners (mean=3.98, n=52). Those who perceived it higher represented the local government (mean=5.62, n=50), and government officials in wildlife agencies (mean=7.17, n=23). Figure 43 shows the mean values of the perceived level of influence for all interests in the sample.

Figure 43. Interest Represented by the Perceived Level of Influence.

A cross-analysis also indicates that those who represented environmental interests are significantly more likely to believe that their level of influence in the plan was lower

than other interests ($\chi^2 = 23.395$, $P=0.003$, $n=200$). Since environmentalists used mostly low interactive forms, this finding is congruent to the results of the cross analysis of forms of participation and the perceived influence to the plan. Those who used low interactive forms of participation perceived their level of influence significantly lower than those who used moderate or high interactive forms ($\chi^2=18.814$, $P=0.016$, $n=200$), while those who participated in high interactive forms perceived their level of influence higher than those who participated in other forms ($\chi^2=24.542$, $P=0.002$, $n=200$).

Respondents that participated during phase I of the plan perceived their level of influence as higher (mean=5.35, $n=146$) in general than those who participated at phase II (mean=4.82, $n=171$).

Responses to the “perceived influence on the plan” were consistent with the responses to “how the final version addressed the respondent’s concerns” ($r=0.760$, $P=0.01$, $n=200$) and with how plans “addressed the concerns of the general public.” The mean value for the perceived influence was 5.18 ($n=194$) with a standard deviation of 2.63. The modal answer was 5 with 16 percent of valid responses. Similar values were also observed for how the plans addressed peoples’ concerns (mean=5.28, $n=193$, standard deviation=2.41, modal response=7 (20%) of the valid responses).

According to the respondents, HCPs addressed respondent and general public’s concerns only moderately; however, HCPs did a better job at protecting the endangered and threatened species at stake. The mean value of the responses for the statement “the final version of the plan adequately protects the endangered and threatened species at

stake” was 6.01 with a standard deviation of 2.57 (n=194). The modal score was 7 with 21 percent of the responses. A majority (108/194=56%) of responses rated this statement in the upper three high scores (7 to 9). In general, land developers, applicant employees, state and federal government personnel and local government personnel believe that the plan did a better job at protecting endangered and threatened species than other interests. The least satisfied were environmentalists, consultants, and recreational land users. Figure 44 compares the mean scores of the statement “the plan adequately protects the endangered and threatened species at stake” for all interests involved.

The cross-analysis shows that environmentalists tend to believe that the plan did a less effective job at protecting the endangered and threatened species at stake than respondents representing other interests did ($\chi^2=56.561$, $P=0.000$, $n=194$). People representing local government show significantly the opposite tendency ($\chi^2=25.273$, $P=0.001$, $n=194$) holding the view more than other groups that the final version of the plan reflects a balanced agreement ($\chi^2=23.869$, $P=0.002$, $n=198$).

Respondents who believed the HCP did a good job at addressing their concerns also considered the plan to have done a good job at adequately protecting the endangered and threatened species at stake ($r=0.656$, $P=0.01$, $n=187$). However, the more the plan reflected their concerns about it, the less they believed that more could have been done to protect the endangered species at stake while at the same time satisfying other groups’ interests ($r=-0.467$, $P=0.01$, $n=188$). Respondents who believed they influenced the plan

more also tended to believe that no more could have been done to protect the endangered and threatened species at stake ($r = -0.434$, $P = 0.01$, $n = 193$).

Figure 44. Mean Values of the Responses to the Statement “The Plan Adequately Protects the Endangered and Threatened Species” by All the Interests Involved.

Most respondents believed that the final version of the plan reflected a somewhat balanced agreement. The sample was distributed around the center with a mean value of

5.21 and a standard deviation of 2.59 (n=198). Respondents that participated in small plans perceived the plan to be more balanced among all parties with a mean of 6.00 (n=19), while respondents of medium (mean=5.30, n=40) and large plans (mean=4.99, n=128) perceived the balance to be more moderate. To the statement of whether “more could have been done at protecting the species at stake while at the same time satisfying other people’s interests” the responses were extremely divided. The mean value for this statement was 5.05 with a standard deviation of 2.78 (n=195). The modal answer was 5 with 22 percent of responses but most of the remaining responses (73%) were at either one of the extremes, 1 or 9.

In general, the more the respondents believed that the final version of the plan adequately protected the endangered and threatened species at stake, the more they believed that the HCP reflects a balanced agreement ($r=0.616$, $P=0.01$, $n=192$), and that no more could have been done to protect the endangered and threatened species at stake while at the same time satisfying other interests ($r=-0.628$, $P=0.01$, $n=189$).

Besides believing that the species were somewhat adequately protected, respondents did not believe that the final version of the plan overprotected the endangered species at stake. The mean for this question was 3.48 (n=190), and the mode equal to 1 (definitively no) with 38 percent of the responses.

The Perceived Levels of Participation

Scores for the main variable *perceived level of participation* were calculated as a composite of the individual scores of the two components of this variable, *access to in-*

formation and access to decision-making, based on the categories described in the Related Research section on Julian et al. (1997). After calculating the scores of each component for each plan, the mean value of both components was calculated. The individual scores of each component are explained later in this Section, but a summary of the scores of the main variable and its components is provided in Table 10.

The mean value calculated represents the perceived level of participation by the respondents who participated in each plan and it could only be calculated for 23 plans in which people participated. Of the 204 respondents, elevated frequencies of respondents were observed for 6 plans in particular, which accounted for 136 (67%) of the respondents. A large number of people (96) participated in one plan alone, plan 305.

**Table 10. Scores for the Perceived Level of Participation and its Components,
Access to Information and Access to Decision-making.**

Main Variable:		Scores Range (points)	Scores (mean)	Categories (number of plans)	
				High	Low
<i>Perceived Level of Participation</i>		1 to 9	5.60	11	12
Components	<i>Access to Information</i>	1 to 9	5.62	11	12
	<i>Access to Decision-making</i>	1 to 9	6.11	12	11

Overall scores for the main variable *perceived levels of participation* ranked from 1 to 9. The most frequent score was 5 with 14 occurrences. A standard deviation of only 1.93 shows that most scores clustered near the mean value of 5.6. The median of the

sample was 5.5 indicating that the sample was mostly normally distributed with a slight negative skewness (-0.267) as shown in Figure 45. Two categories, low and high, were created from these scores. Twelve plans scored low and eleven plans scored high. Data were categorized based on 50th percentile ranks as explained in the Methods Section.

Figure 45. Score Distribution of the Perceived Level of Participation.

No association was found between this variable and the size of the plan or the NEPA-CEQA document required ($\chi^2=3.160^b$, $P=0.075$; $\phi=-0.330$, $P=0.075$; $\gamma=-0.660$, $P=0.063$; $n=29$).

^b 2 cells (50%) has expected count less than 5

Figure 46. Components of the Perceived Level of Participation Compared.

Mean Values (a) and Boxplot (b).

Following are specific descriptions of the scores obtained by each of the two components of this variable, a) access to information and b) access to decision-making. Figure 46 compares the scores obtained by both components, which scored similarly between 5 and 7.

a) Access to Information

Score calculation. Access to information was measured by questions 7 and 8 in the survey. A score for each respondent was calculated. This score corresponds to the mean value of the scores given to each one of the two questions S-7 and S-8. After calculating the scores for each respondent, the mean of all respondents to each plan in which they participated was calculated. This value represented the level of access to information perceived by the respondents of each plan.

The scores ranked from 1 to 9. The modal score was 5, which accounted for 29 counts. Figure 47 shows that the sample is normally distributed with a very slight positive skewness (0.177). The mean value was 5.62 and the median 5.50. The standard deviation was 1.93 showing a clustering of most scores toward the mean value.

Two categories were created from these scores, low and high. Eleven plans scored low and eleven plans scored high. Roughly half of the plans scored low, disregarding the size of the plan or the NEPA-CEQA document required.

Figure 47. Score Distribution of Access to Information.

b) Access to Decision-making

Score calculation. Two questions in the survey, 9 and 10 measured access to decision-making. A score for each respondent was obtained calculating the mean value of the scores given to the two questions, S-9 and S-10. As for access to information, after figuring the scores for each respondent, the mean of all respondents corresponding to each plan in which they participated was calculated. This value represented the level of access to decision-making (power to influence) perceived by the respondents of each plan.

The scores ranked from 1 to 9. Most respondents (36%) scored in the mid-values 4, 5, and 6. The data were in general normally distributed with a slight positive skew (0.172) as shown in Figure 48. The mode and the median coincided at 5, the mean value

was 4.90, and the standard deviation was 2.42. Two categories were calculated from these scores, low and high. Eleven plans scored low and twelve plans scored high.

The cross-analysis shows a significant association with the size of plan indicating that the access to decision-making in the plans is significantly lower in larger plans than in small ones ($\chi^2=3.884$, $P=0.049$; $\phi=-0.411$, $P=0.049$; $\gamma=-0.726$, $P=0.029$; $n=23$). The cross tabulation shows that most large plans (9/14=64%) tended to score low, while most small plans (7/9=78%) tended to score high.

Figure 48. Score Distribution of Access to Decision-making.

An association, although not significant due to low cell counts, was encountered with the type of NEPA-CEQA document required ($\chi^2=7.738$, $P=0.005$; $\phi=0.580$,

$P=0.005$; $\gamma=0.901$, $P=0.001$; $n=23$). Plans where an EIS-EIR document was required tended to score lower than those plans where an EA-IS document was requested. Only 22 percent (1/8) of plans that required an EIS-EIR document scored high, while 73 percent (11/15) of plans that required an EA-IS document did.

Objective 5: Testing the Hypotheses

Following is the detailed description of the testing of the five hypotheses explained in the research objectives. Table 11 shows a summary of the relationship encountered.

Central Hypotheses

H1: Higher levels of participation as documented by the researcher (measured by form, time and influence) will be significantly positively correlated to the biological soundness of the plans' designs.

Two variables were used to test this hypothesis: *level of participation from documentation* (the independent variable), and the *biological soundness of the plan* (the dependent variable).

The correlation between the two variables was significant ($r=0.404$, $P=0.027$, $n=30$) indicating a positive relationship between the level of participation from documentation and the biological soundness of the plan. The presence of a more clustered distribution toward the highest scores of level of participation in the scattered plot of the

two variables shows that the relationship is stronger for the higher scores than for the lower ones (Figure 49).

**Table 11. Summary of the Relationships Encountered while
Testing the Hypotheses Formulated.**

HYPOTHESES	CORRELATION (Spearman's rho) $\alpha=0.05$		
	Significant Positive	Significant Negative	No Significant
H1: Biological Soundness and Level of Participation from documentation	$r=0.404$, $P=0.027$, $n=30$		
H1-a: Biological Soundness and Time of Participation	Tendency to positive		$r=0.108$, $P=0.570$, $n=30$
H1-b: Biological Soundness and Form of Participation	Tendency to positive		$r=0.227$, $P=0.228$, $n=30$
H1-c: Biological Soundness and Influence of Participation	$r=0.434$, $P=0.017$, $n=30$		
H2: Biological Soundness and Perceived Level of Participation		Tendency to negative	$r=-0.031$, $P=0.889$, $n=23$
H3: Level of Participation from documentation and Perceived Level of Participation		Tendency to negative	$r=-0.323$, $P=0.132$, $n=23$

To further describe this relationship, tests of association were applied to the variables. Although 64 percent of the plans that scored high in levels of participation also scored high in the biological soundness, the cross-analysis did not show a significant as-

sociation ($\chi^2=2.143$, $P=0.143$; $\phi=0.267$, $P=0.143$; $\gamma=0.500$, $P=0.129$; $n=30$). See the graphic representation in Figure 50.

Figure 49. Scatterplot of Level of Participation from Documentation and the Biological Soundness.

Analyzed in the context of the variables' components, a similar correlation only exists with Habitat Loss ($r=0.445$, $P=0.014$, $n=30$) and Monitoring ($r=0.481$, $P=0.007$, $n=30$). Habitat Loss however did not correlate to any of the components of participation, time ($r=0.218$, $P=0.248$, $n=30$), form ($r=0.250$, $P=0.183$, $n=30$), and influence ($r=0.266$, $P=0.155$, $n=30$); while Monitoring correlated with all three, time ($r=0.375$, $P=0.041$, $n=30$), form ($r=0.390$, $P=0.034$, $n=30$), and influence ($r=0.388$, $P=0.034$, $n=30$). An ad-

ditional correlation was encountered between Alternatives and Influence of Participation ($r=0.384$, $P=0.036$, $n=30$). Participation, therefore, seems to be more related to three stages of the HCP design, which corresponds to the moment when the habitat to be impacted is decided, when the alternatives to such impact are drafted, and when the monitoring program is proposed.

Figure 50. Level of Participation From Documentation by the Biological Soundness.

H1-a: Earlier public participation, during phase I of the plan, is significantly positively correlated with the biological soundness of the plan.

Two variables were used to test this hypothesis: *time of participation* (the independent variable), and the *biological soundness of the plan* (the dependent variable).

There was no correlation between early participation and the biological soundness of the plan. Time of participation did not show a significant correlation ($r=0.108$, $P=0.570$, $n=30$) to the biological soundness of the plan. Therefore, the assumption that early participation is beneficial to the biological soundness of the plan as suggested by Thomas (1995) was not supported by this study.

H1-b: More interactive forms of public participation in HCPs are significantly positively correlated with the biological soundness of the plan.

Two variables were used to test this hypothesis: *form of participation* (the independent variable), and the *biological soundness of the plan* (the dependent variable).

Forms of participation did not show a significant correlation with the biological soundness of the plan ($r=0.227$, $P=0.228$, $n=30$).

H1-c: There is a significantly positive correlation between the level of influence of participants in decision-making and the biological soundness of the plan.

Two variables were used to test this hypothesis: *influence of participation* (the independent variable), and the *biological soundness of the plan* (the dependent variable).

The test of correlation shows a significant positive correlation between these variables ($r=0.434$, $P=0.017$, $n=30$) suggesting that great influence of participants in decision-making improves the biological soundness of the plan.

The cross-analysis of the categories of these variables indicates a strong association between these variables ($\chi^2=6.533$, $P=0.011$; $\phi=0.467$, $P=0.011$; $\gamma=0.766$,

$P=0.004$). The clustered bar chart in Figure 51 illustrates that 73 percent of the plans that scored low at influence of participation also scored low at the biological soundness, indicating that higher levels of influence in the plan correspond to more biologically sound plans.

Figure 51. Influence of Participation by the Biological Soundness.

Compared to early participation and the form of participation used, the level of influence is more important to the biological soundness of the plan. Time and form of participation did not show this relationship.

Secondary Hypotheses

H2: Higher levels of participation as perceived by the participating public –measured by access to information and decision-making- are significantly correlated to the biological soundness of the plan's design.

Two variables were used to test this hypothesis: the *perceived level of participation* (the independent variable), and the *biological soundness of the plan* (the dependent variable).

High perceived levels of participation did not correspond to more sound HCPs designs. These two variables showed no correlation ($r=-0.31$; $P=0.889$, $n=23$).

H3: The perceived level of participation by the participating public is significantly correlated to the level of participation provided by the documentation.

Two variables were used to test this hypotheses: *the perceived participation* and *the level of participation from documentation*.

The correlation test showed no relationship between these two variables ($r=-0.323$, $P=0.132$, $n=23$). The tendency although not significant was to a negative correlation. A more in depth analysis shows a strong negative correlation of one of the components of the perceived level of participation, the perceived access to decision-making, and the level of participation from documentation ($r=-0.457$; $P=0.029$, $n=23$).

This tendency suggests that both, the level of participation from documentation and the perceived level of participation might not reflect the true level of participation being both measurements biased.

The perceived participation from the public may be biased due to the different interests of the respondents and because of the number of responses received for each plan. Nevertheless, the two components of the perceived level of participation, access to information and access to decision-making correlated positively ($r=0.505$, $P=0.017$, $n=23$) indicating consistency in the data.

Level of participation from documentation may be biased in two ways. First, this research design may not have adequately described all forms in which people participated. The most frequent forms of participation, according to the researcher, were low interactive forms like public comments, while according to the respondents, the most frequent forms were moderate interactive ones like public hearings. This may be explained by the lack of information available to the researcher to adequately document participation in moderate forms such as public hearing and meetings while enough information existed to document low and high forms of participation. The second possible bias also relates to the lack of information. This study may have failed to adequately assess the influence of participation for all forms in which people participated. Influence of participation from documentation (as the ability to produce changes to the plan) could only be assessed through the received comments available in the public record. Thus, influence of participation could not be independently assessed for the participants in high or moderate forms such as steering committees, public hearings, and workshops. Nevertheless, all three components of the level of participation from documentation correlated positively one to the other indicating consistency in the data (Time of participation and

form of participation ($r=0.860$, $P=0.000$); time and influence ($r=0.622$, $P=0.000$); form and influence ($r=0.768$, $P=0.000$)).

Although these biases may have effected the data for two of the three components of the main variable, level of participation, the most probable effect is to have lowered the scores but not to modify the tendency of the data. Thus, these biases have probably not affected significantly the results observed in this research study.

Objective 6: Analysis of Risk-Aversion

Risk-Aversion

Nineteen plans adopted at least one risk-aversion strategy. A precautionary approach was in general equally or less likely adopted in plans lacking information to make a scientifically based decision (less biologically sound) than in those plans where data were sufficient.

According to Kareiva et al. (1999) in the face of shortage of data and to compensate for the uncertainty, plans should adhere to the precautionary principle and adopt the expected patterns described in the Related Research section of this study. Only nine of the 13 plans that lacked information proposed risk-aversion strategies to compensate for the uncertainty. Only one plan of the nine adhered to more than one risk-aversion strategy, but not more than two. Of the possible strategies, only two plans reduced the impacted area, four plans adopted the mitigation measures before the take, and four more

proposed a long-term adaptive management. The frequency of the proposed strategies can be observed in Figure 52.

Score calculation. This variable was measured by two questions in the data-sheet, Q28 and Q30. The sample scores ranked from 0 points to 63. No plan scored 100 points. Eleven plans (37%) scored 0. Most plans (90%) scored less than 40 points, and only 10 percent of the plans scored the highest scores in the sample (50 and 63). The sample mean value was 25.7 with a standard deviation of 20.58. The mean and the mode coincided at 38. Although the skew value was very low, -0.325, suggesting a normal distribution, the scores were mostly clustered at 0 and 40 suggesting a bi-modal distribution. Two categories, low and high, were created from these scores. Eleven plans scored low and nineteen plans scored high in these categories.

Figure 52. Frequencies of the Proposed Risk-Aversion Strategies.

There is no evidence that the level of biological soundness influences the adoption of a precautionary approach. Risk aversion did not show a correlation to biological soundness of the plan and the cross analysis did not show significance at the $\alpha=0.05$ ($\chi^2=3.58$, $P=0.058$; gamma=0.641, $P=0.043$, $n=30$). Unexpectedly, there is a strong tendency for those plans that scored high at biological soundness to also score high in risk aversion; no such tendency exists for those plans that scored low at the biological soundness and would, therefore, be expected to compensate for the uncertainty using risk-aversion strategies. The clustered bar chart in Figure 53, and the cross tabulation shows that 47 percent of plans that scored low at the biological soundness, also scored low at risk-aversion.

Figure 53. Risk-Aversion by the Biological Soundness

CHAPTER 6

CONCLUSIONS

In general, the HCPs analyzed allowed little effective participation and most plans were not especially biologically sound. Of the 30 plans analyzed, 21 plans scored 50 or less in both, levels of participation and biological soundness. The low scores in participation are correlated to a reduced participation during earlier stages of the process. The low scores in biological soundness are attributable to the lack of appropriate data to assess the different stages of the HCP design and implementation. Following is a brief description of the major findings in this study.

Biological Soundness

The sample HCP scores for *biological soundness* were generally low to moderate. In terms of their components, as determined by Kareiva et al. (1999), most plans did a better job at assessing the status of the species and at protecting habitat on site than at estimating the take, assessing the impact, proposing mitigation measures, and proposing a clear monitoring plan. Both large (greater than 300 acres) and small (less or equal to 300 acres) plans were equally biologically sound, however, some particularities exist at the different stages of analysis. Small plans tended to have better estimates of the take levels and impact to the species than large plans, but large plans protected a greater percentage of habitat on site. A strong tendency also exists for plans that required an EIS-

EIR to do better at protecting habitat on site and assessing the species status than plans that required an EA-IS document.

A large amount (319.848 acres) of habitat area supporting the primary species covered in the sample HCPs will be impacted permanently or temporarily by the activity proposed in the plans. One-third of the plans analyzed impacted 100% of the habitat area on-site. The remaining plans preserved some habitat area on site; large plans were more protective of on-site habitat than small ones.

The status of the species was well known and adequately analyzed for 27 plans which scored more than 70 points. Take, on the contrary, was not estimated adequately for 23 plans that scored 50 or less. Take levels were more clearly estimated in plans that minimized the take or in plans that proposed to take the entire habitat on site. Since take and impact are related measures, and given the complexity of estimating the impact, very few plans estimated the impact of the take to the species adequately. To minimize the impact, most plans analyzed alternatives that reduced some of the impact to the species; however, in 13 plans these alternatives were rejected due to economic reasons.

Mitigation procedures addressed the primary threats to the species for a great majority of plans but the success of such procedures was uncertain in most cases. The clear interconnection of mitigation and monitoring indicates that the proposed mitigation efforts should be evaluated by a clear monitoring program. However, a clear monitoring plan was proposed only in slightly over half of the plans. Those plans in the sample analyzed that included viable mitigation measures also proposed a clear monitoring plan and included adaptive management.

To ensure the success of the mitigation and monitoring programs, the HCP requires adequate funding, and most of the resources should be available at the offset of the plan. Twenty-five plans proposed clear funding programs but only 15 required the funding to be established before the take occurs, and only 9 plans outlined future adjustments of the funding in the event of unforeseen circumstances.

Habitat-based plans that focused on protecting the entire habitat are represented by a low number of occurrences in this study (only 3 plans); apart from the increasing interest at assessing the quality of these plans because of their large spatial scale, little can be said about the performance of habitat-based plans compared to the species-specific approach adopted in most plans. However, within the species-specific approach, the number of species covered in the plan was significant to the biological soundness. Single-species plans, or plans that focus on one species only, were more biologically sound than plans that focus on more than one species, the multi-species plans. The three habitat-based plans analyzed in the sample all scored high in biological soundness reinforcing Kareiva et al.'s idea (1999) that habitat-based plans may result in better, more defensible planning efforts than the species-based plans, at least more than the multi-species plans.

Unfortunately and, on the contrary to what might be expected, adopting risk-aversion strategies did not seem to be more evident among those plans that lacked data and had a high level of uncertainty. Plans that scored low for biological soundness have a higher level of uncertainty in the data; and one might expect that risk-aversion measures would be adopted to compensate for these levels of uncertainty. However, although more

than half of the HCPs pursued precautionary approaches, it was not more likely when data were insufficient to make a scientifically based decision.

Levels of Participation from Documentation

The *level of participation from documentation* measured in terms of the time, the form of participation, and the ability to produce changes to the plan, also scored very low for most plans. All three components scored in a similar fashion and strongly correlated one to the other, reinforcing Thomas (1995) ideas that early participation and using forms of participation that allow more interaction can be more influential to the design of the plan. Participation from documentation was higher in large plans than in small plans, and was also higher for plans that required an EIS-EIR compared to plans that required an EA-IS document. A more in depth analysis of this association shows that HCPs that required an EIS-EIR document, had a greater tendency than those that required only an EA-IS document, to allow early participatory processes and higher forms of participation. Despite this finding, the analysis also shows that requiring an EIS-EIR document did not have a particular relation to the ability of participants to influence the decision taken.

Biological Soundness and Levels of Participation from Documentation

A relatively strong relationship exists between the *level of participation from documentation* and the *biological soundness* of the plans' design. A significant positive correlation suggests that plans with early and open participatory processes, which incor-

porated the comments received by the public are also plans with more biologically sound designs.

Particularly significant in this association is one of the components of level of participation, influence of participation. The level to which people are capable of producing changes in the HCPs is more closely related to the biological soundness of the plan than early participation or the form of participation used.

A more detailed analysis of the components of both variables shows that participation is more related to three stages of the HCP design in particular, which corresponds to the moment when the habitat to be impacted is decided, when the alternatives to such impact are drafted, and when the monitoring program is proposed.

Perceived Levels of Participation

Respondents to the survey, in general terms, perceived their level of participation as moderate and believed that the plans were balanced agreements that adequately protected the endangered and threatened species at stake. As expected, among the different interest groups, the least satisfied were the environmentalists, but is interesting that project consultants also expressed low levels of satisfaction.

Information provided by the USFWS (according to the respondents) was less accessible than the information provided by other sources. This finding is particularly significant for respondents that participated in higher forms of participation such as steering committees. The perceived level of influence in the plan was generally moderate. Those who perceived it higher were representatives of the local government and wildlife agen-

cies. Those respondents that used low forms of participation also perceived their level of influence as lower. For example, environmentalists, who perceived their level of influence lower than other groups also participated mostly in low forms of participation as written comments.

Levels of Participation from Documentation and the Perceived

Levels of Participation.

The *perceived level of participation* from the survey and the *level of participation from documentation* resulted in opposite directions. Higher levels of participation from documentation tended to correlate to lower perceived levels of participation. A similar relationship was observed when the perceived level of participation was correlated to the biological soundness of the plans' design.

The same tendency was also observed when comparing general data. For example, while according to documentation large plans allowed more influence of participation than small ones, according to the participating public, small plans had the tendency to allow a higher level of influence in the plan.

Despite the differences, some similarities were encountered between both measurements when analyzed within their own contexts. The level of influence seems to be significant in both contexts when correlated to the outcome of the plan. HCPs where the influence of participants from documentation was higher, also were more biologically sound. In a similar fashion, the higher the perceived level of influence, the better the

HCP at protecting the threatened and endangered species at stake, according to the respondents.

CHAPTER 7

RECOMMENDATIONS

The overall performance of the HCP process can be improved in many ways. Following are some recommendations resulting from this study and its review of documentation.

Participation

Since higher levels of participation correspond to higher levels of biological soundness in the HCP, it is important that, disregarding the form of participation used, a direct interaction between the participants and the decision-makers be allowed at all stages of the process. Participants to be included in the negotiation should represent every element of society, but more important is to require an extensive peer review by professionals external to the negotiation prior to the approval of the plan by the USFWS.

Scope

HCPs address multiple interests with conflicting objectives, and are extremely different in terms of their complexity. These distinctions suggest that plans be categorized according to their scope, including their size, impact to the species, and the level of uncertainty of the supporting data. The different categories of plans should be governed by different directives. For instance, the public comment period should be proportional to the scope of the plan. More complex plans should have longer period for public review and comment, which is being required already by the public in many plans, but not al-

ways granted. Depending on their complexity, plans could be allowed a public review period from the actual 30-day period up to a 180-day period as the maximum.

In creating the different categories, small plans, although they do not affect large amounts of habitat, must be reviewed more carefully. It is necessary to evaluate the long-term effect of a large amount of small-scale developments.

Information and Data Access

The HCP reviewing process, especially if it is very complex, may be a very frustrating experience if the information necessary is not easily available. Although copies of the plans and the NEPA and/or CEQA document are easy to request to the USFWS and the permit holder, some plans, especially the more complex ones, reference other studies which are not so easily accessible. This often makes it more complicated to review the plan on time. To facilitate the review process, the information relative to the plan as well as the supporting documentation should be accessible and maintained at centralized regional centers.

These centers could also serve as banks of information of important data about the different species and their habitats. These banks would make it easier to keep records of the amount of habitat lost for each species, the quality and quantity of the remaining habitat, population sizes, successful mitigation and monitoring programs, restoration programs, and other important data.

Uncertainty

Adoption of a precautionary approach should be a requirement of each HCP when lack of information to make a scientifically based decision is observed. HCPs may be scientifically inadequate if insufficient data were available to make the decision, even though legally the plan might be defensible (Kareiva et al., 1999). In many HCPs, where comments were received arguing that there were not enough data available in the plan to justify the approval of the plan, the most frequent response by the USFWS was “the decision was taken based on the best available information” at the moment (according to section 10 of the ESA). No further information was collected in most situations, nor were precautionary measures adopted.

Mitigation Measures

Mitigation measures, like habitat banks, easements, and restoration, should be evaluated more carefully in terms of compensating for habitat loss. Habitat quantity globally is decreasing for the covered species. According to Kareiva et al. (1999), habitat is declining for 88 percent of the species in his study and is not increasing for any. Although mitigation measures may provide to set aside existing habitat at other locations to compensate for the loss at the HCP location, in relation to the total existing acreage of habitat supporting the species before the implementation of the HCP, the acres of land impacted permanently by the plan will be lost.

Restoration, adopted in many plans as compensation, should not be accepted as compensation for habitat loss unless proven viable. The chances of success of the resto-

ration meeting its goals is often not known before the habitat is taken. Restoration and money for research in restoration, more than mitigation measures that compensate for habitat loss should be a requirement of every plan. Restoration is an important tool that may help in the future to create new habitat that will compensate for the loss of habitat due to human intervention.

Tracking the HCPs' Performance

Since HCPs have only been implemented very recently, especially those with the largest sizes, it is impossible at the moment to evaluate the performance of the proposed plans. This study could only assess the biological soundness of the HCPs' design. It is therefore important that in the future research studies be conducted, by the USFWS or other researchers, to analyze the true performance of the proposed measures approved in these plans. This would allow to determine what measures proposed in the HCPs are or not successful tools at protecting the endangered and threatened species listed in the ESA.

A Final Recommendation

Although HCPs are important tools to balance the needs of development and protection to the endangered and threatened species, all involved and interested parties in the HCP process should be conscious that even the most biologically sound HCPs represent a compromise. Such compromise always represents a loss in the range of the species.

However, the endangered and threatened species do not need compromises but protection despite the economic losses this may represent. Effective land use planning and growth management techniques should allow for development without taking any of the listed species and their habitats. Since at the moment this does not seem possible, HCPs are necessary to negotiate an agreement that minimizes the taking while at the same time allowing the development of the proposed activities.

Because HCPs are necessary, it is important to carefully analyze and monitor their performance aiming at improve their process to achieve a truly “no net loss” settlement for the endangered and threatened species, which may improve their chance for survival and recovery in the wild. This research study shows that a very important component of this improvement is to make them more open and participatory processes where all interested parties, especially biologists and environmentalists, should have the opportunity to influence the design of the plan. Finally, to ensure that the HCP is based on relevant data for the target species and that it truly minimizes the impact, the final version of the HCP should always be “peer reviewed” before the approval of the ITP by the agency.

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APPENDIX A

Figure A1. Typical Processing Steps for Low-effect ITP Applications

Source: US Fish and Wildlife Service and National Marine Fisheries Service, *Endangered Species Habitat Conservation Planning Handbook* Washington DC. 1996.

Figure A2. Typical Processing Steps for ITP Applications Requiring an EA

Source: US Fish and Wildlife Service and National Marine Fisheries Service, *Endangered Species Habitat Conservation Planning Handbook* Washington DC. 1996.

Figure A3. Typical Processing Steps for ITP Applications Requiring an EIS

Source: US Fish and Wildlife Service and National Marine Fisheries Service, *Endangered Species Habitat Conservation Planning Handbook* Washington DC. 1996.

APPENDIX B

APPROVED HCPs IN CALIFORNIA BY OCTOBER 1998.

GROUP 1: 0 to 100 acres

Total Plans = 27

	Acreage
1. Basin A-Willow Pass Grade	5.00
2. Bennett Property	5.00
3. Blackhawk	5.00
4. Champagne Shores	82.00
5. Chevron Pipeline	25.50
6. Citation Builders Ridge at Cresta Verde	22.00
7. City of Marisville	27.00
8. City of Waterford	5.00
9. Coalinga Cogeneration	6.50
10. Colton Transmission Line	8.00
11. Coyote Hills East (Unocal)	45.00
12. Envirocycle	20.00
13. Granite Construction, Phase 1	54.00
14. John Laing Homes, Cantara Completion	44.00
15. John Laing Properties, Inc.	30.00
16. Lennane Properties	48.00
17. Los Osos Center	5.50
18. Maxwell Irrigation District	2.50
19. North of Playa	33.00
20. Pacific Gateway Homes	27.00
21. Parkside Homes	25.40
22. Quail Hollow Quarry (Short Term)	32.00
23. Raley's Landing	13.70
24. San Bruno Mountain 1	35.00
25. San Bruno Mountain 2	19.00
26. San Bruno Mountain 3	40.00
27. Yucca Valley Church Sites	5.00

GROUP 2: 101 to 10,000 acres

Total Plans = 21

	Acreage
1. California City Prison	425.00
2. Corona Development Company	715.00
3. Cushenbury Sand & Gravel	200.00
4. Delano State Prison	635.00
5. Fieldstone Transfer	1,918.00
6. Kern County Waste Facilities	1,500.00
7. Lake Mathews	5,110.00
8. Meadowlark Estates	214.00
9. Ocean Trails	270.00
10. Quali Hollow Quarry (Long Term)	220.00

11.	Regli Estate	500.00
12.	Riverside County SKR	4,400.00
13.	San Bruno Mountain	3,000.00
14.	San Bruno Mountain 4	230.00
15.	Seascape Uplands	192.00
16.	Seneca -Enron	650.00
17.	Shell Oil Company	3,216.00
18.	Sunland Communities, Inc.	160.00
19.	Teichert Vernalis Project, phases 1-2	497.00
20.	Wilder Quarry	125.00
21.	Wildwash Sand and Gravel Mine	200.00

GROUP 3: 10,001 to 582,243 acres

Total Plans = 11

Acreage

1.	San Diego Gas & Electric Plan	
2.	ARCO Western Energy	120,320.00
3.	Coachella Valley	70,000.00
4.	Kern Water Bank	19,900.00
5.	Metropolitan Bakersfield	262,000.00
6.	Multi-Species Conservation Program-City of San Diego	582,243.00
7.	Natomas	53,342.00
8.	Orange County Central/Coastal NCCP	208,000.00
9.	Poway Subarea NCCP	25,000.00
10.	Riverside County SKR	540,000.00
11.	Simpson Timber Company	380,000.00

APPENDIX C

SAMPLE HCPs

SMALL PLANS (0 to 100 acres)

<i>Code</i>	<i>Plan</i>	<i>USFWS, ITP Number</i>
101	Chevron Pipeline	PRT-807634
102	Citation Builders Ridge at Cresta Verde	PRT-760140
103	Coyote Hills East (Unocal)	PRT-768184
104	Envirocycle	PRT-771172
105	John Laing Properties, Inc.	PRT-835424
106	Los Osos Center	PRT-844723
107	Quail Hollow Quarry. Graniterock Company. (Short Term)	PRT-830417
108	Raley's Landing	PRT-829945
109	San Bruno Mountain. Amendment 1	PRT-2-9818
110	San Bruno Mountain. Amendment 3	PRT-2-9818

MODERATE PLANS (101 to 10,000 acres)

<i>Code</i>	<i>Plan</i>	<i>USFWS, ITP Number</i>
201	Corrections Corporation of America. California City Prison	PRT-842781
202	Cushenbury Sand & Gravel	PRT-795218
203	California Department of Corrections. Delano State Prison	PRT-744882
204	Ocean Trails	PRT-799348
205	Quail Hollow Quarry. Graniterock Company. (Long Term)	PRT-830417
206	Estate of Edward V. Regli	PRT-803749
207	Riverside County SKR (Short Term)	PRT-739678
208	San Bruno Mountain	PRT-2-9818
209	Sunland Communities, Inc.	PRT-757505
210	Teichert Vernalis & Son Project, phases 1-2	PRT-820643

LARGE PLANS (10,001 to 582,243 acres)

<i>Code</i>	<i>Plan</i>	<i>USFWS, ITP Number</i>
301	ARCO Western Energy	PRT-809228
302	Coachella Valley	PRT-698685
303	Kern Water Bank	PRT-828086
304	Metropolitan Bakersfield	PRT-786634
305	Multi-Species Conservation Program-City of San Diego	PRT-830421
306	Natomas	PRT-823773
307	Orange County Central/Coastal NCCP	PRT-810569
308	Poway Subarea NCCP	PRT-803743
309	Riverside County SKR (Long Term)	PRT-805414
310	Simpson Timber Company	PRT-767798

APPENDIX D

SURVEY

SURVEY
on
HABITAT CONSERVATION PLANS

I am an Environmental Studies graduate student at San Jose State University. I am studying public participation in the development of Habitat Conservation Plans (HCPs) in the state of California. A number of these plans were selected randomly including the one in which you participated. I am sending this survey to the participants in those HCPs. Your personal help would be very much appreciated. This survey is anonymous. Please, do not put your name on this questionnaire.

This survey is also voluntary. Your consent to participate will be implied if you complete and mail back this questionnaire. Declining to participate will not generate adverse consequences to you. Should you wish to complain about any aspect of the survey, please contact Barbara Pederzoli (408) 243-7589. For questions or complaints about research subjects' rights or in the event of any research-related injury, please contact Dr. Nabil Ibrahim, Acting Associate VP of Graduate Studies and Research (408) 924-2480.

If you would like a summary of the survey's results, please send your name and address in a separate envelope to:

Barbara Pederzoli
1877 Scott Blvd. #104
Santa Clara, CA 95050.

After completing this questionnaire, please mail it back in the enclosed pre-paid and self addressed envelope. Thank you very much.

Barbara Pederzoli.
Graduate Student
Environmental Studies Department
San Jose State University.

All paper materials used in this survey are recycled products with a minimum of 20% post-consumer waste content.

QUESTIONNAIRE

All the questions deal with your own personal experience with the process. The first six questions ask about a few general issues regarding your participation in the plan.

From the list, select the name of the plan in which you participated (select only one):

If you participated in more than one plan listed here please send one survey for each plan.

☐ ARCO Western Energy	☐ Natomas
☐ California City Prison	☐ Ocean Trails
☐ Champagne Shores	☐ Orange County Central/Coastal NCCP
☐ Chevron Pipeline	☐ Poway Subarea NCCP
☐ Citation Builders Ridge at Cresta Verde	☐ Quail Hollow Quarry (short term)
☐ Coachella Valley	☐ Quail Hollow Quarry (long term)
☐ Coyote Hills East (Unocal)	☐ Parkside Homes
☐ Cushenbury Sand & Gravel	☐ Raley's Landing
☐ Delano State Prison	☐ Regli Estate
☐ Envirocycle	☐ Riverside County SKR (short term)
☐ John Laing Homes, Cantara Completion	☐ Riverside County SKR (long term)
☐ Kern County Waste Facilities	☐ San Bruno Mountain
☐ Kern Water Bank	☐ San Bruno Mountain 1
☐ Los Osos Center	☐ San Bruno Mountain 3
☐ Metropolitan Bakersfield	☐ Simpson Timber Company
☐ Multi-Species Cons. Prog. City of San Diego.	☐ Sunland Communities, Inc.
	☐ Teichert Vernalis Project, phases 1-2
	☐ Other (specify): _____

2. During what phase of the plan did you actively participate (check all that apply)?

- ☐ Phase 1 of the plan: when the plan is being drafted.
- ☐ Phase 2 of the plan: during the public comment period, as required by the Incidental Taking Permit process.
- ☐ Phase 2 of the plan: during the public comment, as required by the NEPA-CEQA process.
- ☐ Phase 3 of the plan: during the implementation of the plan, after the USFWS issued the Incidental Taking Permit.
- ☐ Other (specify): _____

3. What interest (s) did you represent in the plan (check all that apply)?

☐ Applicant	☐ Government Personnel not in Federal and State Wildlife Agencies
☐ Land Developer	☐ Government Personnel in Federal and State Wildlife Agencies
☐ Development Community	☐ Local Government
☐ Landowner - Property owner	☐ Recreational Land User
☐ Affected Industry	☐ Independent Biologist (external to negotiation)
☐ Company Employee	☐ Tribal Interest
☐ Industry Group People	☐ Other (specify): _____
☐ Affected Community Member	
☐ Academic	
☐ Environmental Individual	
☐ Environmental Group Member	

4. Please identify the form (s) of your participation (check all that apply):

☐ Steering Committee	☐ Workshops
☐ Advisory Committee	☐ Letter Writing
☐ Science Advisory Board	☐ Comments (public comment period)
☐ Citizen Involved in the Negotiation	☐ Mailing of Materials
☐ Public Meetings	☐ Surveys
☐ Public Hearings	☐ Other (specify): _____
☐ Presentations	

5. During your participation in the plan, how did you receive information relative to the plan (check all that apply)?

☐ Mailing of Materials	☐ Environmental Groups
☐ Electronic Mail	☐ Workshops
☐ Telephone	☐ Requested Information to the Agency
☐ Television	☐ Federal Register Notice
☐ Radio	☐ Advisory Committee/Steering Committee
☐ USFWS Web Site	☐ Public Meetings/Hearings
☐ Other Web Site	☐ Other(specify)_____
☐ Community Groups	

6. How did you attempt to influence the decision-making of the plan (check all that apply)?

Letter Writing to the Agency

Actively Participating in Public Meetings/Hearings

Participating in the Advisory Committee/Steering Committee

Other (specify): _____

On a scale from 1 to 9, where 1 represents the lowest and 9 the highest, please circle your level of agreement with each of the statements according to your own experience. If you are not sure about any of the statements please leave it blank.

7. Please rate the accessibility to the information relative to the plan provided by the USFWS agency.

Not accessible		Moderately						Very accessible	
1	2	3	4	5	6	7	8	9	

8. Please rate the accessibility to the information relative to the plan provided by other sources than the USFWS.

Not accessible		Moderately						Very accessible	
1	2	3	4	5	6	7	8	9	

9. Please rate how much influence do you believe you had on the final, approved version of the plan.

Very little or none				Moderate Amount				A great deal
1	2	3	4	5	6	7	8	9

10. In general terms, the final version of the plan addressed your concerns about it.

Very little or not at all				Moderately				Very much
1	2	3	4	5	6	7	8	9

11. The final version of the plan included or addressed concerns expressed by the general public.

Very little or not at all				Moderately				Very much
1	2	3	4	5	6	7	8	9

12. The final version of the plan adequately protects the endangered and threatened species at stake and their habitat.

Definitely No				Somewhat				Definitely Yes
1	2	3	4	5	6	7	8	9

13. The final version of the plan overprotected the endangered and threatened species at stake affecting negatively the interests of the other groups involved.

Definitely No				Somewhat				Definitely Yes
1	2	3	4	5	6	7	8	9

14. The final version of the plan reflects a balanced agreement among all the parties involved in the negotiation.

Very little or not at all				Somewhat				Very much
1	2	3	4	5	6	7	8	9

15. The final version of this plan could have protected more the endangered and threatened species at stake while at the same time satisfying the various interests of other groups.

Definitely false				Maybe				Definitely true
1	2	3	4	5	6	7	8	9

If you wish to add any comment, please feel free to use the space below.

Thank you very much for your time and your help with this survey.

APPENDIX E

DATA-SHEET

1. MYCODE _____

(-1) Could not be determined/Data Info does not exist (-2) Not applicable

GENERAL INFORMATION

2. Lead Office: _____

3. Lead Biologist: _____

4. Number of permittees: _____

5. Permittees:

6. ITP No: _____

7. Location (county): _____

8. The proposed development required a NEPA - CEQA document:

- ☐ EIS - EIR
- ☐ EA-IS (FONSI-NEG-DEC)
- ☐ No (Low effect)

9. Renewable:

- ☐ Yes
- ☐ No

10. Effective: _____

11. Expires: _____

12. Duration (years): _____

13. Plan's duration (categories):

- ☐ Short (up to 5 years)
- ☐ Medium (>5 to 20 years)
- ☐ Long (> 20 years)
- ☐ In perpetuity

14. Total area covered by the HCP (acres): _____

15. Total area of habitat supporting the species covered in the HCP area:

- a) acres: _____
- b) % of HCP: _____

16. Plan's area category:

- ☐ Small (0 to 100 acres)
- ☐ Medium (101 to 10,000 acres)
- ☐ Large (10,001 to 664,000 acres)

17. Extent of the plan:

- ☐ Local (one county or less)
- ☐ Regional (multi-county)
- ☐ State
- ☐ Multi-state
- ☐ Other

18. The ecological approach of the plan is:

- ☐ A single species plan
- ☐ A multiple species plan
- ☐ A habitat based plan

19. Total number of species covered by the permit _____

20. Species considered:

21. The species taxonomic group are (circle all that apply):

- a. animal species, mammals
- b. animal species, reptiles/amphibians
- c. animal species, invertebrates
- d. animal species, birds
- e. animal species, fish
- f. plant species

22. Type of owner of land (circle all that apply):

- a. Private companies/Individuals
- b. Local government
- c. State government
- d. Other

23. Primary preparer(s) of HCP:

- ☐ Private consulting firm
- ☐ Academic scientists
- ☐ Employees of permittee
- ☐ Employees of local government
- ☐ Employees of state government
- ☐ Federal employees
- ☐ Steering committee

24. Identify the primary of the following as permit-motivating activities:

- ☐ Logging
- ☐ Building of houses
- ☐ Building of offices
- ☐ Building of commercial
- ☐ Buildings (other): _____
- ☐ Agriculture
- ☐ Livestock grazing
- ☐ Dams
- ☐ Water diversions
- ☐ Highway building
- ☐ Off road vehicles
- ☐ Mining/Oil exploration
- ☐ Grading controls
- ☐ General Development/Urbanization

25. The plan covers (circle all that apply):

- a. Listed species that occur in the area and are likely to be taken
- b. Listed species that occur in the area
- c. Candidate species that occur in the area and are likely to be taken
- d. Candidate species that occur in the area
- e. Species of special concern (according to state of CA) that occur in the area and are likely to be taken
- f. Species of special concern (according to state of CA) that occur in the area
- g. All species that occur in the area

26. Does the plan contains the "No surprises" clause?

- ☐ Yes
- ☐ No

27. Will the primary impact be permanent and irreversible (housing development) or temporary and at least partially reversible(timber harvest):

- ☐ Permanent
- ☐ Temporary

BIOLOGICAL SOUNDNESS SECTION

RISK AVERSION/Precautionary Principle: Weighted Value=Points/Max.Points

28. Information was lacking to make a scientifically based decision?
- ☐ Yes for all species covered
 - ☐ Yes for some of the species covered
 - ☐ No
29. If yes to 25, were risk-aversion management actions used to compensate for the uncertainty?
- ☐ Yes
 - ☐ No
30. What management action was (were) used to compensate for uncertainty (circle all that apply):
- a. Reduce the duration of the ITP
 - b. Reduce the impacted area
 - c. Avoid Impact
 - d. Restrict impact to reversible impacts
 - e. Mitigation measures will be implemented before the taking
 - f. Include contingencies. Adaptive management
 - g. Other

SPECIE LOSS, HABITAT LOSS and FRAGMENTATION: Weighted Value=Points/Max.Points

31. Habitat area that will be impacted by the proposed activities covered in the HCP:
- a. acres _____
 - b. % of HCP area: _____
 - c. % of Habitat area: _____
32. Habitat area that will remain undisturbed by the proposed activities covered in the HCP:
- a. acres _____
 - b. % of HCP area: _____
 - c. % of Habitat area: _____
33. Impacted and non-impacted habitat area on site that will be improved or restored through mitigation measures:
- a. acres _____
 - b. % of HCP area: _____
34. Does the implementation of the plan increase significantly the level of fragmentation of the existing habitat?
- ☐ Yes (any covered species can not percolate through)
 - ☐ No (there are clear connections for the most part over the landscape)
35. Does the plan provide connection of the protected landscape with open space?
- ☐ Yes (there are clear connections for the most part over the landscape)
 - ☐ No (any covered species can not percolate through)

36. Does the plan maintain large intact patches of native vegetation?
- ☐ Yes (50% or > of the original size)
 - ☐ No (< 50 % of the original size)
37. Does the plan protect rare landscape elements by developing areas with common features?
- ☐ Yes
 - ☐ No
38. Does the plan maintain buffers between areas developed and wildlife habitat?
- ☐ Yes
 - ☐ No
39. Does the plan require the developer to mimic features of the surrounding natural landscape inside the development areas?
- ☐ Yes
 - ☐ No
40. For how long will the habitat be protected:
- ☐ Short term (less than 10 years)
 - ☐ More than 10 years but less than duration of HCP
 - ☐ Equal duration of HCP
 - ☐ Longer than HCP duration
 - ☐ In perpetuity

SPECIE STATUS: Weighted Value=Points/Max.Points

41. For the species covered, does the plan assess the species status?
- ☐ Yes for all species covered
 - ☐ Yes for some of the species covered
 - ☐ No
42. The assessment of the current status of the considered species clearly identify the following (circle all that apply):
- a. Population size
 - b. Trends in population
 - c. Quality of most remaining feeding, breeding and migration habitat and trends in habitat quality
 - d. Amount of most remaining feeding, breeding and migration habitat and trends in habitat quantity
 - e. Primary threats to the covered species
 - f. Cumulative effect

43. Specify the primary threats to the covered species identified in the plan (circle all that apply):

- a. Habitat loss
- b. Degradation
- c. Fragmentation
- d. Diseases
- e. Pollution
- f. Dams
- g. Invasives
- h. Grazing
- i. Predators
- j. Rarity
- k. Climate change
- l. Pollution
- m. Off road vehicles
- n. Recreational users
- o. Mining

44. Type of data used in the assessment of the species status:

- ☐ Global
- ☐ Local (in the HCP area)
- ☐ Both

TAKE: Weighted Value=Points/Max.Points

45. For the species covered, will take occur?

- ☐ Yes for all species covered
- ☐ Yes for some of the species covered
- ☐ Not sure
- ☐ No

46. For the species to be taken, does the plan quantify the take (predicts the percentage or number of the impacted population that will be taken)?

- ☐ Yes for all species covered
- ☐ Yes for some of the species covered
- ☐ No

47. Are life-stages, sex, etc of individuals to be taken estimated?

- ☐ Yes
- ☐ No

48. The taking was estimated by:

- ☐ Calculation of habitat loss
(relationship between habitat area and expected number of individuals contained within that habitat)
- ☐ Calculation of loss or displacement of individuals of species
(relationship between census of population and prediction of portion that will be lost)
- ☐ Both

49. Data to estimate taking was based on the following types of known information:

- a. General, unspecific expert opinion
- b. Loss of general habitat for the species
- c. Loss in the number of individuals
- d. General population densities
- e. Habitat size and specific densities
- f. Population sizes and trends in population
- g. Demographic rates/models
- h. Movement abilities of individuals
- i. Effect of extrinsic forces (climate changes and invasive species)
- j. Habitat fragmentation
- k. Pollution and other indirect impacts.

50. Is there a monitoring plan proposed to monitor the take and population status for the covered species?

- ☐ Yes for all covered species
- ☐ Yes for some of the covered species
- ☐ No

51. What data will be collected and analyzed to monitor take and population status for the covered species?

- a. Physiological and behavioral data
- b. Population densities
- c. Population size
- d. Population trends
- e. Quality of most remaining feeding, breeding and migration habitat and trends in habitat quality
- f. Amount of most remaining feeding, breeding and migration habitat and trends in habitat quantity
- g. Survival rates
- h. Reproductive rates
- i. Growth rates
- j. Genetic data
- k. Movement rates
- l. Invasive species data
- m. Climate change data
- n. Diseases data
- o. Pollution

IMPACT: Weighted Value=Points/Max.Points

52. For the species covered, does the plan quantify the projected impact?

- ☐ Yes for all species covered
- ☐ Yes for some of the species covered
- ☐ No

53. The data used to evaluate the effects of the take on the species included are (circle all that apply):

- a. Population size
- b. Number of individuals killed or displaced
- c. Trends in population
- d. Quality of most remaining feeding, breeding and migration habitat and trends in habitat quality
- e. Amount of most remaining feeding, breeding and migration habitat and trends in habitat quantity
- f. Primary threats to the covered species
- g. Cumulative effect of impacts

54. The data used in the assessment of the species impact was?

- ☐ Global
- ☐ Local (in the HCP area)
- ☐ Both

MITIGATION and MINIMIZATION: Weighted Value=Points/Max.Points

55. Does the plan provide evidence (cite references) that mitigation/minimization measures will work for each species listed on the permit?

- ☐ Yes
- ☐ No

56. Does the mitigation plan address the primary threats to the covered species continued existence?

- ☐ Yes
- ☐ No

57. The adopted mitigation measures provided in the plan are(circle all that apply):

- a. Avoidance of impacts while still doing the proposed activity
- b. Minimization of impacts, while still doing the proposed activity
- c. Land acquisition
- d. Conservation easements
- e. Habitat banks (ratio): _____
- f. Translocations
- g. Restoration of habitat areas (ratio): _____
- h. Money for research
- i. Creation of buffer areas on site _____
- j. Other _____

58. Duration in years of the mitigation efforts?

- ☐ Less than the duration of the HCP
- ☐ Same as the duration of the HCP
- ☐ More than the duration of the HCP
- ☐ In perpetuity

MONITORING MITIGATION: Weighted Value=Points/Max.Points

59. Is there a monitoring plan proposed to monitor the mitigation measures proposed by the HCP?

- ☐ Yes
- ☐ No

60. Does the monitoring provide for the evaluation of the mitigation efforts? I.e The plan includes indicators for success and failure. There is specific criteria for deciding if mitigation activities are working.
- ☐ Yes for all proposed mitigation measures
 - ☐ Yes for some of the proposed mitigation measures
 - ☐ No
61. Are contingent actions considered in the event of failure?
- ☐ Yes
 - ☐ No
62. What data will be collected and analyzed to monitor mitigation success for the covered species?
- a. Physiological and behavioral data
 - b. Population densities
 - c. Population size
 - d. Population trends
 - e. Quality of most remaining feeding, breeding and migration habitat and trends in habitat quality
 - f. Amount of most remaining feeding, breeding and migration habitat and trends in habitat quantity
 - g. Survival rates
 - h. Reproductive rates
 - i. Growth rates
 - j. Genetic data
 - k. Movement rates
 - l. Invasive species data
 - m. Climate change data
 - n. Diseases data
 - o. Pollution
63. Duration in years of all the monitoring efforts?
- ☐ Less than the duration of the HCP
 - ☐ Same as the duration of the HCP
 - ☐ More than the duration of the HCP
 - ☐ In perpetuity
64. Does the plan considers a long-term adaptive management? (i.e. there is a plan to change HCP strategy in response to the monitoring information)
- ☐ Yes
 - ☐ No
65. Does the plan considers unforeseen circumstances?
- ☐ Yes
 - ☐ No
66. In the event of unforeseen circumstances does the plan provides mitigation actions?
- ☐ Yes
 - ☐ No

ALTERNATIVES ANALYZED: Weighted Value=Points/Max.Points

67. Did the alternatives analyzed focus only on the “no action” ?
- ☐ Yes
 - ☐ No

68. If other alternative(s) than the no action was(were) considered, did the alternative(s) focus on avoiding some of the incidental taking?

a)

- ☐ Yes
- ☐ No

b) If Yes: specify the reason(s) for not following the alternative(s) _____

FUNDING: Weighted Value=Points/Max.Points

69. Does the plan provides clear funding for mitigation and monitoring?

- ☐ Yes
- ☐ No

70. What are the primary funding methods listed in the plan (check all that apply)?

- a. One-time development fees
- b. Continuing (yearly) development fees
- c. Tax check-off programs
- d. Assessment districts under stae, city or county ordinances
- e. Direct contribution from state, city or county funds
- f. Federal funds
- g. Funds from other private sources (ie. Conservation groups)
- h. Other _____

71. Timing of funding:

- ☐ Most funds generated as impacts occur
- ☐ Funds substantially established before impacts occur
- ☐ Both

72. Does the plan provides future adjustments to ensure funding for contingency and monitoring?

- ☐ Yes
- ☐ No

PUBLIC PARTICIPATION SECTION

TIME OF PARTICIPATION: Weighted Value=Points/Max.Points

73. There was participation during (circle all that apply) :

- a. phase I
- b. phase II
- c. phase III

FORM OF PARTICIPATION: Weighted Value=Points/Max.Points

74. Circle all forms of participation occurred in the process of the plan:

- a. Steering Committee
- b. Advisory Committee (science advisory board)
- c. Public meetings
- d. Public hearings
- e. Presentations
- f. Workshops
- g. Comments (public comment period)
- h. Comments (not public comment period)
- i. Mailing of materials
- j. Other _____

75. Circle the form(s) of participation at phase I:

- a. Steering Committee
- b. Advisory Committee (science advisory board)
- c. Public meetings
- d. Public hearings
- e. Presentations
- f. Workshops
- g. Comments (not public comment period)
- h. Mailing of materials
- i. Other _____

76. Circle the form(s) of participation at phase II:

- a. Steering Committee
- b. Advisory Committee (science advisory board)
- c. Public meetings
- d. Public hearings
- e. Presentations
- f. Workshops
- g. Comments (public comment period)
- h. Comments (not public comment period)
- i. Mailing of materials
- j. Other _____

77. Circle the form(s) of participation at phase III:

- a. Steering Committee
- b. Advisory Committee (science advisory board)
- c. Public meetings
- d. Public Hearings
- e. Presentations
- f. Workshops
- g. Comments (not public comment period)
- h. Mailing of materials
- i. Other _____

INFLUENCE OF PARTICIPATION: Weighted Value=Points/Max.Points

If a steering committee, and/or an advisory committee, and/or other direct form of participation was (were) used answer the following questions, otherwise go to question 82:

78. For all forms of participation used, circle the stakeholders that were involved in the negotiation:

- a. Federal wildlife agencies
- b. Land developers/Affected industries
- c. Legal representatives
- d. Federal personnel not in wildlife agencies
- e. Local government personnel
- f. Environmental organizations
- g. Independent community members
- h. Independent biologists /Consultants
- i. Academics
- j. Tribal interests
- k. Community organizations
- l. State personnel
- m. Military

79. For the forms of participation circled in question 78, specify the number of stakeholders that participated by group:

- a. Federal wildlife agencies:
- b. Land developers/Affected industries:
- c. Legal representatives:
- d. Federal personnel not in wildlife agencies:
- e. Local government personnel:
- f. Environmental organizations:
- g. Independent community members:
- h. Independent biologists /Consultants:
- i. Academics:
- j. Tribal interests:
- k. Community organizations:
- l. State personnel:
- m. Military:

80. Circle the groups that participated only in steering committees and/or advisory boards:

- a. Federal wildlife agencies
- b. Land developers/Affected industries
- c. Legal representatives
- d. Federal personnel not in wildlife agencies
- e. Local government personnel
- f. Environmental organizations
- g. Independent community members
- h. Independent biologists /Consultants
- i. Academics
- j. Tribal interests
- k. Community organizations
- l. State personnel
- m. Military

81. Specify the number of stakeholders that participated in steering committees and/or advisory boards by group:

- a. Federal wildlife agencies:
- b. Land developers/Affected industries:
- c. Legal representatives:
- d. Federal personnel not in wildlife agencies:
- e. Local government personnel:
- f. Environmental organizations:
- g. Independent community members:
- h. Independent biologists /Consultants:
- i. Academics:
- j. Tribal interests:
- k. Community organizations:
- l. State personnel:
- m. Military:

82. Were requests for information received during the development of the plan?

- ☐ Yes
- ☐ No

83. Were comments received during the development of the plan including the public comment period?

- ☐ Yes
- ☐ No

84. How many comments were received in total? _____

85. Rate the overall influence (ability to produce changes to the plan) of all participant group in the plans design (1=Significant; 2=Minor; 3=Not at all):

86. Were substantial issues raised by the comments? How many? _____

- ☐ Yes
- ☐ No

APPENDIX F

Table A1. Description of Point Assignment

VARIABLE	COMPONENT	Maximum achievable (e all questions)	Question From Data-Sheet	Question From Survey	Points assignment to the responses of the question	Question total possible points
Level of Participation (from documentation)	Time	4	D-73		Phase I=3 Phase II=1 Phase III=0 (documentation available did not allow to assess participation during this phase of the plan).	4
	Form	3	D-74		Steering committees=3 Advisory committees=3 Public meetings=2 Public hearings=2 Presentations=2 Workshops=2 Comments (public comment)=1 Other comments=1 Mailing of materials=1 Other=1	18/6=3 (weighted)
	Influence	12	D-78		USFWS=0 Land developer/Affected industry=1 Legal representative=1 Federal Gov. not in USFWS=1 Local government=1 Environmentalists=2 Independent community=2 Consultant and biologists=2 Academics=2 Tribal interests=2 Community organizations=2 State Gov. personnel=1 Military=1	18/6=3 (weighted)

VARIABLE	COMPONENT	Maximum achievable (# all questions)	Question From Data-Sheet	Question From Survey	Points assignment to the responses of the question	Question total possible points
...continued Level of Participation (from documentation)	...continued Influence		D-80		USFWS=0 Applicant employees=0 Land developer/Affected industry=1 Federal Gov. not in USFWS=1 Local and state gov.=1 Environmentalists=2 Independent individuals=2 Consultant and biologists=2 Academics=2	11/3.67=3 (weighted)
			D-82		Yes=1 No=0	1
			D-83		Yes=1 No=0	1
			D-85		Significant=3 Minor=1 None=0	3
			D-86		Yes=1 No=0	1
			D-31		0 to 33 acres=3 34 to 66 acres=1 67 to 100 acres=0	3
Biological Soundness (from documentation)	Habitat	15	D-33		0 to 33 acres=1 34 to 66 acres=2 67 to 100 acres=3	3
			D-34		Yes=0 No=1	1
			D-35		Yes=1 No=0	1
			D-36		Yes=1 No=0	1

VARIABLE	COMPONENT	Maximum achievable (e all questions)	Question From Data-Sheet	Question From Survey	Points assignment to the responses of the question	Question total possible points
...continued Biological Soundness (from documentation)	...continued Habitat		D-37		Yes=1 No=0	1
			D-38		Yes=1 No=0	1
			D-39		Yes=1 No=0	1
			D-40		Perpetuity=3 Longer than the plan=2 Same as the plan=1 Less than the plan=0	3
			D-41		Yes for all=3 Yes for some=1 No=0	3
Biological Soundness (from documentation)	Species Status	9	D-42		Pop. Size=1 Pop. Trends=1 Habitat quality and trends=1 Habitat quantity and trends=1 Primary threats=1 Cumulatives=1	6/2=3 (weighted)
			D-44		Both=3 Local only=1 Global only=1	3
			D-46		Yes for all=3 Yes for some=1 No=0	3
			D-47		Yes=1 No=0	1
	Take	10				

VARIABLE	COMPONENT	Maximum achievable (e all questions)	Question From Data-Sheet	Question From Survey	Points assignment to the responses of the question	Question total possible points
... continued Biological Soundness (from documentation)	... continued Take		D-49		Loss of habitat=2 Loss of individuals=2 General pop. Density=2 Specific pop. Density=2 Pop. size and trends=2 Demographic models=1 Habitat fragmentation=1	12/4=3 (weighted)
			D-50		Yes for all=3 Yes for some=1 No=0	3
			D-52		Yes for all=3 Yes for some=1 No=0	3
	Impact	9	D-53		Population size=1 Individuals killed/displaced=1 Trends in population=1 Quality of habitat=1 Quantity of habitat=1 Primary threats=1	6/2=3 (weighted)
			D-54		Both=3 Local only=1 Global only=1	3
			D-55		Yes=3 No=0	3
	Mitigation	6	D-56		Yes=3 No=0	3
			D-59		Yes=3 No=0	3
	Monitoring	15	D-60		Yes for all=3 Yes for some=1 No=0	3

VARIABLE	COMPONENT	Maximum achievable (£ all questions)	Question From Data-Sheet	Question From Survey	Points assignment to the responses of the question	Question total possible points
...continued Biological Soundness (from documentation)	... continued Monitoring		D-61		Yes=3 No=0	3
			D-64		Yes=3 No=0	3
			D-65		Yes=1 No=0	1
			D-66		Yes=2 No=0	2
	Alternatives	2	D-67		Yes=0 No=1	1
			D-68		Yes=1 No=0	1
	Funding		D-69		Yes=3 Somehow=1 No=0	3
			D-71		Before=3 As occurs=0	3
Perceived Level of Participation			D-72		Yes=3 No=0	3
				S-7	N/A	9
	Access to information	9		S-8	N/A	9
	Access to decision-making	9		S-9	N/A	9
				S-10	N/A	9

APPENDIX G

APPROVAL OF THE HUMAN SUBJECTS REVIEW BOARD

Office of the Academic
Vice President
Associate Vice President
Graduate Studies and Research

One Washington Square
San Jose, CA 95128-0001
Voice: (408) 924-2480
Fax: (408) 924-2480
E-mail: ap@cs.sjsu.edu
<http://www.sjsu.edu>

TO: Barbara Pederzoli
1877 Scott Blvd., #104
Santa Clara, CA 95050

FROM: Nabil Ibrahim,
Acting AVP, Graduate Studies & Research

DATE: March 18, 1999

The Human Subjects-Institutional Review Board has approved
your request to use human subjects in the study entitled:

"Habitat Conservation Plans"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Nabil Ibrahim, Ph.D., immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at
(408) 924-2480.

The California State University:
Los Angeles Office
Fresno Office / Chico / Dominguez Hills
Fresno / Fullerton / Hayward / Long Beach
Long Beach / Los Angeles / Monterey
Monterey Bay / Northridge / Pomona
Sacramento / San Bernardino / San Diego
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San Marcos / Sonoma / Stanislaus

APPENDIX H

LIST OF SPECIES COVERED IN THE HCPs

HCP	Primary Listed and Unlisted Species
101	CJF, SJWT, HWS, KM, BNLL, GKR, SJKF, SKR
102	SKR
103	CG, CW
104	SJKF, KM, BNLL, SJAS, SNKR, GKR
105	DF
106	MSN
107	MHJB, ZBG, BLW, BLS
108	VELB
109	MBB, SBE, SFGS
110	MBB, SBE, SFGS
201	DT, MG, BRO, DC
202	DT
203	SJKF, BNLL, TKR
204	CG, CW, APH, OL, SCS, CML, SC, BGD
205	MHJB, ZBG, BLW, BLS
206	NSO, BE, PF, MM
207	SKR
208	MBB, SBE, SFGS
209	DT
210	SJKF, RLF, WBO
301	SJKF, BNLL, TKR, GKR, KM, HWS
302	CVFTL
303	SJKF, TKR, BNLL, GKR, PF, CCD, SWF, BE, LBV, VELB, GGS, RLF, ACG, FS
304	SJKF, BNLL, TKR, GKR, BC, CJF, SJWT, HWS, KW
305	FH, WSP, SWF, BE, BP, CG, LCR, CLT, LBV, ASWT, FS, EB, SMBB, SDBC, OT, COG, SDMM
306	PF, FS, CFS, VPTS, SOG, GGS, ACG, VELB, VPFS, CGG
307	CG, CW, OTWL, PF, LBV, SWF, ASWT, RFS, PPM
308	CG, ASWT, PF, SWF, LBV, RLF, BE, EB, WM
309	SKR
310	NSO

KEY TO THE SPECIES

Species Code	Species Name	Number of HCPs that covered each species
ACG	Aleutian Canada Goose	2
APH	Aphanisma	1
ASWT	Arroyo South-Western Toad	3
BC	Bakersfield Cactus	1
BE	Bald Eagle	4
BGD	Bright Green Dudleya	1
BLS	Ben Lomond Spineflower	2
BLW	Ben Lomond Wallflower	2
BNLL	Blunt Nosed Leopard Lizard	6
BP	Brown Pelican	1
BRO	Burrowing Owl	1
CCD	California Condor	1
CFS	Conservancy Fairy Shrimp	1
CG	California Gnatcatcher	5
CGG	Colusa Grass	1
CJF	California Jewelflower	2
CLT	California Least Tern	1
CML	Catalina Mariposa Lily	1
COG	California Orcutt Grass	1
CVFTL	Coachella Valley Fringe-toed Lizard	1
CW	Cactus Wren	3
DC	Desert Cymopteros	1
DF	Delhi Sands Flower Loving Fly	1
DT	Desert Tortoise	3
EB	Encinitas Baccharis	2
FH	Ferruginous Hawk	1
FS	Fairy Shrimp	3
GGS	Giant Garter Snake	2
GKR	Giant Kangaroo Rat	5
HWS	Hoover's Wollv-star	3
KW	Kern Mallow	1
LBV	Least Bell's Vireo	4
LCR	Light-footed Clapper Rail	1
MBB	Mission Blue Butterfly	3
MG	Mojave Ground Squirrel	1
MHJB	Mt. Hermon June Beetle	2
MM	Marbled Muurrelet	1
MSN	Morro Shoulderband Snail	1
NSO	Northern Spotted Owl	2
OL	Ocean Locoweed	1
OT	Otay Tar Plant	1
OTWL	Orange-Throated Wiptail Lizard	1
PF	Peregrine Falcon	5
PPM	Pacific Pocket Mouse	1
RFS	Riverside Fairy Shrimp	1
RLF	California Red-legged Frog	3
SBE	San Bruno Elfin Butterfly	3
SC	Seaside Calandrina	1
SCS	South Coast Saltscale	1
SDBC	San Diego Button Celery	1
SDMM	San Diego Mesa Mint	1
SFGS	San Francisco Garter Snake	3

SJAS	San Joaquin Antelope Squirrel	1
SJKF	San Joaquin Kit Fox	7
SJWT	San Joaquin Woolly-threads	2
SKR	Stephens' kangaroo Rat	4
SMBB	Salt Marsh Bird's Beak	1
SOG	Sacramento Orcutt Grass	1
SWF	South-western Willow Flycatcher	4
TKR	Tipton Kangaroo Rat	4
VELB	Valley Eldelberry Longhorn Beetle	3
VPFS	Vernal Pool Fairy Shrimp	1
WBO	Western Burrowing Owl	1
WM	Willow Monardella	1
WSP	Western Snowy Plover	1
ZBG	Zayante Band-Winged Grasshopper	2

APPENDIX I
FREQUENCY TABLES

DATA-SHEET: General Information Section**Lead Office**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Arcata	2	6.7	6.7	6.7
	Carlsbad	10	33.3	33.3	40.0
	Sacramento	12	40.0	40.0	80.0
	Ventura	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Location (County)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Del Norte, Humboldt, Mendocino, Trinity	1	3.3	3.3	3.3
	Humboldt	1	3.3	3.3	6.7
	Kern	7	23.3	23.3	30.0
	Los Angeles	1	3.3	3.3	33.3
	Orange	2	6.7	6.7	40.0
	Riverside	4	13.3	13.3	53.3
	Sacramento, Sutter	1	3.3	3.3	56.7
	San Bernardino	3	10.0	10.0	66.7
	San Diego	2	6.7	6.7	73.3
	San Joaquin	1	3.3	3.3	76.7
	San Luis Obispo	1	3.3	3.3	80.0
	San Mateo	3	10.0	10.0	90.0
	Santa Cruz	2	6.7	6.7	96.7
	Yolo County	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

NEPA-CEQA document required

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None required (Low Effect)	1	3.3	3.3	3.3
	EIS-EIR required	8	26.7	26.7	30.0
	ES-EA required (FONSI/NEG-DEC)	21	70.0	70.0	100.0
	Total	30	100.0	100.0	

Renewable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	3	10.0	10.0	10.0
	No	1	3.3	3.3	13.3
	Yes	26	86.7	86.7	100.0
	Total	30	100.0	100.0	

Plan duration (group)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Short (up to 5 years)	7	23.3	23.3	23.3
	Medium (>5 to 20 years)	4	13.3	13.3	36.7
	Long (>20 years)	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Habitat area supporting the species in the HCP area (acres)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be Determined/Data Info does not exist.	4	13.3	13.3	13.3
	.00	1	3.3	3.3	16.7
	.00	1	3.3	3.3	20.0
	.50	1	3.3	3.3	23.3
	3.40	1	3.3	3.3	26.7
	5.50	1	3.3	3.3	30.0
	20.00	1	3.3	3.3	33.3
	21.60	1	3.3	3.3	36.7
	25.00	1	3.3	3.3	40.0
	25.50	1	3.3	3.3	43.3
	48.50	1	3.3	3.3	46.7
	110.00	1	3.3	3.3	50.0
	113.31	1	3.3	3.3	53.3
	123.00	1	3.3	3.3	56.7
	160.00	1	3.3	3.3	60.0
	360.00	1	3.3	3.3	63.3
	417.00	1	3.3	3.3	66.7
	3300.00	1	3.3	3.3	70.0
	9712.00	1	3.3	3.3	73.3
	13776.00	1	3.3	3.3	76.7
	30000.00	1	3.3	3.3	80.0
	41546.00	1	3.3	3.3	83.3
	46201.00	1	3.3	3.3	86.7
	70356.00	1	3.3	3.3	90.0
	167667.00	1	3.3	3.3	93.3
	197760.00	1	3.3	3.3	96.7
	383100.00	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Habitat area supporting the species covered (% of HCP area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	3	10.0	10.0	10.0
	.00	1	3.3	3.3	13.3
	.00	1	3.3	3.3	16.7
	.02	1	3.3	3.3	20.0
	4.20	1	3.3	3.3	23.3
	5.80	1	3.3	3.3	26.7
	9.09	1	3.3	3.3	30.0
	9.44	1	3.3	3.3	33.3
	19.25	1	3.3	3.3	36.7
	21.75	1	3.3	3.3	40.0
	28.00	1	3.3	3.3	43.3
	28.80	1	3.3	3.3	46.7
	29.00	1	3.3	3.3	50.0
	33.00	1	3.3	3.3	53.3
	45.00	1	3.3	3.3	56.7
	48.80	1	3.3	3.3	60.0
	55.10	1	3.3	3.3	63.3
	56.69	1	3.3	3.3	66.7
	75.00	1	3.3	3.3	70.0
	78.39	1	3.3	3.3	73.3
	86.88	1	3.3	3.3	76.7
	95.00	1	3.3	3.3	80.0
	100.00	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Plan area categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Small (0 to 100 acres)	9	30.0	30.0	30.0
	Medium (101 to 10,000 acres)	11	36.7	36.7	66.7
	Large (10,001 to 664,000 acres)	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Extent of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local (one county or less)	28	93.3	93.3	93.3
	Regional (multi-county)	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Ecological approach of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A single species plan	12	40.0	40.0	40.0
	A multiple species plan	15	50.0	50.0	90.0
	A habitat based plan	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Number of Listed Species Covered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	36.7	36.7	36.7
	2	1	3.3	3.3	40.0
	3	5	16.7	16.7	56.7
	4	4	13.3	13.3	70.0
	6	2	6.7	6.7	76.7
	7	2	6.7	6.7	83.3
	9	2	6.7	6.7	90.0
	11	1	3.3	3.3	93.3
	15	1	3.3	3.3	96.7
	17	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Animal species, mammals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Animal species, reptiles/amphibians

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	36.7	36.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Animal species, invertebrates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Animal species, birds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Animal species, fish

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Plant species

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Owned by private companies/individuals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	16.7	16.7	16.7
	Yes	25	83.3	83.3	100.0
	Total	30	100.0	100.0	

Owned by Local Government

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Owned by State Government

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Primary Preparer of HCP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private consulting firm	19	63.3	63.3	63.3
	Employees of permittee	7	23.3	23.3	86.7
	Employees of local government	3	10.0	10.0	96.7
	Steering Committee	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Primary permit-motivating activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Logging	2	6.7	6.7	6.7
	Building of houses	5	16.7	16.7	23.3
	Building of commercial	2	6.7	6.7	30.0
	Building (others)	5	16.7	16.7	46.7
	Water diversions	1	3.3	3.3	50.0
	Mining/Oil exploration	5	16.7	16.7	66.7
	Urbanization	8	26.7	26.7	93.3
	Landslide/Grading controls	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

The plan covers (listed species that occur in the area and are likely to be taken)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	100.0	100.0	100.0

The plan covers (listed species that occur in the area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

The plan covers (candidate species that occur in the area and are likely to be taken)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

The plan covers (candidate species that occur in the area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	22	73.3	73.3	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

The plan covers (species of special concern -by CA- that occur in the area and are likely to be taken)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

The plan covers (species of special concern -by CA- that occur in the area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	22	73.3	73.3	73.3
	Ye	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

The plan covers (all species that occur in the area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Does the plan contains the "No surprises" clause?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	66.7	66.7	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Will the primary impact be permanent and irreversible?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	16.7	16.7	16.7
	Yes	25	83.3	83.3	100.0
	Total	30	100.0	100.0	

Will the primary impact be temporary and at least partially reversible?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

habitat area supporting the species covered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	53.3	61.5	61.5
	2	2	6.7	7.7	69.2
	3	8	26.7	30.8	100.0
	Total	26	86.7	100.0	
Missing	System	4	13.3		
Total		30	100.0		

habitat area as percentage of HCP area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined	3	10.0	10.0	10.0
	0-33%	13	43.3	43.3	53.3
	34-66%	4	13.3	13.3	66.7
	67-100%	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Risk-Aversion) Section

Information lacks to make scientifically based decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	17	56.7	56.7	56.7
	Yes for all species covered	6	20.0	20.0	76.7
	Yes for some of the species covered	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Were risk-aversion management actions used to compensate for the uncertainty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	36.7	36.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Management actions used to compensate for uncertainty (reduce the duration of the ITP)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Management actions used to compensate for uncertainty (reduce the impacted area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	25	83.3	83.3	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Management actions used to compensate for uncertainty (avoid impact)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Management action used to compensate for uncertainty (restrict impact to reversible impacts)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

**Management actions used to compensate for uncertainty (mitigation measures
will be implemented before the taking)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Management actions used to compensate for uncertainty (include contingencies, adaptive management)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Management actions used to compensate for uncertainty (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Habitat Loss) Section

Habitat area that will be impacted by the proposed activities covered in the HCP(acres)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	1	3.3	3.3	3.3
	0	1	3.3	3.3	6.7
	1	1	3.3	3.3	10.0
	3	1	3.3	3.3	13.3
	6	1	3.3	3.3	16.7
	20	1	3.3	3.3	20.0
	22	1	3.3	3.3	23.3
	25	1	3.3	3.3	26.7
	26	1	3.3	3.3	30.0
	37	1	3.3	3.3	33.3
	45	1	3.3	3.3	36.7
	49	1	3.3	3.3	40.0
	75	1	3.3	3.3	43.3
	105	1	3.3	3.3	46.7
	113	1	3.3	3.3	50.0
	123	1	3.3	3.3	53.3
	160	1	3.3	3.3	56.7
	287	1	3.3	3.3	60.0
	330	1	3.3	3.3	63.3
	628	2	6.7	6.7	70.0
	3521	1	3.3	3.3	73.3
	4400	1	3.3	3.3	76.7
	10041	1	3.3	3.3	80.0
	14240	1	3.3	3.3	83.3
	15000	1	3.3	3.3	86.7
	24526	1	3.3	3.3	90.0
	31618	1	3.3	3.3	93.3
	33819	1	3.3	3.3	96.7
	180000	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Habitat area that will be impacted by the proposed activities covered in the HCP(% of HCP area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	2	6.7	6.7	6.7
	0	1	3.3	3.3	10.0
	0	1	3.3	3.3	13.3
	0	1	3.3	3.3	16.7
	1	1	3.3	3.3	20.0
	3	1	3.3	3.3	23.3
	9	1	3.3	3.3	26.7
	9	1	3.3	3.3	30.0
	11	1	3.3	3.3	33.3
	12	1	3.3	3.3	36.7
	14	1	3.3	3.3	40.0
	14	1	3.3	3.3	43.3
	14	1	3.3	3.3	46.7
	15	1	3.3	3.3	50.0
	17	2	6.7	6.7	56.7
	22	1	3.3	3.3	60.0
	24	1	3.3	3.3	63.3
	29	1	3.3	3.3	66.7
	33	1	3.3	3.3	70.0
	45	2	6.7	6.7	76.7
	46	1	3.3	3.3	80.0
	47	1	3.3	3.3	83.3
	53	1	3.3	3.3	86.7
	100	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Habitat area that will be impacted by the proposed activities covered in the HCP(% of habitat area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	5	16.7	16.7	16.7
	19	2	6.7	6.7	23.3
	20	1	3.3	3.3	26.7
	26	1	3.3	3.3	30.0
	27	1	3.3	3.3	33.3
	41	1	3.3	3.3	36.7
	43	1	3.3	3.3	40.0
	44	1	3.3	3.3	43.3
	47	1	3.3	3.3	46.7
	50	1	3.3	3.3	50.0
	59	1	3.3	3.3	53.3
	70	1	3.3	3.3	56.7
	73	1	3.3	3.3	60.0
	79	1	3.3	3.3	63.3
	100	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Habitat area that will remain undisturbed by the proposed activities covered in the HCP(acres)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	6	20.0	20.0	20.0
	0	11	36.7	36.7	56.7
	65	1	3.3	3.3	60.0
	73	1	3.3	3.3	63.3
	92	1	3.3	3.3	66.7
	304	1	3.3	3.3	70.0
	4267	1	3.3	3.3	73.3
	10080	1	3.3	3.3	76.7
	12382	1	3.3	3.3	80.0
	15000	1	3.3	3.3	83.3
	17020	1	3.3	3.3	86.7
	17600	1	3.3	3.3	90.0
	19236	1	3.3	3.3	93.3
	38738	1	3.3	3.3	96.7
	203100	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Habitat area that will remain undisturbed by the proposed activities covered in the HCP(% of HCP area)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Could not be determined/Data info does not exist	6	20.0	20.0	20.0
0	11	36.7	36.7	56.7
3	1	3.3	3.3	60.0
3	1	3.3	3.3	63.3
5	1	3.3	3.3	66.7
15	1	3.3	3.3	70.0
17	1	3.3	3.3	73.3
18	1	3.3	3.3	76.7
20	1	3.3	3.3	80.0
21	1	3.3	3.3	83.3
32	1	3.3	3.3	86.7
34	1	3.3	3.3	90.0
40	1	3.3	3.3	93.3
53	1	3.3	3.3	96.7
63	1	3.3	3.3	100.0
Total	30	100.0	100.0	

Habitat area that will remain undisturbed by the proposed activities covered in the HCP(% of habitat area)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Could not be determined/Data info does not exist	7	23.3	23.3	23.3
0	11	36.7	36.7	60.0
21	1	3.3	3.3	63.3
27	1	3.3	3.3	66.7
30	1	3.3	3.3	70.0
41	1	3.3	3.3	73.3
50	1	3.3	3.3	76.7
53	1	3.3	3.3	80.0
55	1	3.3	3.3	83.3
57	1	3.3	3.3	86.7
59	1	3.3	3.3	90.0
73	1	3.3	3.3	93.3
73	1	3.3	3.3	96.7
80	1	3.3	3.3	100.0
Total	30	100.0	100.0	

Impacted and non-impacted habitat area on site that will be improved or restored through mitigation measures(acres)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	10	33.3	33.3	33.3
	0	12	40.0	40.0	73.3
	13	1	3.3	3.3	76.7
	46	1	3.3	3.3	80.0
	53	1	3.3	3.3	83.3
	60	1	3.3	3.3	86.7
	61	1	3.3	3.3	90.0
	348	1	3.3	3.3	93.3
	3000	1	3.3	3.3	96.7
	5592	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Impacted and non-impacted habitat area on site that will be improved or restored through mitigation measures(% of HCP area)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	10	33.3	33.3	33.3
	0	12	40.0	40.0	73.3
	2	1	3.3	3.3	76.7
	13	1	3.3	3.3	80.0
	15	1	3.3	3.3	83.3
	17	1	3.3	3.3	86.7
	24	1	3.3	3.3	90.0
	28	1	3.3	3.3	93.3
	54	1	3.3	3.3	96.7
	69	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Does the implementation of the plan increase significantly the level of fragmentation of the existing habitat?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	1	3.3	3.3	3.3
	Could not be determined/Data Info does not exist	6	20.0	20.0	23.3
	No	15	50.0	50.0	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Does the plan provides connection of the protected landscape with open space?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	5	16.7	16.7	30.0
	No	4	13.3	13.3	43.3
	Yes	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

Does the plan maintain large intact patches of native vegetation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	3	10.0	10.0	10.0
	No	8	26.7	26.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Does the plan protects rare landscape elements by developing ares with common features?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	14	46.7	46.7	53.3
	Yes	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

Does the plan maintains buffers between areas developed and wildlife habitat?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	6	20.0	20.0	20.0
	No	12	40.0	40.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Does the plan requires the developer to mimic features of the surrounding natural landscape inside the development areas?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	5	16.7	16.7	16.7
	No	15	50.0	50.0	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

For how long will the habitat be protected ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	3	10.0	10.0	10.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	13.3
	More than 10 years but less than the duration of HCP	1	3.3	3.3	16.7
	Equal duration of HCP	2	6.7	6.7	23.3
	Longer than HCP duration	8	26.7	26.7	50.0
	In perpetuity	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Percentage of existing habitat area impacted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 50%	10	33.3	40.0	40.0
	50% or more	15	50.0	60.0	100.0
	Total	25	83.3	100.0	
Missing	Could not be determined	5	16.7		
Total		30	100.0		

Ecological approach of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A single species plan	12	40.0	44.4	44.4
	A multiple species plan	15	50.0	55.6	100.0
	Total	27	90.0	100.0	
Missing	A habitat based plan	3	10.0		
Total		30	100.0		

Animal species, mammals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Animal species, reptiles/amphibians

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	36.7	36.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Animal species, invertebrates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Animal species, birds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Animal species, fish

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Plant species

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Owned by private companies/individuals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	16.7	16.7	16.7
	Yes	25	83.3	83.3	100.0
	Total	30	100.0	100.0	

Owned by Local Government

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Owned by State Government

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Does the plan contains the "No surprises" clause?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	66.7	66.7	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Will the primary impact be permanent and irreversible?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	16.7	16.7	16.7
	Yes	25	83.3	83.3	100.0
	Total	30	100.0	100.0	

Will the primary impact be temporary and at least partially reversible?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Species Status) Section

For the species covered, does the plan assess the species status?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes for all the species covered	26	86.7	86.7	86.7
	Yes for some of the species covered	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (population size)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	20.0	20.0	20.0
	Yes	24	80.0	80.0	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (trends in population)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	7	23.3	23.3	23.3
	Yes	23	76.7	76.7	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (quality of remaining habitat/trends in habitat quality)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	7	23.3	23.3	23.3
	Yes	23	76.7	76.7	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (amount of remaining habitat/trends in habitat quantity)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	6.7	6.7	6.7
	Yes	28	93.3	93.3	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (primary threats to the covered species)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	3.3	3.3	3.3
	Yes	29	96.7	96.7	100.0
	Total	30	100.0	100.0	

The assessment for the current status of the considered species clearly identify the following (cumulative effect)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (Habitat loss)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	3.3	3.3	3.3
	Yes	29	96.7	96.7	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (degradation)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	36.7	36.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (fragmentation)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	16	53.3	53.3	53.3
	Yes	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (diseases)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	26	86.7	86.7	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (pollution)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (dams)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (invasives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	25	83.3	83.3	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (grazing)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (predators)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	66.7	66.7	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (rarity)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Specify the primary threats to the covered species identified in the plan (climate change)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	28	93.3	93.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (pollution)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (ORV)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (Other recreational uses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	26	86.7	86.7	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Specify the primary threats to the covered species identified in the plan (Mining)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Type of data used in the assessment of the species status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Global	3	10.0	10.0	10.0
	Local (in the HCP area)	3	10.0	10.0	20.0
	Both	24	80.0	80.0	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Take) Section

For the species covered, will take occur?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, for all species covered	17	56.7	56.7	56.7
	Yes for some of the species covered	10	33.3	33.3	90.0
	Not sure	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

For the species to be taken, does the plan quantify the take ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	17	56.7	56.7	56.7
	Yes for all species covered	8	26.7	26.7	83.3
	Yes for some of the species covered	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Are life-stages, sex, etc of individuals to be taken estimated?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	1	3.3	3.3	3.3
	No	25	83.3	83.3	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

The taking was estimated by

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	5	16.7	16.7	16.7
	Could not be determined/Data info does not exist	2	6.7	6.7	23.3
	Calculation of habitat loss	17	56.7	56.7	80.0
	Calculation of loss or displacement of individuals of specie	5	16.7	16.7	96.7
	Both, calculation of loss of habitat and individuals	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (general, unspecific expert opinion)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	25	83.3	83.3	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (loss of general habitat for the species)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	2	6.7	6.7	13.3
	Yes	26	86.7	86.7	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (loss in the numbers of individuals)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	21	70.0	70.0	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (general population densities)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	8	26.7	26.7	33.3
	Yes	20	66.7	66.7	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (habitat size and specific densities)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	24	80.0	80.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (population sizes and trends in population)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	22	73.3	73.3	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (demographic rates/models)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information
(movement abilities of individuals)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (effect of extrinsic forces)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information (habitat fragmentation)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	24	80.0	80.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Data to estimate taking was based on the following types of known information
(pollution and other indirect impacts)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Is there a monitoring plan proposed to monitor the take and population status for the covered species?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -1	1	3.3	3.3	3.3
No	16	53.3	53.3	56.7
Yes for all covered species	12	40.0	40.0	96.7
Yes for some of the covered species	1	3.3	3.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(physiological and behavioral data)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	13	43.3	43.3	43.3
Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
No	10	33.3	33.3	86.7
Yes	4	13.3	13.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(population densities)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	13	43.3	43.3	43.3
Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
No	11	36.7	36.7	90.0
Yes	3	10.0	10.0	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(population size)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	13	43.3	43.3	43.3
Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
No	3	10.0	10.0	63.3
Yes	11	36.7	36.7	100.0
Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(population trends)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	4	13.3	13.3	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(quality of most remaining feeding, breeding and migration habitat/trends in habitat quality)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	11	36.7	36.7	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(amount of most remaining feeding, breeding and migration habitat/trends in habitat quantity)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	7	23.3	23.3	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(survival rates)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	8	26.7	26.7	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(reproductive rates)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data info does not exist	3	10.0	10.0	53.3
	No	10	33.3	33.3	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(growth rates)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data info does not exist	3	10.0	10.0	53.3
	No	11	36.7	36.7	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(genetic data)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data info does not exist	3	10.0	10.0	53.3
	No	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor take and population status for the covered species?
(movement rates)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data info does not exist	3	10.0	10.0	53.3
	No	13	43.3	43.3	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(invasive species data)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	13	43.3	43.3	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(climate change data)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(diseases data)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor take and population status for the covered species?
(pollution)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	13	43.3	43.3	43.3
	Could not be determined/Data Info does not exist	3	10.0	10.0	53.3
	No	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Impact) Section

For the species covered, does the plan quantify the projected impact?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	23	76.7	76.7	76.7
	Yes for all species covered	4	13.3	13.3	90.0
	Yes for some of the species covered	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (population size)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	16	53.3	53.3	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (number of individuals killed)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	15	50.0	50.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (trends in population)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	16	53.3	53.3	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (quality of most remaining feeding, breeding and migration habitat/trends in habitat quality)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	4	13.3	13.3	50.0
	Yes	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (amount of most remaining feeding, breeding and migration habitat/ trends in habitat quantity)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	2	6.7	6.7	43.3
	Yes	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (primary threats to the covered species)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	8	26.7	26.7	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

The data used to evaluate the effect of the take on the species included are? (cumulative effect of impacts)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	11	36.7	36.7	36.7
	No	17	56.7	56.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

The data used in the assessment of the species impact was ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	11	36.7	36.7	36.7
	Could not be determined/Data info does not exist	4	13.3	13.3	50.0
	Global	2	6.7	6.7	56.7
	Local (in the HCP area)	2	6.7	6.7	63.3
	Both	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Mitigation) Section

Does the plan provide evidence that mitigation/minimization measures will work for each species listed on the permit?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	25	83.3	83.3	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Does the mitigation plan address the primary threats to the covered species continued existence?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	100.0	100.0	100.0

The adopted mitigation measures provided in the plan are? (avoidance of impacts while still doing the proposed activity)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (minimization of the impacts while still doing the proposed activity)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	18	60.0	60.0	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (land acquisition)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (conservation easements)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	14	46.7	46.7	46.7
	Yes	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (habitat banks -ratio)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	19	63.3	63.3	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (translocations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	23	76.7	76.7	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (restoration of habitat areas - ratio)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	11	36.7	36.7	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (money for reseach)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (creation of buffer areas on site)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The adopted mitigation measures provided in the plan are? (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	25	83.3	83.3	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Duration in years of the mitigation efforts?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	2	6.7	6.7	6.7
	Less than the duration of the HCP	1	3.3	3.3	10.0
	Same as the duration of the HCP	9	30.0	30.0	40.0
	More than the duration of the HCP	2	6.7	6.7	46.7
	In perpetuity	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Monitoring) Section

Is there a monitoring plan proposed to monitor the mitigation measures proposed by the HCP?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	1	3.3	3.3	3.3
	No	11	36.7	36.7	40.0
	Yes	18	60.0	60.0	100.0
	Total	30	100.0	100.0	

Does the monitoring provide for the evaluation of the mitigation efforts?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	3	10.0	10.0	10.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	13.3
	No	15	50.0	50.0	63.3
	Yes for all proposed mitigation measures	9	30.0	30.0	93.3
	Yes for some of the proposed mitigation measures	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Are contingent actions considered in the event of failure?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	14	46.7	46.7	53.3
	Yes	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(physiological and behavioral data)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	7	23.3	23.3	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(population densities)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	9	30.0	30.0	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(population size)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	3	10.0	10.0	56.7
	Yes	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(population trends)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	5	16.7	16.7	63.3
	Yes	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species? (quality of most remaining feeding, breeding and migration habitat/trends in habitat quality)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	4	13.3	13.3	43.3
	No	7	23.3	23.3	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(amount of most remaining feeding, breeding and migration habitat/ trends in habitat quantity)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	6	20.0	20.0	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(survival rates)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	6	20.0	20.0	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

**What data will be collected and analyzed to monitor mitigation success for the covered species?
(reproductive rates)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	7	23.3	23.3	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species? (Growth rates)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	9	30.0	30.0	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species? (genetic data)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
	No	11	36.7	36.7	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species?
(movement rates)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	9	30.0	30.0	30.0
Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
No	16	53.3	53.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species?
(invasive species data)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	9	30.0	30.0	30.0
Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
No	15	50.0	50.0	96.7
Yes	1	3.3	3.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species?
(climate change data)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	9	30.0	30.0	30.0
Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
No	16	53.3	53.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species?
(diseases data)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	9	30.0	30.0	30.0
Could not be determined/Data Info does not exist	5	16.7	16.7	46.7
No	15	50.0	50.0	96.7
Yes	1	3.3	3.3	100.0
Total	30	100.0	100.0	

What data will be collected and analyzed to monitor mitigation success for the covered species? (pollution)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	9	30.0	30.0	30.0
	Could not be determined/Data info does not exist	5	16.7	16.7	46.7
	No	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Duration in years of all the monitoring efforts?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	11	36.7	36.7	36.7
	Could not be determined/Data info does not exist	3	10.0	10.0	46.7
	Less than the duration of the HCP	2	6.7	6.7	53.3
	Same as the duration of the HCP	8	26.7	26.7	80.0
	More than the duration of the HCP	1	3.3	3.3	83.3
	In perpetuity	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Does the plan considers a long term adaptive management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	1	3.3	3.3	3.3
	No	15	50.0	50.0	53.3
	Yes	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

Does the plan considers unforeseen circumstances?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	3	10.0	10.0	10.0
	No	10	33.3	33.3	43.3
	Yes	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

In the event of unforeseen circumstances does the plan provide mitigation actions other than amendments to the plan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	10	33.3	33.3	33.3
	Could not be determined/Data info does not exist	3	10.0	10.0	43.3
	No	9	30.0	30.0	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Alternatives) Section

Did the alternatives analyzed focus only on the "no action"?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	1	3.3	3.3	3.3
	No	25	83.3	83.3	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

If other alternative than the no action was considered, did the alternative focus on avoiding some of the incidental taking?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	5	16.7	16.7	16.7
	No	5	16.7	16.7	33.3
	Yes	20	66.7	66.7	100.0
	Total	30	100.0	100.0	

If other alternative than the no action was considered, did the alternative focus on avoiding some of the incidental taking? (if yes; specify the reason for not following the alternative)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Community pressure	1	3.3	3.3	3.3
	Economic	7	23.3	23.3	26.7
	Economic and community pressure	1	3.3	3.3	30.0
	Economic and long term less beneficial	2	6.7	6.7	36.7
	Economic and Timing	1	3.3	3.3	40.0
	Economics	2	6.7	6.7	46.7
	Legal action	1	3.3	3.3	50.0
	Legal Liability	1	3.3	3.3	53.3
	Long term less beneficial for the species	4	13.3	13.3	66.7
	Not Applicable	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Biological Soundness (Funding) Section

Does the plan provides clear funding for mitigation and monitoring?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	6.7	6.7	6.7
	Yes	25	83.3	83.3	90.0
	More or less clear	2	6.7	6.7	96.7
	Funding is not required	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (one-time development fees)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	20.0	20.0	20.0
	Yes	24	80.0	80.0	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (continuing development fees)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	14	46.7	46.7	46.7
	Yes	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (tax check-off programs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	29	96.7	96.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (assessment districts under state, city or county ordinances)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	28	93.3	93.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (direct contribution from state, city or county funds)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	21	70.0	70.0	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (federal funds)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	23	76.7	76.7	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (funds from other private sources)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	28	93.3	93.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

What are the primary funding methods listed in the plan? (cons.easements)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	90.0	90.0	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Timing of funding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most funds generated as impacts occur	12	40.0	40.0	40.0
	Funds substantially established before impacts occur	15	50.0	50.0	90.0
	Both, funds generated before and as impacts occur	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Does the plan provides future adjustments to ensure funding for contingency and monitoring?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	19	63.3	63.3	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Public Participation (Form) Section

Forms of participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined	3	10.0	10.0	10.0
	Low	17	56.7	56.7	66.7
	Moderate	2	6.7	6.7	73.3
	High	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (steering committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	20	66.7	66.7	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (advisory committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	21	70.0	70.0	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (public meetings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	24	80.0	80.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (public hearings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	22	73.3	73.3	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (presentations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (workshops)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (comments)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	9	30.0	30.0	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (others comments)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (mailing of materials)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	2	6.7	6.7	13.3
	Yes	26	86.7	86.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation occurred in the process of the plan (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (steering committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	20	66.7	66.7	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (advisory committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	5	16.7	16.7	16.7
	No	22	73.3	73.3	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (public meetings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (public hearings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	25	83.3	83.3	90.0
	Yes	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (presentations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (workshops)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (other comments)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (mailing of materials)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase I (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	24	80.0	80.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (steering committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	20	66.7	66.7	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (advisory committee)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	22	73.3	73.3	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (public meetings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	24	80.0	80.0	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (public hearings)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	22	73.3	73.3	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (presentations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (workshops)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (comments)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	9	30.0	30.0	36.7
	Yes	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (other comments)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	27	90.0	90.0	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (mailing of materials)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	3	10.0	10.0	16.7
	Yes	25	83.3	83.3	100.0
	Total	30	100.0	100.0	

Circle all forms of participation at phase II (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	26	86.7	86.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Specify type of participation at Phase III.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	27	90.0	90.0	90.0
	Advisory Committee/Board	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Public Participation (time) Section

There was participation during? (Phase I)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	No	20	66.7	66.7	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

There was participation during? (Phase II)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	2	6.7	6.7	6.7
	Yes	28	93.3	93.3	100.0
	Total	30	100.0	100.0	

There was participation during? (Phase III)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	24	80.0	80.0	80.0
	No	4	13.3	13.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

DATA-SHEET: Public Participation (Influence) Section:

Circle the stakeholders that were involved in the negotiation (USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	14	46.7	46.7	73.3
	Yes	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Land Developer/Affected Industries)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	10	33.3	33.3	60.0
	Yes	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Legal Representatives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	12	40.0	40.0	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Federal personnel other than USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	12	40.0	40.0	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Local government personnel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	7	23.3	23.3	50.0
	Yes	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (environmental organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	7	23.3	23.3	50.0
	Yes	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Independent community members)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	9	30.0	30.0	56.7
	Yes	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Consultants and ind. biologists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	13	43.3	43.3	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Academics)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	13	43.3	43.3	70.0
	Yes	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Tribal interests)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	20	66.7	66.7	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Community organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	15	50.0	50.0	76.7
	Yes	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (State Government)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	6	20.0	20.0	46.7
	Yes	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Circle the stakeholders that were involved in the negotiation (Military interests)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	8	26.7	26.7	26.7
	No	17	56.7	56.7	83.3
	Yes	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	10	33.3	33.3	73.3
	1	2	6.7	6.7	80.0
	2	2	6.7	6.7	86.7
	3	2	6.7	6.7	93.3
	5	1	3.3	3.3	96.7
	9	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Land Developers/Affected Industries)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	6	20.0	20.0	60.0
	1	2	6.7	6.7	66.7
	2	2	6.7	6.7	73.3
	5	2	6.7	6.7	80.0
	7	1	3.3	3.3	83.3
	9	1	3.3	3.3	86.7
	12	1	3.3	3.3	90.0
	19	2	6.7	6.7	96.7
	32	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Legal Representatives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	8	26.7	26.7	66.7
	1	2	6.7	6.7	73.3
	2	2	6.7	6.7	80.0
	3	1	3.3	3.3	83.3
	4	1	3.3	3.3	86.7
	6	1	3.3	3.3	90.0
	9	1	3.3	3.3	93.3
	15	1	3.3	3.3	96.7
	17	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Federal personnel other than USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	8	26.7	26.7	66.7
	1	5	16.7	16.7	83.3
	2	1	3.3	3.3	86.7
	3	1	3.3	3.3	90.0
	7	1	3.3	3.3	93.3
	8	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Local government personnel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	3	10.0	10.0	50.0
	1	2	6.7	6.7	56.7
	2	2	6.7	6.7	63.3
	3	3	10.0	10.0	73.3
	7	1	3.3	3.3	76.7
	10	1	3.3	3.3	80.0
	16	1	3.3	3.3	83.3
	19	2	6.7	6.7	90.0
	24	1	3.3	3.3	93.3
	42	1	3.3	3.3	96.7
	54	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (environmental organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	3	10.0	10.0	50.0
	1	2	6.7	6.7	56.7
	2	2	6.7	6.7	63.3
	3	1	3.3	3.3	66.7
	5	1	3.3	3.3	70.0
	8	1	3.3	3.3	73.3
	10	1	3.3	3.3	76.7
	12	1	3.3	3.3	80.0
	15	1	3.3	3.3	83.3
	16	1	3.3	3.3	86.7
	17	2	6.7	6.7	93.3
	19	1	3.3	3.3	96.7
	37	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Independent community members)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	5	16.7	16.7	56.7
	2	3	10.0	10.0	66.7
	4	1	3.3	3.3	70.0
	5	1	3.3	3.3	73.3
	6	1	3.3	3.3	76.7
	24	1	3.3	3.3	80.0
	25	1	3.3	3.3	83.3
	29	1	3.3	3.3	86.7
	45	1	3.3	3.3	90.0
	46	2	6.7	6.7	96.7
	180	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Consultants and ind. biologists))

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	9	30.0	30.0	70.0
	1	3	10.0	10.0	80.0
	3	2	6.7	6.7	86.7
	4	1	3.3	3.3	90.0
	7	2	6.7	6.7	96.7
	9	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Academics)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	9	30.0	30.0	70.0
	1	3	10.0	10.0	80.0
	2	1	3.3	3.3	83.3
	5	1	3.3	3.3	86.7
	7	1	3.3	3.3	90.0
	12	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Tribal interests)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aplicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	16	53.3	53.3	93.3
	1	1	3.3	3.3	96.7
	2	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Community organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	11	36.7	36.7	76.7
	1	2	6.7	6.7	83.3
	3	2	6.7	6.7	90.0
	5	1	3.3	3.3	93.3
	8	1	3.3	3.3	96.7
	9	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (CA Fish & Game)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	2	6.7	6.7	46.7
	1	5	16.7	16.7	63.3
	2	1	3.3	3.3	66.7
	3	1	3.3	3.3	70.0
	4	2	6.7	6.7	76.7
	5	1	3.3	3.3	80.0
	6	3	10.0	10.0	90.0
	8	1	3.3	3.3	93.3
	11	1	3.3	3.3	96.7
	19	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the stakeholders that were involved in the negotiation (Military interests)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	4	13.3	13.3	13.3
	Could not be determined/Data Info does not exist	8	26.7	26.7	40.0
	0	13	43.3	43.3	83.3
	1	3	10.0	10.0	93.3
	2	1	3.3	3.3	96.7
	5	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Applicant's employees)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	No	4	13.3	13.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Affected Industries/Land Developers)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Federal Government personnel not in USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	No	2	6.7	6.7	86.7
	Yes	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Local and State Government)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Environmental Organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (other individuals)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	No	5	16.7	16.7	96.7
	Yes	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (others, consultants, community organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Yes	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

List the groups that participated specifically in the Steering Committee and/or Advisory Board (Academics)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	No	4	13.3	13.3	93.3
	Yes	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	1	1	3.3	3.3	86.7
	2	3	10.0	10.0	96.7
	9	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Applicant's employees)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	0	4	13.3	13.3	96.7
	2	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Affected Industries/Land Developers)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	0	1	3.3	3.3	86.7
	2	1	3.3	3.3	90.0
	6	1	3.3	3.3	93.3
	7	1	3.3	3.3	96.7
	8	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Federal Government not in USFWS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	0	1	3.3	3.3	86.7
	1	3	10.0	10.0	96.7
	2	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Local and State Government)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	1	1	3.3	3.3	86.7
	2	2	6.7	6.7	93.3
	4	1	3.3	3.3	96.7
	10	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Environmental Organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	2	2	6.7	6.7	90.0
	3	1	3.3	3.3	93.3
	4	1	3.3	3.3	96.7
	8	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Individuals)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	2	6.7	6.7	86.7
	0	3	10.0	10.0	96.7
	2	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Other, Consultants, Community Organizations)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	2	2	6.7	6.7	90.0
	5	1	3.3	3.3	93.3
	8	1	3.3	3.3	96.7
	13	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Number the participants in the Steering Committee and/or Advisory Board by group (Academics)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	24	80.0	80.0	80.0
	Could not be determined/Data Info does not exist	1	3.3	3.3	83.3
	0	4	13.3	13.3	96.7
	5	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Were requests for information received during the development of the plan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data Info does not exist	3	10.0	10.0	10.0
	No	4	13.3	13.3	23.3
	Yes	23	76.7	76.7	100.0
	Total	30	100.0	100.0	

Were comments received during the development of the plan, including the public comment period?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	4	13.3	13.3	13.3
	No	8	26.7	26.7	40.0
	Yes	18	60.0	60.0	100.0
	Total	30	100.0	100.0	

How many comments were received in total?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined/Data info does not exist	7	23.3	23.3	23.3
	0	8	26.7	26.7	50.0
	1	4	13.3	13.3	63.3
	2	4	13.3	13.3	76.7
	9	1	3.3	3.3	80.0
	10	1	3.3	3.3	83.3
	18	1	3.3	3.3	86.7
	23	1	3.3	3.3	90.0
	120	1	3.3	3.3	93.3
	134	1	3.3	3.3	96.7
	190	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Rate the overall influence (ability to produce changes to the plan) only by the comments received

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	8	26.7	26.7	26.7
	Could not be determined/Data info does not exist	5	16.7	16.7	43.3
	Significant	2	6.7	6.7	50.0
	Minor	10	33.3	33.3	83.3
	Not at all	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Were substantial issues raised by the comments?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	8	26.7	26.7	26.7
	Could not be determined/Data Info does not exist	7	23.3	23.3	50.0
	No	5	16.7	16.7	66.7
	Yes	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

SURVEY: Perceived Participation Part 1 (questions 1 to 6)

Plan in which participated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	101	1	.5	.5	.5
	103	2	1.0	1.0	1.6
	104	1	.5	.5	2.1
	106	4	2.0	2.1	4.1
	107	3	1.5	1.6	5.7
	109	4	2.0	2.1	7.8
	110	4	2.0	2.1	9.8
	203	1	.5	.5	10.4
	204	2	1.0	1.0	11.4
	205	6	2.9	3.1	14.5
	206	1	.5	.5	15.0
	207	16	7.8	8.3	23.3
	208	14	6.9	7.3	30.6
	301	1	.5	.5	31.1
	302	7	3.4	3.6	34.7
	303	2	1.0	1.0	35.8
	304	6	2.9	3.1	38.9
	305	47	23.0	24.4	63.2
	306	17	8.3	8.8	72.0
	307	20	9.8	10.4	82.4
	308	7	3.4	3.6	86.0
	309	22	10.8	11.4	97.4
	310	4	2.0	2.1	99.5
	1112	1	.5	.5	100.0
	Total	193	94.6	100.0	
Missing	Other	11	5.4		
Total		204	100.0		

Plans by size groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Could not be determined	12	5.9	5.9	5.9
	Small	19	9.3	9.3	15.2
	Moderate	40	19.6	19.6	34.8
	Large	133	65.2	65.2	100.0
	Total	204	100.0	100.0	

Participated during phase 1 of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	55	27.0	27.0	27.0
	yes	149	73.0	73.0	100.0
	Total	204	100.0	100.0	

Participated during phase 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	14.7	14.7	14.7
	Yes	174	85.3	85.3	100.0
	Total	204	100.0	100.0	

Participated during phase 3 of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	84	41.2	41.2	41.2
	Yes	120	58.8	58.8	100.0
	Total	204	100.0	100.0	

Applicant/Company Employee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	173	84.8	84.8	84.8
	Yes	31	15.2	15.2	100.0
	Total	204	100.0	100.0	

Land Developer/Development Community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	176	86.3	86.3	86.3
	Yes	28	13.7	13.7	100.0
	Total	204	100.0	100.0	

Landowner-Property owner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	151	74.0	74.0	74.0
	Yes	53	26.0	26.0	100.0
	Total	204	100.0	100.0	

Affected Industry/Industry Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	199	97.5	97.5	97.5
	Yes	5	2.5	2.5	100.0
	Total	204	100.0	100.0	

Affected Community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	85.8	85.8	85.8
	Yes	29	14.2	14.2	100.0
	Total	204	100.0	100.0	

Academic

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	195	95.6	95.6	95.6
	Yes	9	4.4	4.4	100.0
	Total	204	100.0	100.0	

Environmentalists/ Environmental Organizations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	144	70.6	70.6	70.6
	Yes	60	29.4	29.4	100.0
	Total	204	100.0	100.0	

Government Personnel not in Federal State and Wildlife Agencies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	186	91.2	91.2	91.2
	Yes	18	8.8	8.8	100.0
	Total	204	100.0	100.0	

Government Personnel in Federal and State Wildlife Agencies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	181	88.7	88.7	88.7
	Yes	23	11.3	11.3	100.0
	Total	204	100.0	100.0	

Local Government

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	154	75.5	75.5	75.5
	Yes	50	24.5	24.5	100.0
	Total	204	100.0	100.0	

Recreational Land User

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	188	92.2	92.2	92.2
	Yes	16	7.8	7.8	100.0
	Total	204	100.0	100.0	

Independent Biologist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	189	92.6	92.6	92.6
	Yes	15	7.4	7.4	100.0
	Total	204	100.0	100.0	

Tribal Interest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	200	98.0	98.0	98.0
	Yes	4	2.0	2.0	100.0
	Total	204	100.0	100.0	

Other/Consultants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	85.8	85.8	85.8
	Yes	29	14.2	14.2	100.0
	Total	204	100.0	100.0	

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	94	46.1	46.1	46.1
	Yes	110	53.9	53.9	100.0
	Total	204	100.0	100.0	

Public Meetings/Public Hearings/ Presentations/Workshops

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	68	33.3	33.3	33.3
	Yes	136	66.7	66.7	100.0
	Total	204	100.0	100.0	

Letter Writing/Comments/Mailing of Materials/Surveys

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	79	38.7	38.7	38.7
	Yes	125	61.3	61.3	100.0
	Total	204	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	151	74.0	74.0	74.0
	Yes	53	26.0	26.0	100.0
	Total	204	100.0	100.0	

Mailing of Materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	35	17.2	17.2	17.2
	Yes	169	82.8	82.8	100.0
	Total	204	100.0	100.0	

Electronic Mail

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	85.8	85.8	85.8
	Yes	29	14.2	14.2	100.0
	Total	204	100.0	100.0	

Telephone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	56.4	56.4	56.4
	Yes	89	43.6	43.6	100.0
	Total	204	100.0	100.0	

Television

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	195	95.6	95.6	95.6
	Yes	9	4.4	4.4	100.0
	Total	204	100.0	100.0	

Radio

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	202	99.0	99.0	99.0
	Yes	2	1.0	1.0	100.0
	Total	204	100.0	100.0	

USFWS Website

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	201	98.5	98.5	98.5
	Yes	3	1.5	1.5	100.0
	Total	204	100.0	100.0	

Other Web Sites

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	198	97.1	97.1	97.1
	Yes	6	2.9	2.9	100.0
	Total	204	100.0	100.0	

Community Groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	167	81.9	81.9	81.9
	Yes	37	18.1	18.1	100.0
	Total	204	100.0	100.0	

Environmental Groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	130	63.7	63.7	63.7
	Yes	74	36.3	36.3	100.0
	Total	204	100.0	100.0	

Workshops

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	140	68.6	68.6	68.6
	Yes	64	31.4	31.4	100.0
	Total	204	100.0	100.0	

Agency Information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	155	76.0	76.0	76.0
	Yes	49	24.0	24.0	100.0
	Total	204	100.0	100.0	

Federal Register Notice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	85.8	85.8	85.8
	Yes	29	14.2	14.2	100.0
	Total	204	100.0	100.0	

Advisory /Steering Committee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	130	63.7	63.7	63.7
	Yes	74	36.3	36.3	100.0
	Total	204	100.0	100.0	

Public Hearings/Meetings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	97	47.5	47.5	47.5
	Yes	107	52.5	52.5	100.0
	Total	204	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	159	77.9	77.9	77.9
	Yes	45	22.1	22.1	100.0
	Total	204	100.0	100.0	

Influence by Letter Writing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	119	58.3	58.3	58.3
	Yes	85	41.7	41.7	100.0
	Total	204	100.0	100.0	

Influence by Participating in Public Meeting/Hearing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	84	41.2	41.2	41.2
	Yes	120	58.8	58.8	100.0
	Total	204	100.0	100.0	

Influence by Participating in Advisory /Steering Committee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	107	52.5	52.5	52.5
	Yes	97	47.5	47.5	100.0
	Total	204	100.0	100.0	

Other form of Influence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	125	61.3	61.3	61.3
	Yes	79	38.7	38.7	100.0
	Total	204	100.0	100.0	

SURVEY: Perceived Participation Part 2 (questions 7 to 15)

Accessibility to Information relative to the plan provided by the USFWS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	5.4	6.0	6.0
	2	18	8.8	9.9	15.9
	3	30	14.7	16.5	32.4
	4	13	6.4	7.1	39.6
	5	36	17.6	19.8	59.3
	6	16	7.8	8.8	68.1
	7	24	11.8	13.2	81.3
	8	14	6.9	7.7	89.0
	9	20	9.8	11.0	100.0
	Total	182	89.2	100.0	
Missing	No answer	22	10.8		
Total		204	100.0		

Accessibility to Information relative to the plan Provided by other sources than the USFWS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	2.9	3.3	3.3
	2	7	3.4	3.8	7.1
	3	14	6.9	7.6	14.7
	4	11	5.4	6.0	20.7
	5	26	12.7	14.1	34.8
	6	28	13.7	15.2	50.0
	7	36	17.6	19.6	69.6
	8	35	17.2	19.0	88.6
	9	21	10.3	11.4	100.0
	Total	184	90.2	100.0	
Missing	No answer	20	9.8		
Total		204	100.0		

Perceived Influence on the final version of the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	28	13.7	14.0	14.0
	2	19	9.3	9.5	23.5
	3	25	12.3	12.5	36.0
	4	16	7.8	8.0	44.0
	5	43	21.1	21.5	65.5
	6	12	5.9	6.0	71.5
	7	22	10.8	11.0	82.5
	8	18	8.8	9.0	91.5
	9	17	8.3	8.5	100.0
	Total	200	98.0	100.0	
Missing	No answer	4	2.0		
Total		204	100.0		

The Final version addressed your concerns about the plan.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	28	13.7	14.4	14.4
	2	19	9.3	9.8	24.2
	3	8	3.9	4.1	28.4
	4	13	6.4	6.7	35.1
	5	34	16.7	17.5	52.6
	6	16	7.8	8.2	60.8
	7	30	14.7	15.5	76.3
	8	28	13.7	14.4	90.7
	9	18	8.8	9.3	100.0
	Total	194	95.1	100.0	
Missing	No answer	10	4.9		
Total		204	100.0		

The final version of the plan addressed general public's concerns about the plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	9.8	10.4	10.4
	2	11	5.4	5.7	16.1
	3	24	11.8	12.4	28.5
	4	14	6.9	7.3	35.8
	5	23	11.3	11.9	47.7
	6	21	10.3	10.9	58.5
	7	41	20.1	21.2	79.8
	8	29	14.2	15.0	94.8
	9	10	4.9	5.2	100.0
	Total	193	94.6	100.0	
Missing	No answer	11	5.4		
Total		204	100.0		

The final version of the plan adequately protects the endangered and threatened species at stake

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	9.8	10.3	10.3
	2	9	4.4	4.6	14.9
	3	9	4.4	4.6	19.6
	4	10	4.9	5.2	24.7
	5	25	12.3	12.9	37.6
	6	13	6.4	6.7	44.3
	7	42	20.6	21.6	66.0
	8	30	14.7	15.5	81.4
	9	36	17.6	18.6	100.0
	Total	194	95.1	100.0	
Missing	No answer	10	4.9		
Total		204	100.0		

The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of other groups involved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	77	37.7	40.5	40.5
	2	24	11.8	12.6	53.2
	3	22	10.8	11.6	64.7
	4	11	5.4	5.8	70.5
	5	8	3.9	4.2	74.7
	6	4	2.0	2.1	76.8
	7	13	6.4	6.8	83.7
	8	7	3.4	3.7	87.4
	9	24	11.8	12.6	100.0
	Total	190	93.1	100.0	
Missing	No answer	14	6.9		
Total		204	100.0		

The final version of the plan reflects a balanced agreement among all parties involved in the negotiation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	13.2	13.6	13.6
	2	10	4.9	5.1	18.7
	3	22	10.8	11.1	29.8
	4	13	6.4	6.6	36.4
	5	35	17.2	17.7	54.0
	6	14	6.9	7.1	61.1
	7	28	13.7	14.1	75.3
	8	29	14.2	14.6	89.9
	9	20	9.8	10.1	100.0
	Total	198	97.1	100.0	
Missing	No answer	6	2.9		
Total		204	100.0		

The final version of the plan could have protected more the endangered and threatened species at stake while at the same time satisfying the interests of the other groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	31	15.2	15.9	15.9
	2	16	7.8	8.2	24.1
	3	14	6.9	7.2	31.3
	4	16	7.8	8.2	39.5
	5	45	22.1	23.1	62.6
	6	10	4.9	5.1	67.7
	7	12	5.9	6.2	73.8
	8	13	6.4	6.7	80.5
	9	38	18.6	19.5	100.0
	Total	195	95.6	100.0	
Missing	No answer	9	4.4		
Total		204	100.0		

TOTALS: Variables' Scores (Biological Soundness, Levels of Participation and Perceived Participation)

Size of the Plan Re-categorized

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	small	15	50.0	50.0	50.0
	large	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

RISK-AVERSION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	11	36.7	36.7	36.7
	38	16	53.3	53.3	90.0
	50	2	6.7	6.7	96.7
	63	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

HABITAT LOSS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	6.7	6.7	6.7
	7	1	3.3	3.3	10.0
	13	3	10.0	10.0	20.0
	20	1	3.3	3.3	23.3
	27	3	10.0	10.0	33.3
	33	1	3.3	3.3	36.7
	40	5	16.7	16.7	53.3
	47	6	20.0	20.0	73.3
	53	1	3.3	3.3	76.7
	67	3	10.0	10.0	86.7
	73	3	10.0	10.0	96.7
	80	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

SPECIES STATUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	39	1	3.3	3.3	3.3
	50	1	3.3	3.3	6.7
	61	1	3.3	3.3	10.0
	67	1	3.3	3.3	13.3
	72	5	16.7	16.7	30.0
	78	2	6.7	6.7	36.7
	83	3	10.0	10.0	46.7
	89	2	6.7	6.7	53.3
	94	13	43.3	43.3	96.7
	100	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

TAKE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	3.3	3.3	3.3
	5	1	3.3	3.3	6.7
	10	3	10.0	10.0	16.7
	15	1	3.3	3.3	20.0
	18	1	3.3	3.3	23.3
	20	4	13.3	13.3	36.7
	23	2	6.7	6.7	43.3
	30	1	3.3	3.3	46.7
	33	1	3.3	3.3	50.0
	35	1	3.3	3.3	53.3
	40	6	20.0	20.0	73.3
	42	1	3.3	3.3	76.7
	45	1	3.3	3.3	80.0
	60	1	3.3	3.3	83.3
	70	2	6.7	6.7	90.0
	75	1	3.3	3.3	93.3
	85	1	3.3	3.3	96.7
	93	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

IMPACT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	10	33.3	33.3	33.3
	11	4	13.3	13.3	46.7
	17	1	3.3	3.3	50.0
	22	2	6.7	6.7	56.7
	28	2	6.7	6.7	63.3
	44	2	6.7	6.7	70.0
	50	2	6.7	6.7	76.7
	56	1	3.3	3.3	80.0
	61	1	3.3	3.3	83.3
	67	1	3.3	3.3	86.7
	78	2	6.7	6.7	93.3
	83	1	3.3	3.3	96.7
	100	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

MITIGATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	25	83.3	83.3	83.3
	100	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

MONITORING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	5	16.7	16.7	16.7
	7	3	10.0	10.0	26.7
	20	3	10.0	10.0	36.7
	27	2	6.7	6.7	43.3
	40	1	3.3	3.3	46.7
	60	5	16.7	16.7	63.3
	67	3	10.0	10.0	73.3
	80	7	23.3	23.3	96.7
	87	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

ALTERNATIVES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	5	16.7	16.7	16.7
	50	5	16.7	16.7	33.3
	100	20	66.7	66.7	100.0
	Total	30	100.0	100.0	

FUNDING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	3	10.0	10.0	10.0
	33	6	20.0	20.0	30.0
	44	1	3.3	3.3	33.3
	67	14	46.7	46.7	80.0
	78	1	3.3	3.3	83.3
	100	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

BIOLOGICAL SOUNDNESS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36	1	3.3	3.3	3.3
	37	1	3.3	3.3	6.7
	39	1	3.3	3.3	10.0
	41	1	3.3	3.3	13.3
	42	3	10.0	10.0	23.3
	43	1	3.3	3.3	26.7
	44	1	3.3	3.3	30.0
	46	1	3.3	3.3	33.3
	47	1	3.3	3.3	36.7
	48	2	6.7	6.7	43.3
	50	1	3.3	3.3	46.7
	51	1	3.3	3.3	50.0
	52	1	3.3	3.3	53.3
	53	2	6.7	6.7	60.0
	54	1	3.3	3.3	63.3
	55	1	3.3	3.3	66.7
	56	1	3.3	3.3	70.0
	60	1	3.3	3.3	73.3
	61	1	3.3	3.3	76.7
	63	1	3.3	3.3	80.0
	64	1	3.3	3.3	83.3
	68	1	3.3	3.3	86.7
	70	1	3.3	3.3	90.0
	72	1	3.3	3.3	93.3
	77	1	3.3	3.3	96.7
	79	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

P.TIME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	6.7	6.7	6.7
	25	20	66.7	66.7	73.3
	100	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

P.FORM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	3	10.0	10.0	10.0
	6	5	16.7	16.7	26.7
	11	13	43.3	43.3	70.0
	22	1	3.3	3.3	73.3
	39	1	3.3	3.3	76.7
	44	1	3.3	3.3	80.0
	50	1	3.3	3.3	83.3
	56	3	10.0	10.0	93.3
	78	1	3.3	3.3	96.7
	83	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

P.INFLUE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	23.3	23.3	23.3
	8	2	6.7	6.7	30.0
	17	1	3.3	3.3	33.3
	18	1	3.3	3.3	36.7
	19	1	3.3	3.3	40.0
	22	2	6.7	6.7	46.7
	24	1	3.3	3.3	50.0
	25	3	10.0	10.0	60.0
	26	1	3.3	3.3	63.3
	32	1	3.3	3.3	66.7
	47	1	3.3	3.3	70.0
	50	1	3.3	3.3	73.3
	52	1	3.3	3.3	76.7
	53	1	3.3	3.3	80.0
	61	1	3.3	3.3	83.3
	67	2	6.7	6.7	90.0
	74	2	6.7	6.7	96.7
	90	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

PARTICIPATION FROM DOCUMENTATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	6.7	6.7	6.7
	8	1	3.3	3.3	10.0
	10	2	6.7	6.7	16.7
	12	1	3.3	3.3	20.0
	13	2	6.7	6.7	26.7
	18	2	6.7	6.7	33.3
	19	2	6.7	6.7	40.0
	20	4	13.3	13.3	53.3
	21	1	3.3	3.3	56.7
	23	1	3.3	3.3	60.0
	29	1	3.3	3.3	63.3
	32	1	3.3	3.3	66.7
	33	1	3.3	3.3	70.0
	49	1	3.3	3.3	73.3
	52	1	3.3	3.3	76.7
	64	1	3.3	3.3	80.0
	69	2	6.7	6.7	86.7
	72	1	3.3	3.3	90.0
	77	1	3.3	3.3	93.3
	84	1	3.3	3.3	96.7
	91	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

ACCESS TO INFORMATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.10	1	3.3	4.5	4.5
	4.29	1	3.3	4.5	9.1
	4.42	1	3.3	4.5	13.6
	4.50	2	6.7	9.1	22.7
	4.92	1	3.3	4.5	27.3
	5.00	1	3.3	4.5	31.8
	5.44	1	3.3	4.5	36.4
	5.50	1	3.3	4.5	40.9
	6.12	1	3.3	4.5	45.5
	6.17	1	3.3	4.5	50.0
	6.27	1	3.3	4.5	54.5
	6.36	1	3.3	4.5	59.1
	6.50	2	6.7	9.1	68.2
	6.75	1	3.3	4.5	72.7
	7.00	1	3.3	4.5	77.3
	7.08	1	3.3	4.5	81.8
	7.25	1	3.3	4.5	86.4
	7.50	1	3.3	4.5	90.9
	7.88	1	3.3	4.5	95.5
	8.00	1	3.3	4.5	100.0
	Total	22	73.3	100.0	
Missing	Could not be determined/Data info does not exist	8	26.7		
Total		30	100.0		

ACCESS TO DECISION MAKING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.41	1	3.3	4.3	4.3
	3.52	1	3.3	4.3	8.7
	3.88	1	3.3	4.3	13.0
	4.24	1	3.3	4.3	17.4
	4.41	1	3.3	4.3	21.7
	4.50	1	3.3	4.3	26.1
	4.84	1	3.3	4.3	30.4
	5.00	1	3.3	4.3	34.8
	5.14	1	3.3	4.3	39.1
	5.50	1	3.3	4.3	43.5
	5.68	1	3.3	4.3	47.8
	6.42	1	3.3	4.3	52.2
	6.50	2	6.7	8.7	60.9
	6.63	1	3.3	4.3	65.2
	6.88	1	3.3	4.3	69.6
	7.00	1	3.3	4.3	73.9
	7.50	1	3.3	4.3	78.3
	8.00	2	6.7	8.7	87.0
	9.00	3	10.0	13.0	100.0
	Total	23	76.7	100.0	
Missing	Could not be determined/Data info does not exist	7	23.3		
Total		30	100.0		

PERCEIVED PARTICIPATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.73	1	3.3	4.3	4.3
	3.89	1	3.3	4.3	8.7
	4.50	1	3.3	4.3	13.0
	4.56	1	3.3	4.3	17.4
	4.71	2	6.7	8.7	26.1
	5.00	1	3.3	4.3	30.4
	5.50	2	6.7	8.7	39.1
	5.55	1	3.3	4.3	43.5
	5.67	1	3.3	4.3	47.8
	5.75	1	3.3	4.3	52.2
	5.77	1	3.3	4.3	56.5
	6.00	1	3.3	4.3	60.9
	6.44	1	3.3	4.3	65.2
	6.80	1	3.3	4.3	69.6
	7.13	1	3.3	4.3	73.9
	7.25	2	6.7	8.7	82.6
	7.38	2	6.7	8.7	91.3
	8.50	1	3.3	4.3	95.7
	9.00	1	3.3	4.3	100.0
	Total	23	76.7	100.0	
Missing	Could not be determined/Data info does not exist	7	23.3		
Total		30	100.0		

Risk-Aversion (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	11	36.7	36.7	36.7
	high	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Habitat Loss (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	16	53.3	53.3	53.3
	high	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

Species Status (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	14	46.7	46.7	46.7
	high	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Take (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	15	50.0	50.0	50.0
	high	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Impact (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	15	50.0	50.0	50.0
	high	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Mitigation (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	25	83.3	83.3	83.3
	high	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Monitoring (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	14	46.7	46.7	46.7
	high	16	53.3	53.3	100.0
	Total	30	100.0	100.0	

Alternatives (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	10	33.3	33.3	33.3
	high	20	66.7	66.7	100.0
	Total	30	100.0	100.0	

Funding (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	10	33.3	33.3	33.3
	high	20	66.7	66.7	100.0
	Total	30	100.0	100.0	

Biological Soundness (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	15	50.0	50.0	50.0
	high	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Time (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	22	73.3	73.3	73.3
	high	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Form (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	21	70.0	70.0	70.0
	high	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Influence (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	15	50.0	50.0	50.0
	high	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

Participation from Documentation (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	16	53.3	53.3	53.3
	high	14	46.7	46.7	100.0
	Total	30	100.0	100.0	

Access to Information (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	11	36.7	50.0	50.0
	high	11	36.7	50.0	100.0
	Total	22	73.3	100.0	
Missing	Could not be determined	8	26.7		
Total		30	100.0		

Access to Decision Making (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	11	36.7	47.8	47.8
	high	12	40.0	52.2	100.0
	Total	23	76.7	100.0	
Missing	Could not be determined	7	23.3		
Total		30	100.0		

Perceived Participation (Categorized)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	11	36.7	47.8	47.8
	high	12	40.0	52.2	100.0
	Total	23	76.7	100.0	
Missing	Could not be determined	7	23.3		
Total		30	100.0		

APPENDIX J

CHI-SQUARE TABLES AND CROSS-TABULATIONS

Size of the Plan * Time of Participation

Crosstab

Count

		Time		Total
		low	high	
Plan	small	14	1	15
Size	large	8	7	15
Total		22	8	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.136 ^b	1	.013		
Continuity Correction ^a	4.261	1	.039		
Likelihood Ratio	6.719	1	.010		
Fisher's Exact Test				.035	.018
Linear-by-Linear Association	5.932	1	.015		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

Symmetric Measures

			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by	Phi		.452			.013
Nominal	Cramer's V		.452			.013
Ordinal by Ordinal	Gamma		.849	.161	2.777	.005
N of Valid Cases			30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Form of Participation

Crosstab

Count

		Form		Total
		low	high	
Plan	small	14	1	15
Size	large	7	8	15
Total		21	9	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.778 ^b	1	.005		
Continuity Correction ^a	5.714	1	.017		
Likelihood Ratio	8.576	1	.003		
Fisher's Exact Test				.014	.007
Linear-by-Linear Association	7.519	1	.006		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.509			.005
Nominal Cramer's V	.509			.005
Ordinal by Ordinal Gamma	.882	.128	3.240	.001
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Participation from Documentation**Crosstab**

Count

		Participation from Documentation		Total
		low	high	
Plan	small	12	3	15
Size	large	4	11	15
Total		16	14	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.571 ^b	1	.003		
Continuity Correction ^a	6.563	1	.010		
Likelihood Ratio	9.046	1	.003		
Fisher's Exact Test				.009	.005
Linear-by-Linear Association	8.286	1	.004		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.535			.003
	Cramer's V	.535			.003
Ordinal by Ordinal	Gamma	.833	.133	3.464	.001
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Habitat Loss**Crosstab**

Count

		Habitat Loss		Total
		low	high	
Plan	small	11	4	15
Size	large	5	10	15
Total		16	14	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.821 ^b	1	.028		
Continuity Correction ^a	3.348	1	.067		
Likelihood Ratio	4.963	1	.026		
Fisher's Exact Test				.066	.033
Linear-by-Linear Association	4.661	1	.031		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.401			.028
	Cramer's V	.401			.028
Ordinal by Ordinal	Gamma	.692	.208	2.397	.017
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Take

Crosstab

Count

		Take		Total
		low	high	
Plan	small	5	10	15
Size	large	10	5	15
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.333 ^b	1	.068		
Continuity Correction ^a	2.133	1	.144		
Likelihood Ratio	3.398	1	.065		
Fisher's Exact Test				.143	.072
Linear-by-Linear Association	3.222	1	.073		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.333			.068
Nominal Cramer's V	.333			.068
Ordinal by Ordinal Gamma	-.600	.248	-1.936	.053
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Funding

Crosstab

Count

		Funding		Total
		low	high	
Plan	small	2	13	15
Size	large	8	7	15
Total		10	20	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.400 ^b	1	.020		
Continuity Correction ^a	3.750	1	.053		
Likelihood Ratio	5.683	1	.017		
Fisher's Exact Test				.050	.025
Linear-by-Linear Association	5.220	1	.022		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.424			.020
Nominal by Cramer's V	.424			.020
Ordinal by Ordinal Gamma	-.763	.192	-2.566	.010
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Size of the Plan * Access to Decision Making

Crosstab

Count

		Access to Decision Making		Total
		low	high	
Plan	small	2	7	9
Size	large	9	5	14
Total		11	12	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.884 ^b	1	.049		
Continuity Correction ^a	2.382	1	.123		
Likelihood Ratio	4.057	1	.044		
Fisher's Exact Test				.089	.060
Linear-by-Linear Association	3.716	1	.054		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.30.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.411			.049
Cramer's V	.411			.049
Ordinal by Ordinal Gamma	-.726	.231	-2.183	.029
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

NEPA-CEQA Document Required * Species Status

Crosstab

Count

		Species Status		Total
		low	high	
NEPA-CEQA document required	EIS-EIR required	1	7	8
	ES-EA required (FONSI/NEG-DEC)	12	9	21
Total		13	16	29

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.668 ^b	1	.031		
Continuity Correction ^a	3.038	1	.081		
Likelihood Ratio	5.181	1	.023		
Fisher's Exact Test				.044	.038
Linear-by-Linear Association	4.507	1	.034		
N of Valid Cases	29				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.59.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.401			.031
Nominal by Cramer's V	.401			.031
Ordinal by Ordinal Gamma	-.806	.202	-2.486	.013
N of Valid Cases	29			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

NEPA-CEQA Document Required * Time of Participation

Crosstab

Count

		Time		Total
		low	high	
NEPA-CEQA document required	EIS-EIR required	2	6	8
	ES-EA required (FONSI/NEG-DEC)	19	2	21
Total		21	8	29

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.433 ^b	1	.000		
Continuity Correction ^a	9.371	1	.002		
Likelihood Ratio	11.956	1	.001		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	12.004	1	.001		
N of Valid Cases	29				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.21.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.655			.000
Nominal by Nominal Cramer's V	.655			.000
Ordinal by Ordinal Gamma	-.932	.072	-3.179	.001
N of Valid Cases	29			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

NEPA-CEQA Document Required * Form of Participation

Crosstab

Count

		Form		Total
		low	high	
NEPA-CEQA document required	EIS-EIR required	2	6	8
	ES-EA required (FONSI/NEG-DEC)	18	3	21
Total		20	9	29

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.977 ^b	1	.002		
Continuity Correction ^a	7.342	1	.007		
Likelihood Ratio	9.702	1	.002		
Fisher's Exact Test				.004	.004
Linear-by-Linear Association	9.633	1	.002		
N of Valid Cases	29				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.48.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.587			.002
Nominal by Cramer's V	.587			.002
Ordinal by Ordinal Gamma	-.895	.102	-2.961	.003
N of Valid Cases	29			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

NEPA-CEQA Document Required * Access to Information

Crosstab

Count

		Access to Information		Total
		low	high	
NEPA-CEQA document required	EIS-EIR required	4	4	8
	ES-EA required (FONSI/NEG-DEC)	7	7	14
Total		11	11	22

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.000 ^b	1	1.000		
Continuity Correction ^a	.000	1	1.000		
Likelihood Ratio	.000	1	1.000		
Fisher's Exact Test				1.000	.670
Linear-by-Linear Association	.000	1	1.000		
N of Valid Cases	22				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.000			1.000
Nominal by Cramer's V	.000			1.000
Ordinal by Ordinal Gamma	.000	.443	.000	1.000
N of Valid Cases	22			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

NEPA-CEQA Document Required * Access to Decision Making

Crosstab

Count

		Access to Decision Making		Total
		low	high	
NEPA-CEQA document required	EIS-EIR required	7	1	8
	ES-EA required (FONSI/NEG-DEC)	4	11	15
Total		11	12	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.738 ^a	1	.005		
Continuity Correction ^a	5.492	1	.019		
Likelihood Ratio	8.416	1	.004		
Fisher's Exact Test				.009	.008
Linear-by-Linear Association	7.401	1	.007		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.83.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.580			.005
Nominal by Cramer's V	.580			.005
Ordinal by Ordinal Gamma	.901	.114	3.335	.001
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Ecological Approach of the Plan * Impact

Crosstab

Count

		Impact		Total
		low	high	
Ecological approach of the plan	A single species plan	3	9	12
	A multiple species plan	10	5	15
Total		13	14	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.636 ^b	1	.031		
Continuity Correction ^a	3.117	1	.077		
Likelihood Ratio	4.801	1	.028		
Fisher's Exact Test				.054	.038
Linear-by-Linear Association	4.464	1	.035		
N of Valid Cases	27				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.78.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.414			.031
Nominal Cramer's V	.414			.031
Ordinal by Ordinal Gamma	-.714	.211	-2.376	.018
N of Valid Cases	27			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Ecological approach of the plan * Biological Soundness**Crosstab**

Count

		Biological Soundness		Total
		low	high	
Ecological approach of the plan	A single species plan	4	8	12
	A multiple species plan	11	4	15
Total		15	12	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.320 ^b	1	.038		
Continuity Correction ^a	2.852	1	.091		
Likelihood Ratio	4.422	1	.035		
Fisher's Exact Test				.057	.045
Linear-by-Linear Association	4.160	1	.041		
N of Valid Cases	27				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.33.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.400			.038
Nominal by Cramer's V	.400			.038
Ordinal by Ordinal Gamma	-.692	.220	-2.241	.025
N of Valid Cases	27			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Time of Participation * Form of Participation

Crosstab

Count

		Form		Total
		low	high	
Time	low	21	1	22
	high		8	8
Total		21	9	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25.455 ^b	1	.000		
Continuity Correction ^a	21.112	1	.000		
Likelihood Ratio	28.516	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	24.606	1	.000		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.40.

Time of Participation * Influence of Participation

Crosstab

Count

		Influence		Total
		low	high	
Time	low	14	8	22
	high	1	7	8
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.136 ^b	1	.013		
Continuity Correction ^a	4.261	1	.039		
Likelihood Ratio	6.719	1	.010		
Fisher's Exact Test				.035	.018
Linear-by-Linear Association	5.932	1	.015		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.452			.013
	Cramer's V	.452			.013
Ordinal by Ordinal	Gamma	.849	.161	2.777	.005
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Time of Participation * Monitoring

Crosstab

Count

		Monitoring		Total
		low	high	
Time	low	13	9	22
	high	1	7	8
Total		14	16	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.117 ^b	1	.024		
Continuity Correction ^a	3.416	1	.065		
Likelihood Ratio	5.660	1	.017		
Fisher's Exact Test				.039	.030
Linear-by-Linear Association	4.946	1	.026		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.73.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.413			.024
	Cramer's V	.413			.024
Ordinal by Ordinal	Gamma	.820	.189	2.576	.010
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Time of Participation * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Time	low	12	10	22
	high	3	5	8
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.682 ^b	1	.409		
Continuity Correction ^a	.170	1	.680		
Likelihood Ratio	.687	1	.407		
Fisher's Exact Test				.682	.341
Linear-by-Linear Association	.659	1	.417		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.151			.409
	Cramer's V	.151			.409
Ordinal by Ordinal	Gamma	.333	.376	.835	.404
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Form of Participation * Influence of Participation

Crosstab

Count

		Influence		Total
		low	high	
Form	low	14	7	21
	high	1	8	9
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.778 ^b	1	.005		
Continuity Correction ^a	5.714	1	.017		
Likelihood Ratio	8.576	1	.003		
Fisher's Exact Test				.014	.007
Linear-by-Linear Association	7.519	1	.006		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.509			.005
Nominal Cramer's V	.509			.005
Ordinal by Ordinal Gamma	.882	.128	3.240	.001
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Form of Participation * Access to Decision Making**Crosstab**

Count

		Decision Making		Total
		low	high	
Form	low	3	11	14
	high	8	1	9
Total		11	12	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.991 ^b	1	.002		
Continuity Correction ^a	7.471	1	.006		
Likelihood Ratio	11.014	1	.001		
Fisher's Exact Test				.003	.002
Linear-by-Linear Association	9.557	1	.002		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.30.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.659			.002
Cramer's V	.659			.002
Ordinal by Ordinal Gamma	-.934	.079	-4.111	.000
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Form of Participation * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Form	low	11	10	21
	high	4	5	9
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.159 ^b	1	.690		
Continuity Correction ^a	.000	1	1.000		
Likelihood Ratio	.159	1	.690		
Fisher's Exact Test				1.000	.500
Linear-by-Linear Association	.153	1	.695		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.073			.690
Nominal by Cramer's V	.073			.690
Ordinal by Ordinal Gamma	.158	.390	.399	.690
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Influence of Participation * Form of Participation

Crosstab

Count

		Form		Total
		low	high	
Influence	low	14	1	15
	high	7	8	15
Total		21	9	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.778 ^b	1	.005		
Continuity Correction ^a	5.714	1	.017		
Likelihood Ratio	8.576	1	.003		
Fisher's Exact Test				.014	.007
Linear-by-Linear Association	7.519	1	.006		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.50.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.509			.005
	Cramer's V	.509			.005
Ordinal by Ordinal	Gamma	.882	.128	3.240	.001
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Influence of Participation * Time of Participation

Crosstab

Count

		Time		Total
		low	high	
Influence	low	14	1	15
	high	8	7	15
Total		22	8	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.136 ^b	1	.013		
Continuity Correction ^a	4.261	1	.039		
Likelihood Ratio	6.719	1	.010		
Fisher's Exact Test				.035	.018
Linear-by-Linear Association	5.932	1	.015		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.452			.013
	Cramer's V	.452			.013
Ordinal by Ordinal	Gamma	.849	.161	2.777	.005
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Influence of Participation * Habitat Loss

Crosstab

Count

		Habitat Loss		Total
		low	high	
Influence	low	11	4	15
	high	5	10	15
Total		16	14	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.821 ^b	1	.028		
Continuity Correction ^a	3.348	1	.067		
Likelihood Ratio	4.963	1	.026		
Fisher's Exact Test				.066	.033
Linear-by-Linear Association	4.661	1	.031		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	.401			.028
Nominal by Nominal Cramer's V	.401			.028
Ordinal by Ordinal Gamma	.692	.208	2.397	.017
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Influence of Participation * Monitoring

Crosstab

Count

		Monitoring		Total
		low	high	
Influence	low	11	4	15
	high	3	12	15
Total		14	16	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.571 ^b	1	.003		
Continuity Correction ^a	6.563	1	.010		
Likelihood Ratio	9.046	1	.003		
Fisher's Exact Test				.009	.005
Linear-by-Linear Association	8.286	1	.004		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.535			.003
Nominal by Cramer's V	.535			.003
Ordinal by Ordinal Gamma	.833	.133	3.464	.001
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Influence of Participation * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Influence	low	11	4	15
	high	4	11	15
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.533 ^b	1	.011		
Continuity Correction ^a	4.800	1	.028		
Likelihood Ratio	6.794	1	.009		
Fisher's Exact Test				.027	.013
Linear-by-Linear Association	6.316	1	.012		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.467			.011
Nominal by Cramer's V	.467			.011
Ordinal by Ordinal Gamma	.766	.170	2.890	.004
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participation from Documentation * Habitat Loss

Crosstab

Count

		Habitat Loss		Total
		low	high	
Participation from Documentation	low	13	3	16
	high	3	11	14
Total		16	14	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.736 ^b	1	.001		
Continuity Correction ^a	8.467	1	.004		
Likelihood Ratio	11.465	1	.001		
Fisher's Exact Test				.003	.001
Linear-by-Linear Association	10.378	1	.001		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.53.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.598			.001
Nominal by Cramer's V	.598			.001
Ordinal by Ordinal Gamma	.882	.102	4.055	.000
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participation from Documentation * Monitoring

Crosstab

Count

		Monitoring		Total
		low	high	
Participation from Documentation	low	11	5	16
	high	3	11	14
Total		14	16	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.718 ^a	1	.010		
Continuity Correction ^a	4.951	1	.026		
Likelihood Ratio	7.032	1	.008		
Fisher's Exact Test				.014	.012
Linear-by-Linear Association	6.494	1	.011		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.53.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.473			.010
	Cramer's V	.473			.010
Ordinal by Ordinal	Gamma	.779	.166	2.958	.003
N of Valid Cases		30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participation from Documentation * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Participation from Documentation	low	10	6	16
	high	5	9	14
Total		15	15	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.143 ^b	1	.143		
Continuity Correction ^a	1.205	1	.272		
Likelihood Ratio	2.170	1	.141		
Fisher's Exact Test				.272	.136
Linear-by-Linear Association	2.071	1	.150		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.267			.143
Nominal by Cramer's V	.267			.143
Ordinal by Ordinal Gamma	.500	.285	1.519	.129
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Funding * Risk-Aversion

Crosstab

Count

		Risk-Aversion		Total
		low	high	
Funding	low	6	4	10
	high	5	15	20
Total		11	19	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.517 ^b	1	.061		
Continuity Correction ^a	2.171	1	.141		
Likelihood Ratio	3.476	1	.062		
Fisher's Exact Test				.108	.071
Linear-by-Linear Association	3.400	1	.065		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.67.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.342			.061
Nominal by Cramer's V	.342			.061
Ordinal by Ordinal Gamma	.636	.246	1.860	.063
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Biological Soundness * Risk-Aversion

Crosstab

Count

		Risk-Aversion		Total
		low	high	
Biological Soundness	low	8	7	15
	high	3	12	15
Total		11	19	30

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.589 ^b	1	.058		
Continuity Correction ^a	2.297	1	.130		
Likelihood Ratio	3.690	1	.055		
Fisher's Exact Test				.128	.064
Linear-by-Linear Association	3.469	1	.063		
N of Valid Cases	30				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.50.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	.346			.058
Nominal by Nominal Cramer's V	.346			.058
Ordinal by Ordinal Gamma	.641	.244	2.019	.043
N of Valid Cases	30			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Access to Information * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Access to Information	low	5	6	11
	high	5	6	11
Total		10	12	22

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.000 ^b	1	1.000	1.000	.665
Continuity Correction ^a	.000	1	1.000		
Likelihood Ratio	.000	1	1.000		
Fisher's Exact Test					
Linear-by-Linear Association	.000	1	1.000		
N of Valid Cases	22				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.000			1.000
Nominal by Cramer's V	.000			1.000
Ordinal by Ordinal Gamma	.000	.428	.000	1.000
N of Valid Cases	22			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Access to Decision Making * Participation from Documentation

Crosstab

Count

		Participation from Documentation		Total
		low	high	
Access to Decision Making	low	2	9	11
	high	8	4	12
Total		10	13	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.490 ^b	1	.019		
Continuity Correction ^a	3.694	1	.055		
Likelihood Ratio	5.785	1	.016		
Fisher's Exact Test				.036	.026
Linear-by-Linear Association	5.251	1	.022		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.78.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.489			.019
Nominal by Cramer's V	.489			.019
Ordinal by Ordinal Gamma	-.800	.179	-2.705	.007
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Access to Decision Making * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Access to Decision Making	low	4	7	11
	high	6	6	12
Total		10	13	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.434 ^b	1	.510		
Continuity Correction ^a	.057	1	.812		
Likelihood Ratio	.436	1	.509		
Fisher's Exact Test				.680	.407
Linear-by-Linear Association	.415	1	.519		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.78.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.137			.510
Nominal by Cramer's V	.137			.510
Ordinal by Ordinal Gamma	-.273	.394	-.666	.505
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Perceived Participation * Biological Soundness

Crosstab

Count

		Biological Soundness		Total
		low	high	
Perceived Participation	low	4	7	11
	high	6	6	12
Total		10	13	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.434 ^a	1	.510		
Continuity Correction ^a	.057	1	.812		
Likelihood Ratio	.436	1	.509		
Fisher's Exact Test				.680	.407
Linear-by-Linear Association	.415	1	.519		
N of Valid Cases	23				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.78.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.137			.510
Nominal by Nominal Cramer's V	.137			.510
Ordinal by Ordinal Gamma	-.273	.394	-.666	.505
N of Valid Cases	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Plans by size groups * Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation

Crosstab

Count

		Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation		Total
		No	Yes	
Plans by size groups	Could not be determined	3	9	12
	Small	14	5	19
	Moderate	23	17	40
	Large	54	79	133
Total		94	110	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.679 ^a	3	.009
Likelihood Ratio	11.953	3	.008
Linear-by-Linear Association	.072	1	.788
N of Valid Cases	204		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.53.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.239			.009
Nominal by Cramer's V	.239			.009
Ordinal by Ordinal Gamma	.240	.123	1.894	.058
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Applicant/Company Employee

Crosstab

Count

		Applicant/Company Employee		Total
		No	Yes	
Participated during phase 1 of the plan	No	52	3	55
	yes	121	28	149
Total		173	31	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.545 ^b	1	.019		
Continuity Correction ^a	4.558	1	.033		
Likelihood Ratio	6.570	1	.010		
Fisher's Exact Test				.016	.012
Linear-by-Linear Association	5.518	1	.019		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.36.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.165			.019
	Cramer's V	.165			.019
Ordinal by Ordinal	Gamma	.601	.201	2.942	.003
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Land Developer/Development Community

Crosstab

Count

		Land Developer/Development Community		Total
		No	Yes	
Participated during phase 1 of the plan	No	53	2	55
	yes	123	26	149
Total		176	28	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.473 ^b	1	.011		
Continuity Correction ^a	5.359	1	.021		
Likelihood Ratio	8.038	1	.005		
Fisher's Exact Test				.011	.006
Linear-by-Linear Association	6.441	1	.011		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.55.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.178			.011
	Cramer's V	.178			.011
Ordinal by Ordinal	Gamma	.697	.193	3.346	.001
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Landowner-Property owner?

Crosstab

Count

		Landowner-Property owner?		Total
		No	Yes	
Participated during phase 1 of the plan	No	35	20	55
	yes	116	33	149
Total		151	53	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.222 ^b	1	.040		
Continuity Correction ^a	3.515	1	.061		
Likelihood Ratio	4.047	1	.044		
Fisher's Exact Test				.048	.032
Linear-by-Linear Association	4.201	1	.040		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.29.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.144			.040
	Cramer's V	.144			.040
Ordinal by Ordinal	Gamma	-.335	.152	-1.922	.055
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Affected Community

Crosstab

Count

		Affected Community		Total
		No	Yes	
Participated during phase 1 of the plan	No	43	12	55
	yes	132	17	149
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.569 ^b	1	.059		
Continuity Correction ^a	2.766	1	.096		
Likelihood Ratio	3.322	1	.068		
Fisher's Exact Test				.071	.052
Linear-by-Linear Association	3.551	1	.059		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.82.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.132			.059
	Cramer's V	.132			.059
Ordinal by Ordinal	Gamma	-.368	.180	-1.680	.093
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Local Government

Crosstab

Count

		Local Government		Total
		No	Yes	
Participated during phase 1 of the plan	No	47	8	55
	yes	107	42	149
Total		154	50	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.041 ^b	1	.044		
Continuity Correction ^a	3.337	1	.068		
Likelihood Ratio	4.361	1	.037		
Fisher's Exact Test				.046	.031
Linear-by-Linear Association	4.021	1	.045		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.48.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.141			.044
Nominal by Cramer's V	.141			.044
Ordinal by Ordinal Gamma	.395	.179	2.238	.025
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Recreational Land User

Crosstab

Count

		Recreational Land User		Total
		No	Yes	
Participated during phase 1 of the plan	No	44	11	55
	yes	144	5	149
Total		188	16	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15.397 ^b	1	.000		
Continuity Correction ^a	13.180	1	.000		
Likelihood Ratio	13.348	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.321	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.31.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.275			.000
Nominal by Cramer's V	.275			.000
Ordinal by Ordinal Gamma	-.756	.121	-2.909	.004
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation

Crosstab

Count

		Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation		Total
		No	Yes	
Participated during phase 1 of the plan	No	46	9	55
	yes	48	101	149
Total		94	110	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	42.751 ^b	1	.000		
Continuity Correction ^a	40.707	1	.000		
Likelihood Ratio	45.240	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	42.542	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.34.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.458			.000
Nominal by Cramer's V	.458			.000
Ordinal by Ordinal Gamma	.830	.063	7.029	.000
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Letter Writing/Comments/Mailing of Materials/Surveys

Crosstab

Count

		Letter Writing/Comments/Mailing of Materials/Surveys		Total
		No	Yes	
Participated during phase 1 of the plan	No	11	44	55
	yes	68	81	149
Total		79	125	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.127 ^b	1	.001		
Continuity Correction ^a	10.073	1	.002		
Likelihood Ratio	11.875	1	.001		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	11.073	1	.001		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.30.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.234			.001
Cramer's V	.234			.001
Ordinal by Ordinal Gamma	-.541	.133	-3.654	.000
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * Perceived Influence on the final version of the plan

Crosstab

Count

		Perceived Influence on the final version of the plan				
		1	2	3	4	5
Participated during phase 1 of the plan	No	17	6	13	7	7
	yes	11	13	12	9	36
Total		28	19	25	16	43

Crosstab

Count

		Perceived Influence on the final version of the plan				Total
		6	7	8	9	
Participated during phase 1 of the plan	No	1		2	1	54
	yes	11	22	16	16	146
Total		12	22	18	17	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.472 ^a	8	.000
Likelihood Ratio	50.281	8	.000
Linear-by-Linear Association	34.561	1	.000
N of Valid Cases	200		

a. 4 cells (22.2%) have expected count less than 5. The minimum expected count is 3.24.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.477			.000
	Cramer's V	.477			.000
Ordinal by Ordinal	Gamma	.610	.075	6.716	.000
N of Valid Cases		200			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 1 of the plan * The Final version addressed your concerns about the plan.

Crosstab

Count

		The Final version addressed your concerns about the plan.				
		1	2	3	4	5
Participated during phase 1 of the plan	No	15	12	4	1	10
	yes	13	7	4	12	24
Total		28	19	8	13	34

Crosstab

Count

		The Final version addressed your concerns about the plan..				Total
		6	7	8	9	
Participated during phase 1 of the plan	No	5	3		4	54
	yes	11	27	28	14	140
Total		16	30	28	18	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.585 ^a	8	.000
Likelihood Ratio	47.993	8	.000
Linear-by-Linear Association	28.400	1	.000
N of Valid Cases	194		

a. 3 cells (16.7%) have expected count less than 5. The minimum expected count is 2.23.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by	Phi	.463			.000
Nominal	Cramer's V	.463			.000
Ordinal by Ordinal	Gamma	.520	.087	5.359	.000
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 2 * Letter Writing/Comments/Mailing of Materials/Surveys

Crosstab

Count

		Letter Writing/Comments/Mailing of Materials/Surveys		Total
		No	Yes	
Participated during phase 2	No	18	12	30
	Yes	61	113	174
Total		79	125	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.709 ^a	1	.010		
Continuity Correction ^a	5.699	1	.017		
Likelihood Ratio	6.526	1	.011		
Fisher's Exact Test				.014	.009
Linear-by-Linear Association	6.676	1	.010		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.62.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.181			.010
Nominal by Cramer's V	.181			.010
Ordinal by Ordinal Gamma	.471	.158	2.432	.015
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 2 * Public Meetings/Public Hearings/ Presentations/Workshops

Crosstab

Count

		Public Meetings/Public Hearings/ Presentations/Workshops		Total
		No	Yes	
Participated during phase 2	No	16	14	30
	Yes	52	122	174
Total		68	136	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.331 ^b	1	.012		
Continuity Correction ^a	5.320	1	.021		
Likelihood Ratio	6.002	1	.014		
Fisher's Exact Test				.020	.012
Linear-by-Linear Association	6.300	1	.012		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.00.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.176			.012
Nominal Cramer's V	.176			.012
Ordinal by Ordinal Gamma	.457	.159	2.281	.023
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Applicant/Company Employee

Crosstab

Count

		Applicant/Company Employee		Total
		No	Yes	
Participated during phase 3 of the plan	No	80	4	84
	Yes	93	27	120
Total		173	31	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.064 ^b	1	.001		
Continuity Correction ^a	10.727	1	.001		
Likelihood Ratio	13.725	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	12.005	1	.001		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.76.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.243			.001
Nominal by Cramer's V	.243			.001
Ordinal by Ordinal Gamma	.706	.140	3.954	.000
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Affected Community

Crosstab

Count

		Affected Community		Total
		No	Yes	
Participated during phase 3 of the plan	No	83	21	84
	Yes	112	8	120
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.619 ^b	1	.000		
Continuity Correction ^a	12.157	1	.000		
Likelihood Ratio	13.559	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	13.552	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.94.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.258			.000
Nominal by Cramer's V	.258			.000
Ordinal by Ordinal Gamma	-.647	.129	-3.482	.000
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Local Government

Crosstab

Count

		Local Government		Total
		No	Yes	
Participated during phase 3 of the plan	No	72	12	84
	Yes	82	38	120
Total		154	50	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.068 ^b	1	.005		
Continuity Correction ^a	7.156	1	.007		
Likelihood Ratio	8.470	1	.004		
Fisher's Exact Test				.005	.003
Linear-by-Linear Association	8.028	1	.005		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.59.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.199			.005
Nominal by Cramer's V	.199			.005
Ordinal by Ordinal Gamma	.471	.143	3.035	.002
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Recreational Land User

Crosstab

Count

		Recreational Land User		Total
		No	Yes	
Participated during phase 3 of the plan	No	72	12	84
	Yes	116	4	120
Total		188	16	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.200 ^b	1	.004		
Continuity Correction ^a	6.755	1	.009		
Likelihood Ratio	8.194	1	.004		
Fisher's Exact Test				.007	.005
Linear-by-Linear Association	8.160	1	.004		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.59.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.200			.004
Nominal by Nominal Cramer's V	.200			.004
Ordinal by Ordinal Gamma	-.657	.169	-2.630	.009
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation

Crosstab

Count

		Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation		Total
		No	Yes	
Participated during phase 3 of the plan	No	50	34	84
	Yes	44	76	120
Total		94	110	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.390 ^b	1	.001		
Continuity Correction ^a	9.490	1	.002		
Likelihood Ratio	10.448	1	.001		
Fisher's Exact Test				.002	.001
Linear-by-Linear Association	10.339	1	.001		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 38.71.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	.226			.001
Nominal by Nominal Cramer's V	.226			.001
Ordinal by Ordinal Gamma	.435	.118	3.287	.001
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Letter Writing/Comments/Mailing of Materials/Surveys

Crosstab

Count

		Letter Writing/Comments/Mailing of Materials/Surveys		Total
		No	Yes	
Participated during phase 3 of the plan	No	25	59	84
	Yes	54	66	120
Total		79	125	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.835 ^b	1	.028		
Continuity Correction ^a	4.214	1	.040		
Likelihood Ratio	4.904	1	.027		
Fisher's Exact Test				.030	.020
Linear-by-Linear Association	4.812	1	.028		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 32.53.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.154			.028
Cramer's V	.154			.028
Ordinal by Ordinal Gamma	-.318	.135	-2.255	.024
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Environmentalists/ Environmental Organizations

Crosstab

Count

		Environmentalists/ Environmental Organizations		Total
		No	Yes	
Participated during phase 3 of the plan	No	53	31	84
	Yes	91	29	120
Total		144	60	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.862 ^b	1	.049		
Continuity Correction ^a	3.273	1	.070		
Likelihood Ratio	3.828	1	.050		
Fisher's Exact Test				.061	.036
Linear-by-Linear Association	3.843	1	.050		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 24.71.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	-.138			.049
Nominal by Cramer's V	.138			.049
Ordinal by Ordinal Gamma	-.295	.142	-1.940	.052
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Government Personnel in Federal and State Wildlife Agencies

Crosstab

Count

		Government Personnel in Federal and State Wildlife Agencies		Total
		No	Yes	
Participated during phase 3 of the plan	No	82	2	84
	Yes	99	21	120
Total		181	23	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.291 ^b	1	.001		
Continuity Correction ^a	9.830	1	.002		
Likelihood Ratio	13.507	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	11.236	1	.001		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.47.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	.235			.001
Nominal by Nominal Cramer's V	.235			.001
Ordinal by Ordinal Gamma	.794	.140	3.911	.000
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Other/Consultants

Crosstab

Count

		Other/Consultants		Total
		No	Yes	
Participated during phase 3 of the plan	No	67	17	84
	Yes	108	12	120
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.247 ^b	1	.039		
Continuity Correction ^a	3.449	1	.063		
Likelihood Ratio	4.176	1	.041		
Fisher's Exact Test				.044	.032
Linear-by-Linear Association	4.226	1	.040		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.94.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.144			.039
	Cramer's V	.144			.039
Ordinal by Ordinal	Gamma	-.391	.173	-1.978	.048
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * Perceived Influence on the final version of the plan

Crosstab

Count

		Perceived Influence on the final version of the plan				
		1	2	3	4	5
Participated during phase 3 of the plan	No	19	11	13	9	20
	Yes	9	8	12	7	23
Total		28	19	25	16	43

Crosstab

Count

		Perceived Influence on the final version of the plan				Total
		6	7	8	9	
Participated during phase 3 of the plan	No	5	2	3		82
	Yes	7	20	15	17	118
Total		12	22	18	17	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.402 ^a	8	.000
Likelihood Ratio	47.841	8	.000
Linear-by-Linear Association	34.584	1	.000
N of Valid Cases	200		

a. 1 cells (5.6%) have expected count less than 5. The minimum expected count is 4.92.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.444			.000
	Cramer's V	.444			.000
Ordinal by Ordinal	Gamma	.539	.072	6.978	.000
N of Valid Cases		200			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Participated during phase 3 of the plan * The Final version addressed your concerns about the plan.

Crosstab

Count

		The Final version addressed your concerns about the plan.				
		1	2	3	4	5
Participated during phase 3 of the plan	No	21	12	4	3	17
	Yes	7	7	4	10	17
Total		28	19	8	13	34

Crosstab

Count

		The Final version addressed your concerns about the plan.				Total
		6	7	8	9	
Participated during phase 3 of the plan	No	10	9	5		81
	Yes	6	21	23	18	113
Total		16	30	28	18	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.356 ^a	8	.000
Likelihood Ratio	50.772	8	.000
Linear-by-Linear Association	32.025	1	.000
N of Valid Cases	194		

a. 2 cells (11.1%) have expected count less than 5. The minimum expected count is 3.34.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.473			.000
	Cramer's V	.473			.000
Ordinal by Ordinal	Gamma	.528	.073	6.772	.000
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Environmentalists/ Environmental Organizations * Perceived Influence on the final version of the plan

Crosstab

Count

		Perceived Influence on the final version of the plan			
		1	2	3	4
Environmentalists/ Environmental Organizations	No	23	13	9	10
	Yes	5	6	16	6
Total		28	19	25	16

Crosstab

Count

		Perceived influence on the final version of the plan			
		5	6	7	8
Environmentalists/	No	33	7	16	14
Environmental Organizations	Yes	10	5	6	4
Total		43	12	22	18

Crosstab

Count

		Perceived	Total
		9	
Environmentalists/	No	16	141
Environmental Organizations	Yes	1	59
Total		17	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.395 ^a	8	.003
Likelihood Ratio	23.411	8	.003
Linear-by-Linear Association	2.618	1	.106
N of Valid Cases	200		

a. 2 cells (11.1%) have expected count less than 5. The minimum expected count is 3.54.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.342			.003
	Cramer's V	.342			.003
Ordinal by Ordinal	Gamma	-.157	.092	-1.695	.090
N of Valid Cases		200			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Environmentalists/ Environmental Organizations * The final version of the plan adequately protects the endangered and threatened species at stake

Crosstab

Count

		The final version of the plan adequately protects the			
		1	2	3	4
Environmentalists/	No	5	4	2	4
Environmental Organizations	Yes	15	5	7	6
Total		20	9	9	10

Crosstab

Count

		The final version of the plan adequately protects the			
		5	6	7	8
Environmentalists/	No	15	12	32	28
Environmental Organizations	Yes	10	1	10	2
Total		25	13	42	30

Crosstab

Count

		The final	Total
		9	
Environmentalists/	No	33	135
Environmental Organizations	Yes	3	59
Total		36	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.561 ^a	8	.000
Likelihood Ratio	58.347	8	.000
Linear-by-Linear Association	49.239	1	.000
N of Valid Cases	194		

a. 4 cells (22.2%) have expected count less than 5. The minimum expected count is 2.74.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.540			.000
	Cramer's V	.540			.000
Ordinal by Ordinal	Gamma	-.664	.070	-7.615	.000
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Environmentalists/ Environmental Organizations * The final version of the plan reflects a balanced agreement among all parties involved in the negotiation

Crosstab

Count

		The final version of the plan reflects a balanced agreement			
		1	2	3	4
Environmentalists/ Environmental Organizations	No	15	6	14	8
	Yes	12	4	8	5
Total		27	10	22	13

Crosstab

Count

		The final version of the plan reflects a balanced agreement			
		5	6	7	8
Environmentalists/ Environmental Organizations	No	23	14	21	20
	Yes	12		7	9
Total		35	14	28	29

Crosstab

Count

		The final	Total
		9	
Environmentalists/	No	18	139
Environmental Organizations	Yes	2	59
Total		20	198

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.542 ^a	8	.069
Likelihood Ratio	19.078	8	.014
Linear-by-Linear Association	7.134	1	.008
N of Valid Cases	198		

a. 3 cells (16.7%) have expected count less than 5. The minimum expected count is 2.98.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by	Phi	.271			.069
Nominal	Cramer's V	.271			.069
Ordinal by Ordinal	Gamma	-.270	.097	-2.718	.007
N of Valid Cases		198			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Environmentalists/ Environmental Organizations * The Final version addressed your concerns about the plan.

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		1	2	3	4
Environmentalists/	No	21	6	7	6
Environmental Organizations	Yes	7	13	1	7
Total		28	19	8	13

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		5	6	7	8
Environmentalists/	No	21	12	25	23
Environmental Organizations	Yes	13	4	5	5
Total		34	16	30	28

Crosstab

Count

		The Final	Total
		9	
Environmentalists/	No	16	137
Environmental Organizations	Yes	2	57
Total		18	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.522 ^a	8	.001
Likelihood Ratio	26.687	8	.001
Linear-by-Linear Association	8.626	1	.003
N of Valid Cases	194		

a. 3 cells (16.7%) have expected count less than 5. The minimum expected count is 2.35.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.377			.001
	Cramer's V	.377			.001
Ordinal by Ordinal	Gamma	-.309	.091	-3.261	.001
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Local Government * The final version of the plan reflects a balanced agreement among all parties involved in the negotiation

Crosstab

Count

		The final version of the plan reflects a balanced agreement among all parties				
		1	2	3	4	5
Local Government	No	26	10	20	10	25
	Yes	1		2	3	10
Total		27	10	22	13	35

Crosstab

Count

		The final version of the plan reflects a balanced agreement				Total
		6	7	8	9	
Local Government	No	10	16	16	15	148
	Yes	4	12	13	5	50
Total		14	28	29	20	198

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.869 ^a	8	.002
Likelihood Ratio	28.515	8	.000
Linear-by-Linear Association	17.062	1	.000
N of Valid Cases	198		

a. 3 cells (16.7%) have expected count less than 5. The minimum expected count is 2.53.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.347			.002
	Cramer's V	.347			.002
Ordinal by Ordinal	Gamma	.426	.084	4.605	.000
N of Valid Cases		198			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Affected Industry/Industry Group

Crosstab

Count

		Affected Industry/Industry Group		Total
		No	Yes	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	94		94
	Yes	105	5	110
Total		199	5	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.380 ^b	1	.036	.063	.044
Continuity Correction ^a	2.685	1	.101		
Likelihood Ratio	6.284	1	.012		
Fisher's Exact Test					
Linear-by-Linear Association	4.359	1	.037		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.30.

Symmetric Measures

			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi		.147			.036
	Cramer's V		.147			.036
Ordinal by Ordinal	Gamma		1.000	.000	2.288	.022
N of Valid Cases			204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Affected Community

Crosstab

Count

		Affected Community		Total
		No	Yes	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	73	21	94
	Yes	102	8	110
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.436 ^a	1	.002		
Continuity Correction ^a	8.241	1	.004		
Likelihood Ratio	9.612	1	.002		
Fisher's Exact Test				.002	.002
Linear-by-Linear Association	9.390	1	.002		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.36.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.215			.002
	Cramer's V	.215			.002
Ordinal by Ordinal	Gamma	-.572	.149	-3.037	.002
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Academic

Crosstab

Count

		Academic		Total
		No	Yes	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	93	1	94
	Yes	102	8	110
Total		195	9	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.633 ^b	1	.031		
Continuity Correction ^a	3.278	1	.070		
Likelihood Ratio	5.357	1	.021		
Fisher's Exact Test				.040	.031
Linear-by-Linear Association	4.611	1	.032		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.15.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.151			.031
	Cramer's V	.151			.031
Ordinal by Ordinal	Gamma	.759	.227	2.305	.021
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Local Government

Crosstab

Count

		Local Government		Total
		No	Yes	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	83	11	94
	Yes	71	39	110
Total		154	50	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15.455 ^b	1	.000		
Continuity Correction ^a	14.198	1	.000		
Likelihood Ratio	16.304	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.379	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.04.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.275			.000
	Cramer's V	.275			.000
Ordinal by Ordinal	Gamma	.611	.118	4.208	.000
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Recreational Land User

Crosstab

Count

		Recreational Land User		Total
		No	Yes	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	81	13	94
	Yes	107	3	110
Total		188	16	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.644 ^b	1	.003		
Continuity Correction ^a	7.176	1	.007		
Likelihood Ratio	9.089	1	.003		
Fisher's Exact Test				.004	.003
Linear-by-Linear Association	8.602	1	.003		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.37.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.206			.003
	Cramer's V	.206			.003
Ordinal by Ordinal	Gamma	-.703	.166	-2.857	.004
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * Perceived Influence on the final version of the plan

Crosstab

Count

		Perceived Influence on the final version of the plan			
		1	2	3	4
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	22	11	15	8
	Yes	6	8	10	8
Total		28	19	25	16

Crosstab

Count

		Perceived Influence on the final version of the plan			
		5	6	7	8
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	13	3	10	6
	Yes	30	9	12	12
Total		43	12	22	18

Crosstab

Count

		Perceived	Total
		9	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	5	93
	Yes	12	107
Total		17	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.542 ^a	8	.002
Likelihood Ratio	25.460	8	.001
Linear-by-Linear Association	16.319	1	.000
N of Valid Cases	200		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.58.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.350			.002
Nominal by Cramer's V	.350			.002
Ordinal by Ordinal Gamma	.378	.084	4.378	.000
N of Valid Cases	200			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation * The Final version addressed your concerns about the plan.

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		1	2	3	4
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	23	14	5	4
	Yes	5	5	3	9
Total		28	19	8	13

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		5	6	7	8
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	13	7	7	7
	Yes	21	9	23	21
Total		34	16	30	28

Crosstab

Count

		The Final	Total
		9	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	12	92
	Yes	6	102
Total		18	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.508 ^a	8	.000
Likelihood Ratio	39.449	8	.000
Linear-by-Linear Association	16.433	1	.000
N of Valid Cases	194		

a. 2 cells (11.1%) have expected count less than 5. The minimum expected count is 3.79.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.440			.000
	Cramer's V	.440			.000
Ordinal by Ordinal	Gamma	.336	.089	3.709	.000
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in

the Negotiation * Accessibility to Information relative to the plan provided by the USFWS

Crosstab

Count

		Accessibility to Information relative to the plan provided by the			
		1	2	3	4
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	8	12	6	5
	Yes	3	6	24	8
Total		11	18	30	13

Crosstab

Count

		Accessibility to Information relative to the plan provided by the			
		5	6	7	8
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	19	6	7	6
	Yes	17	10	17	8
Total		36	16	24	14

Crosstab

Count

		Accessibility	Total
		9	
Steering Committee/Advisory Committee/Science Advisory Board/Individuals involved in the Negotiation	No	8	77
	Yes	12	105
Total		20	182

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.253 ^a	8	.019
Likelihood Ratio	18.846	8	.016
Linear-by-Linear Association	1.806	1	.179
N of Valid Cases	182		

a. 1 cells (5.6%) have expected count less than 5. The minimum expected count is 4.65.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Phi	.317			.019
Nominal by Cramer's V	.317			.019
Ordinal by Ordinal Gamma	.131	.098	1.333	.183
N of Valid Cases	182			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Public Meetings/Public Hearings/ Presentations/Workshops * Academic**Crosstab**

Count

		Academic		Total
		No	Yes	
Public Meetings/Public Hearings/ Presentations/Workshops	No	61	7	68
	Yes	134	2	136
Total		195	9	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.369 ^b	1	.004		
Continuity Correction ^a	6.408	1	.011		
Likelihood Ratio	7.841	1	.005		
Fisher's Exact Test				.007	.007
Linear-by-Linear Association	8.328	1	.004		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.203			.004
	Cramer's V	.203			.004
Ordinal by Ordinal	Gamma	-.770	.166	-2.291	.022
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Public Meetings/Public Hearings/ Presentations/Workshops * Government Personnel not in Federal State and Wildlife Agencies

Crosstab

Count

		Government Personnel not in Federal State and Wildlife Agencies		
		No	Yes	Total
Public Meetings/Public Hearings/ Presentations/Workshops	No	58	10	68
	Yes	128	8	136
Total		186	18	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.387 ^a	1	.036		
Continuity Correction ^a	3.359	1	.067		
Likelihood Ratio	4.121	1	.042		
Fisher's Exact Test				.063	.036
Linear-by-Linear Association	4.366	1	.037		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.147			.036
	Cramer's V	.147			.036
Ordinal by Ordinal	Gamma	-.468	.195	-1.852	.064
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Public Meetings/Public Hearings/ Presentations/Workshops * Independent Biologist

Crosstab

Count

		Independent Biologist		Total
		No	Yes	
Public Meetings/Public Hearings/ Presentations/Workshops	No	59	9	68
	Yes	130	6	136
Total		189	15	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.181 ^b	1	.023		
Continuity Correction ^a	3.967	1	.046		
Likelihood Ratio	4.835	1	.028		
Fisher's Exact Test				.042	.026
Linear-by-Linear Association	5.156	1	.023		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	-.159			.023
	Cramer's V	.159			.023
Ordinal by Ordinal	Gamma	-.535	.196	-1.964	.050
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Public Meetings/Public Hearings/ Presentations/Workshops * Other/Consultants

Crosstab

Count

		Other/Consultants		Total
		No	Yes	
Public Meetings/Public Hearings/ Presentations/Workshops	No	67	1	68
	Yes	108	28	136
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.587 ^b	1	.000		
Continuity Correction ^a	12.064	1	.001		
Likelihood Ratio	18.092	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	13.520	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.67.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.258			.000
	Cramer's V	.258			.000
Ordinal by Ordinal	Gamma	.891	.106	4.928	.000
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Public Meetings/Public Hearings/ Presentations/Workshops * Accessibility to Information relative to the plan provided by the USFWS

Crosstab

Count

		Accessibility to Information relative to the plan provided by the			
		1	2	3	4
Public Meetings/Public Hearings/	No	1	7	2	7
Presentations/Workshops	Yes	10	11	28	6
Total		11	18	30	13

Crosstab

Count

		Accessibility to Information relative to the plan provided by the			
		5	6	7	8
Public Meetings/Public Hearings/	No	14	9	8	6
Presentations/Workshops	Yes	22	7	16	8
Total		36	16	24	14

Crosstab

Count

		Accessibility	Total
		9	
Public Meetings/Public Hearings/	No	8	62
Presentations/Workshops	Yes	12	120
Total		20	182

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.212 ^a	8	.010
Likelihood Ratio	23.458	8	.003
Linear-by-Linear Association	4.948	1	.026
N of Valid Cases	182		

a. 3 cells (16.7%) have expected count less than 5. The minimum expected count is 3.75.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.333			.010
	Cramer's V	.333			.010
Ordinal by Ordinal	Gamma	-.226	.095	-2.342	.019
N of Valid Cases		182			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * Landowner-Property owner?

Crosstab

Count

		Landowner-Property owner?		Total
		No	Yes	
Letter Writing/Comments/Mailing of Materials/Surveys	No	67	12	79
	Yes	84	41	125
Total		151	53	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.806 ^b	1	.005		
Continuity Correction ^a	6.917	1	.009		
Likelihood Ratio	8.229	1	.004		
Fisher's Exact Test				.005	.004
Linear-by-Linear Association	7.768	1	.005		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.52.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.196			.005
	Cramer's V	.196			.005
Ordinal by Ordinal	Gamma	.463	.144	3.008	.003
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * Affected Community

Crosstab

Count

		Affected Community		Total
		No	Yes	
Letter Writing/Comments/Mailing of Materials/Surveys	No	73	6	79
	Yes	102	23	125
Total		175	29	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.634 ^b	1	.031		
Continuity Correction ^a	3.791	1	.052		
Likelihood Ratio	4.999	1	.025		
Fisher's Exact Test				.039	.023
Linear-by-Linear Association	4.612	1	.032		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.23.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.151			.031
	Cramer's V	.151			.031
Ordinal by Ordinal	Gamma	.466	.189	2.357	.018
N of Valid Cases		204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * Environmentalists/ Environmental Organizations

Crosstab

Count

		Environmentalists/ Environmental Organizations		Total
		No	Yes	
Letter Writing/Comments/Mailing of Materials/Surveys	No	69	10	79
	Yes	75	50	125
Total		144	60	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	17.430 ^b	1	.000		
Continuity Correction ^a	16.138	1	.000		
Likelihood Ratio	18.898	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	17.345	1	.000		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.24.

Symmetric Measures

			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi		.292			.000
	Cramer's V		.292			.000
Ordinal by Ordinal	Gamma		.643	.113	4.690	.000
N of Valid Cases			204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * Local Government

Crosstab

Count

		Local Government		Total
		No	Yes	
Letter Writing/Comments/Mailing of Materials/Surveys	No	53	26	79
	Yes	101	24	125
Total		154	50	204

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.919 ^b	1	.027		
Continuity Correction ^a	4.205	1	.040		
Likelihood Ratio	4.831	1	.028		
Fisher's Exact Test				.031	.021
Linear-by-Linear Association	4.894	1	.027		
N of Valid Cases	204				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.36.

Symmetric Measures

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal Phi	-.155			.027
Cramer's V	.155			.027
Ordinal by Ordinal Gamma	-.347	.145	-2.153	.031
N of Valid Cases	204			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * Perceived Influence on the final version of the plan

Crosstab

Count

		Perceived Influence on the final version of the plan			
		1	2	3	4
Letter Writing/Comments/Mailing of Materials/Surveys	No	7	7	7	7
	Yes	21	12	18	9
Total		28	19	25	16

Crosstab

Count

		Perceived Influence on the final version of the plan			
		5	6	7	8
Letter Writing/Comments/Mailing of Materials/Surveys	No	20	3	15	3
	Yes	23	9	7	15
Total		43	12	22	18

Crosstab

Count

		Perceived	Total
		9	
Letter Writing/Comments/Mailing of Materials/Surveys	No	9	78
	Yes	8	122
Total		17	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.814 ^a	8	.016
Likelihood Ratio	19.275	8	.013
Linear-by-Linear Association	3.051	1	.081
N of Valid Cases	200		

a. 1 cells (5.6%) have expected count less than 5. The minimum expected count is 4.68.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.307			.016
	Cramer's V	.307			.016
Ordinal by Ordinal	Gamma	-.165	.091	-1.800	.072
N of Valid Cases		200			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Letter Writing/Comments/Mailing of Materials/Surveys * The Final version addressed your concerns about the plan.

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		1	2	3	4
Letter	No	3	3	2	6
Writing/Comments/Mailing of Materials/Surveys	Yes	25	16	6	7
Total		28	19	8	13

Crosstab

Count

		The Final version addressed your concerns about the plan.			
		5	6	7	8
Letter	No	14	8	18	10
Writing/Comments/Mailing of Materials/Surveys	Yes	20	8	12	18
Total		34	16	30	28

Crosstab

Count

		The Final	Total
		9	
Letter	No	12	76
Writing/Comments/Mailing of Materials/Surveys	Yes	6	118
Total		18	194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.973 ^a	8	.001
Likelihood Ratio	29.148	8	.000
Linear-by-Linear Association	18.885	1	.000
N of Valid Cases	194		

a. 2 cells (11.1%) have expected count less than 5. The minimum expected count is 3.13.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.373			.001
	Cramer's V	.373			.001
Ordinal by Ordinal	Gamma	-.390	.083	-4.541	.000
N of Valid Cases		194			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Nonparametric Correlations for All Variables

Correlations

			RISK-AVERSION	HABITAT LOSS
Spearman's rho	RISK-AVERSION	Correlation Coefficient	1.000	.000
		Sig. (2-tailed)	.	.998
		N	30	30
	HABITAT LOSS	Correlation Coefficient	.000	1.000
		Sig. (2-tailed)	.998	.
		N	30	30
	SPECIES STATUS	Correlation Coefficient	.101	.271
		Sig. (2-tailed)	.595	.147
		N	30	30
	TAKE	Correlation Coefficient	-.371*	.331
		Sig. (2-tailed)	.043	.074
		N	30	30
	IMPACT	Correlation Coefficient	.093	-.060
		Sig. (2-tailed)	.624	.751
		N	30	30
	MITIGATION	Correlation Coefficient	.075	-.115
		Sig. (2-tailed)	.693	.547
		N	30	30
	MONITORING	Correlation Coefficient	.283	.271
		Sig. (2-tailed)	.130	.147
		N	30	30
	ALTERNATIVES	Correlation Coefficient	.054	-.011
		Sig. (2-tailed)	.778	.955
		N	30	30
	FUNDING	Correlation Coefficient	.372*	-.359
		Sig. (2-tailed)	.043	.051
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.192	.243
		Sig. (2-tailed)	.309	.195
		N	30	30
	P.TIME	Correlation Coefficient	.344	.218
		Sig. (2-tailed)	.063	.248
		N	30	30
	P.FORM	Correlation Coefficient	.338	.250
		Sig. (2-tailed)	.067	.183
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.190	.266
		Sig. (2-tailed)	.315	.155
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.210	.445*
		Sig. (2-tailed)	.264	.014
		N	30	30

Correlations

			RISK- AVERSION	HABITAT LOSS
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.048	-.394
		Sig. (2-tailed)	.834	.069
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.004	-.100
		Sig. (2-tailed)	.986	.651
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	.012	-.195
		Sig. (2-tailed)	.958	.372
		N	23	23

Correlations

			SPECIES STATUS	TAKE
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.101	-.371*
		Sig. (2-tailed)	.595	.043
		N	30	30
	HABITAT LOSS	Correlation Coefficient	.271	.331
		Sig. (2-tailed)	.147	.074
		N	30	30
	SPECIES STATUS	Correlation Coefficient	1.000	.021
		Sig. (2-tailed)	.	.914
		N	30	30
	TAKE	Correlation Coefficient	.021	1.000
		Sig. (2-tailed)	.914	.
		N	30	30
	IMPACT	Correlation Coefficient	.230	.133
		Sig. (2-tailed)	.222	.485
		N	30	30
	MITIGATION	Correlation Coefficient	-.281	.094
		Sig. (2-tailed)	.132	.623
		N	30	30
	MONITORING	Correlation Coefficient	-.139	.351
		Sig. (2-tailed)	.464	.057
		N	30	30
	ALTERNATIVES	Correlation Coefficient	-.070	-.072
		Sig. (2-tailed)	.714	.704
		N	30	30
	FUNDING	Correlation Coefficient	-.001	-.132
		Sig. (2-tailed)	.996	.487
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.147	.390*
		Sig. (2-tailed)	.438	.033
		N	30	30
	P.TIME	Correlation Coefficient	.061	-.276
		Sig. (2-tailed)	.750	.140
		N	30	30
	P.FORM	Correlation Coefficient	.135	-.207
		Sig. (2-tailed)	.475	.271
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.060	-.073
		Sig. (2-tailed)	.754	.701
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.102	-.025
		Sig. (2-tailed)	.590	.894
		N	30	30

Correlations

			SPECIES STATUS	TAKE
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.083	.167
		Sig. (2-tailed)	.713	.458
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.288	.223
		Sig. (2-tailed)	.182	.306
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	-.239	.216
		Sig. (2-tailed)	.271	.322
		N	23	23

Correlations

			IMPACT	MITIGATION
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.093	.075
		Sig. (2-tailed)	.624	.693
		N	30	30
	HABITAT LOSS	Correlation Coefficient	-.060	-.115
		Sig. (2-tailed)	.751	.547
		N	30	30
	SPECIES STATUS	Correlation Coefficient	.230	-.281
		Sig. (2-tailed)	.222	.132
		N	30	30
	TAKE	Correlation Coefficient	.133	.094
		Sig. (2-tailed)	.485	.623
		N	30	30
	IMPACT	Correlation Coefficient	1.000	.269
		Sig. (2-tailed)	.	.151
		N	30	30
	MITIGATION	Correlation Coefficient	.269	1.000
		Sig. (2-tailed)	.151	.
		N	30	30
	MONITORING	Correlation Coefficient	.125	.408*
		Sig. (2-tailed)	.511	.025
		N	30	30
	ALTERNATIVES	Correlation Coefficient	.254	.310
		Sig. (2-tailed)	.176	.096
		N	30	30
	FUNDING	Correlation Coefficient	-.044	-.181
		Sig. (2-tailed)	.816	.338
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.537**	.445*
		Sig. (2-tailed)	.002	.014
		N	30	30
	P.TIME	Correlation Coefficient	-.032	-.012
		Sig. (2-tailed)	.867	.948
		N	30	30
	P.FORM	Correlation Coefficient	-.090	.059
		Sig. (2-tailed)	.635	.755
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.056	.177
		Sig. (2-tailed)	.770	.350
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.053	.057
		Sig. (2-tailed)	.782	.765
		N	30	30

Correlations

			IMPACT	MITIGATION
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.088	.065
		Sig. (2-tailed)	.695	.774
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.026	-.113
		Sig. (2-tailed)	.905	.609
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	.101	-.069
		Sig. (2-tailed)	.648	.754
		N	23	23

Correlations

			MONITO- RING	ALERNATI- VES
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.283	.054
		Sig. (2-tailed)	.130	.778
		N	30	30
	HABITAT LOSS	Correlation Coefficient	.271	-.011
		Sig. (2-tailed)	.147	.955
		N	30	30
	SPECIES STATUS	Correlation Coefficient	-.139	-.070
		Sig. (2-tailed)	.464	.714
		N	30	30
	TAKE	Correlation Coefficient	.351	-.072
		Sig. (2-tailed)	.057	.704
		N	30	30
	IMPACT	Correlation Coefficient	.125	.254
		Sig. (2-tailed)	.511	.176
		N	30	30
	MITIGATION	Correlation Coefficient	.408*	.310
		Sig. (2-tailed)	.025	.096
		N	30	30
	MONITORING	Correlation Coefficient	1.000	.099
		Sig. (2-tailed)	.	.604
		N	30	30
	ALTERNATIVES	Correlation Coefficient	.099	1.000
		Sig. (2-tailed)	.604	.
		N	30	30
	FUNDING	Correlation Coefficient	.151	-.052
		Sig. (2-tailed)	.424	.783
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.676**	.589**
		Sig. (2-tailed)	.000	.001
		N	30	30
	P.TIME	Correlation Coefficient	.375*	-.026
		Sig. (2-tailed)	.041	.892
		N	30	30
	P.FORM	Correlation Coefficient	.390*	.194
		Sig. (2-tailed)	.033	.304
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.388*	.384*
		Sig. (2-tailed)	.034	.036
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.481**	.243
		Sig. (2-tailed)	.007	.197
		N	30	30

Correlations

			MONITO- RING	ALERNATI- VES
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.096	.046
		Sig. (2-tailed)	.669	.840
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.177	-.196
		Sig. (2-tailed)	.419	.371
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	-.100	-.096
		Sig. (2-tailed)	.649	.664
		N	23	23

Correlations

			FUNDING	BIOLOG. SOUNDN.
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.372*	.192
		Sig. (2-tailed)	.043	.309
		N	30	30
	HABITAT LOSS	Correlation Coefficient	-.359	.243
		Sig. (2-tailed)	.051	.195
		N	30	30
	SPECIES STATUS	Correlation Coefficient	-.001	.147
		Sig. (2-tailed)	.996	.438
		N	30	30
	TAKE	Correlation Coefficient	-.132	.390*
		Sig. (2-tailed)	.487	.033
		N	30	30
	IMPACT	Correlation Coefficient	-.044	.537**
		Sig. (2-tailed)	.816	.002
		N	30	30
	MITIGATION	Correlation Coefficient	-.181	.445*
		Sig. (2-tailed)	.338	.014
		N	30	30
	MONITORING	Correlation Coefficient	.151	.676**
		Sig. (2-tailed)	.424	.000
		N	30	30
	ALTERNATIVES	Correlation Coefficient	-.052	.589**
		Sig. (2-tailed)	.783	.001
		N	30	30
	FUNDING	Correlation Coefficient	1.000	.165
		Sig. (2-tailed)	.	.384
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.165	1.000
		Sig. (2-tailed)	.384	.
		N	30	30
	P.TIME	Correlation Coefficient	-.036	.108
		Sig. (2-tailed)	.850	.570
		N	30	30
	P.FORM	Correlation Coefficient	-.030	.227
		Sig. (2-tailed)	.876	.228
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.032	.434*
		Sig. (2-tailed)	.867	.017
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	-.126	.404*
		Sig. (2-tailed)	.508	.027
		N	30	30

Correlations

			FUNDING	BIOLOG. SOUNDN.
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.068	.032
		Sig. (2-tailed)	.764	.888
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	.150	-.117
		Sig. (2-tailed)	.496	.594
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	.118	-.031
		Sig. (2-tailed)	.591	.889
		N	23	23

Correlations

			P.TIME	P.FORM
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.344	.338
		Sig. (2-tailed)	.063	.067
		N	30	30
	HABITAT LOSS	Correlation Coefficient	.218	.250
		Sig. (2-tailed)	.248	.183
		N	30	30
	SPECIES STATUS	Correlation Coefficient	.061	.135
		Sig. (2-tailed)	.750	.475
		N	30	30
	TAKE	Correlation Coefficient	-.276	-.207
		Sig. (2-tailed)	.140	.271
		N	30	30
	IMPACT	Correlation Coefficient	-.032	-.090
		Sig. (2-tailed)	.867	.635
		N	30	30
	MITIGATION	Correlation Coefficient	-.012	.059
		Sig. (2-tailed)	.948	.755
		N	30	30
	MONITORING	Correlation Coefficient	.375*	.390*
		Sig. (2-tailed)	.041	.033
		N	30	30
	ALTERNATIVES	Correlation Coefficient	-.026	.194
		Sig. (2-tailed)	.892	.304
		N	30	30
	FUNDING	Correlation Coefficient	-.036	-.030
		Sig. (2-tailed)	.850	.876
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.108	.227
		Sig. (2-tailed)	.570	.228
		N	30	30
	P.TIME	Correlation Coefficient	1.000	.860**
		Sig. (2-tailed)	.	.000
		N	30	30
	P.FORM	Correlation Coefficient	.860**	1.000
		Sig. (2-tailed)	.000	.
		N	30	30
	P.INFLUENCE	Correlation Coefficient	.622**	.768**
		Sig. (2-tailed)	.000	.000
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.829**	.880**
		Sig. (2-tailed)	.000	.000
		N	30	30

Correlations

			P.TIME	P.FORM
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	-.126	-.135
		Sig. (2-tailed)	.577	.549
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.398	-.529*
		Sig. (2-tailed)	.060	.009
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	-.286	-.417*
		Sig. (2-tailed)	.186	.048
		N	23	23

Correlations

			P.INFLUE	PART. from DOCUM.
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.190	.210
		Sig. (2-tailed)	.315	.264
		N	30	30
	HABITAT LOSS	Correlation Coefficient	.266	.445*
		Sig. (2-tailed)	.155	.014
		N	30	30
	SPECIES STATUS	Correlation Coefficient	.060	.102
		Sig. (2-tailed)	.754	.590
		N	30	30
	TAKE	Correlation Coefficient	-.073	-.025
		Sig. (2-tailed)	.701	.894
		N	30	30
	IMPACT	Correlation Coefficient	.056	.053
		Sig. (2-tailed)	.770	.782
		N	30	30
	MITIGATION	Correlation Coefficient	.177	.057
		Sig. (2-tailed)	.350	.765
		N	30	30
	MONITORING	Correlation Coefficient	.388*	.481**
		Sig. (2-tailed)	.034	.007
		N	30	30
	ALTERNATIVES	Correlation Coefficient	.384*	.243
		Sig. (2-tailed)	.036	.197
		N	30	30
	FUNDING	Correlation Coefficient	.032	-.126
		Sig. (2-tailed)	.867	.508
		N	30	30
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.434*	.404*
		Sig. (2-tailed)	.017	.027
		N	30	30
	P.TIME	Correlation Coefficient	.622**	.829**
		Sig. (2-tailed)	.000	.000
		N	30	30
	P.FORM	Correlation Coefficient	.768**	.880**
		Sig. (2-tailed)	.000	.000
		N	30	30
	P.INFLUENCE	Correlation Coefficient	1.000	.865**
		Sig. (2-tailed)	.	.000
		N	30	30
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	.865**	1.000
		Sig. (2-tailed)	.000	.
		N	30	30

Correlations

			P.INFLUE	PART. from DOCUM.
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	-.316	-.240
		Sig. (2-tailed)	.152	.281
		N	22	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	-.494*	-.457*
		Sig. (2-tailed)	.017	.029
		N	23	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	-.371	-.323
		Sig. (2-tailed)	.082	.132
		N	23	23

Correlations

			ACCESS to INFORM.
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.048
		Sig. (2-tailed)	.834
		N	22
	HABITAT LOSS	Correlation Coefficient	-.394
		Sig. (2-tailed)	.069
		N	22
	SPECIES STATUS	Correlation Coefficient	.083
		Sig. (2-tailed)	.713
		N	22
	TAKE	Correlation Coefficient	.167
		Sig. (2-tailed)	.458
		N	22
	IMPACT	Correlation Coefficient	.088
		Sig. (2-tailed)	.695
		N	22
	MITIGATION	Correlation Coefficient	.065
		Sig. (2-tailed)	.774
		N	22
	MONITORING	Correlation Coefficient	.096
		Sig. (2-tailed)	.669
		N	22
	ALTERNATIVES	Correlation Coefficient	.046
		Sig. (2-tailed)	.840
		N	22
	FUNDING	Correlation Coefficient	.068
		Sig. (2-tailed)	.764
		N	22
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	.032
		Sig. (2-tailed)	.888
		N	22
	P.TIME	Correlation Coefficient	-.126
		Sig. (2-tailed)	.577
		N	22
	P.FORM	Correlation Coefficient	-.135
		Sig. (2-tailed)	.549
		N	22
	P.INFLUENCE	Correlation Coefficient	-.316
		Sig. (2-tailed)	.152
		N	22
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	-.240
		Sig. (2-tailed)	.281
		N	22

Correlations

			ACCESS to INFORM.
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	.505*
		Sig. (2-tailed)	.017
		N	22
	PERCEIVED PARTICIPATION	Correlation Coefficient	.694**
		Sig. (2-tailed)	.000
		N	22

Correlations

			ACCESS to DEC. MAKING
Spearman's rho	RISK-AVERSION	Correlation Coefficient	-.004
		Sig. (2-tailed)	.986
		N	23
	HABITAT LOSS	Correlation Coefficient	-.100
		Sig. (2-tailed)	.651
		N	23
	SPECIES STATUS	Correlation Coefficient	-.288
		Sig. (2-tailed)	.182
		N	23
	TAKE	Correlation Coefficient	.223
		Sig. (2-tailed)	.306
		N	23
	IMPACT	Correlation Coefficient	-.026
		Sig. (2-tailed)	.905
		N	23
	MITIGATION	Correlation Coefficient	-.113
		Sig. (2-tailed)	.609
		N	23
	MONITORING	Correlation Coefficient	-.177
		Sig. (2-tailed)	.419
		N	23
	ALTERNATIVES	Correlation Coefficient	-.196
		Sig. (2-tailed)	.371
		N	23
	FUNDING	Correlation Coefficient	.150
		Sig. (2-tailed)	.496
		N	23
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	-.117
		Sig. (2-tailed)	.594
		N	23
	P.TIME	Correlation Coefficient	-.398
		Sig. (2-tailed)	.060
		N	23
	P.FORM	Correlation Coefficient	-.529*
		Sig. (2-tailed)	.009
		N	23
	P.INFLUENCE	Correlation Coefficient	-.494*
		Sig. (2-tailed)	.017
		N	23
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	-.457*
		Sig. (2-tailed)	.029
		N	23

Correlations

			ACCESS to DEC. MAKING
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.505*
		Sig. (2-tailed)	.017
		N	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	.943**
		Sig. (2-tailed)	.000
		N	23

Correlations

			PERCEIVED PARTICIP.
Spearman's rho	RISK-AVERSION	Correlation Coefficient	.012
		Sig. (2-tailed)	.958
		N	23
	HABITAT LOSS	Correlation Coefficient	-.195
		Sig. (2-tailed)	.372
		N	23
	SPECIES STATUS	Correlation Coefficient	-.239
		Sig. (2-tailed)	.271
		N	23
	TAKE	Correlation Coefficient	.216
		Sig. (2-tailed)	.322
		N	23
	IMPACT	Correlation Coefficient	.101
		Sig. (2-tailed)	.648
		N	23
	MITIGATION	Correlation Coefficient	-.069
		Sig. (2-tailed)	.754
		N	23
	MONITORING	Correlation Coefficient	-.100
		Sig. (2-tailed)	.649
		N	23
	ALTERNATIVES	Correlation Coefficient	-.096
		Sig. (2-tailed)	.664
		N	23
	FUNDING	Correlation Coefficient	.118
		Sig. (2-tailed)	.591
		N	23
	BIOLOGICAL SOUNDNESS	Correlation Coefficient	-.031
		Sig. (2-tailed)	.889
		N	23
	P.TIME	Correlation Coefficient	-.286
		Sig. (2-tailed)	.186
		N	23
	P.FORM	Correlation Coefficient	-.417*
		Sig. (2-tailed)	.048
		N	23
	P.INFLUENCE	Correlation Coefficient	-.371
		Sig. (2-tailed)	.082
		N	23
	PARTICIPATION from DOCUMENTATION	Correlation Coefficient	-.323
		Sig. (2-tailed)	.132
		N	23

Correlations

			PERCEIVED PARTICIP.
Spearman's rho	ACCESS TO INFORMATION	Correlation Coefficient	.694**
		Sig. (2-tailed)	.000
		N	22
	ACCESS TO DECISION MAKING	Correlation Coefficient	.943**
		Sig. (2-tailed)	.000
		N	23
	PERCEIVED PARTICIPATION	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	23

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Nonparametric Correlations for Survey Questions 7 to 15

Correlations

			Accessibility to Information relative to the plan provided by the USFWS
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	1.000 . 182
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.404** .000 177
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.266** .000 180
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.343** .000 175
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.348** .000 171
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.088 .251 172
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.236** .002 168
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.365** .000 176
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.091 .229 176

Correlations

			Accessibility to Information relative to the plan Provided by other sources than the USFWS
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.404** .000 177
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 184
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.417** .000 182
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.545** .000 177
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.575** .000 173
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.454** .000 176
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.047 .542 172
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.414** .000 178
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.262** .000 177

Correlations

			Perceived Influence on the final version of the plan
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.266** .000 180
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.417** .000 182
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 200
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.760** .000 193
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.544** .000 191
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.467** .000 192
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.049 .505 188
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.573** .000 196
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.434** .000 193

Correlations

			The Final version addressed your concerns about the plan.
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.343** .000 175
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.545** .000 177
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.760** .000 193
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 194
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.749** .000 186
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.656** .000 187
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.036 .630 183
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.759** .000 191
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.467** .000 188

Correlations

			The final version of the plan addressed general public's concerns about the plan
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.348** .000 171
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.575** .000 173
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.544** .000 191
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.749** .000 186
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 193
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.658** .000 187
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	.038 .610 183
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.674** .000 190
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.376** .000 188

Correlations

			The final version of the plan adequately protects the endangered and threatened species at stake
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.088 .251 172
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.454** .000 176
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.467** .000 192
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.656** .000 187
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.658** .000 187
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 194
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	.359** .000 184
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	.616** .000 192
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.628** .000 189

Correlations

			The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of other groups involved
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	-.236** .002 168
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	-.047 .542 172
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	-.049 .505 188
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	-.036 .630 183
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.038 .610 183
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.359** .000 184
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 190
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	-.094 .203 187
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.264** .000 184

Correlations

			The final version of the plan reflects a balanced agreement among all parties involved in the negotiation
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	.365** .000 176
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	.414** .000 178
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	.573** .000 196
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.759** .000 191
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	.674** .000 190
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	.616** .000 192
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.094 .203 187
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 198
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	-.407** .000 192

Correlations

			The final version of the plan could have protected more the endangered and threatened species at stake while at the same time satisfying the interests of teh other groups
Spearman's rho	Accessibility to Information relative to the plan provided by the USFWS	Correlation Coefficient Sig. (2-tailed) N	-.091 .229 176
	Accessibility to Information relative to the plan Provided by other sources than the USFWS	Correlation Coefficient Sig. (2-tailed) N	-.262** .000 177
	Perceived Influence on the final version of the plan	Correlation Coefficient Sig. (2-tailed) N	-.434** .000 193
	The Final version addressed your concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	-.467** .000 188
	The final version of the plan addressed general public's concerns about the plan	Correlation Coefficient Sig. (2-tailed) N	-.376** .000 188
	The final version of the plan adequately protects the endangered and threatened species at stake	Correlation Coefficient Sig. (2-tailed) N	-.628** .000 189
	The final version of the plan overprotected the endangered and threatened species at stake affecting the interests of	Correlation Coefficient Sig. (2-tailed) N	-.264** .000 184
	The final version of the plan reflects a balanced agreement among all parties involved in the negotiation	Correlation Coefficient Sig. (2-tailed) N	-.407** .000 192
	The final version of the plan could have protected more the endangered and threatened species at stake while at the	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 195

** . Correlation is significant at the .01 level (2-tailed).