

The HCP Handbook Addendum or “Five Point Policy”

The addendum to the HCP Handbook, published in June 2000, supplements the [HCP Handbook](#) and provides guidance in the areas of biological goals and objectives, adaptive management, monitoring, permit duration, and public participation.

1. Biological Goals And Objectives

What are an HCP's Biological Goals and Objectives?

HCPs have always been designed to achieve a biological purpose, yet they may not have specifically stated those biological goals. In the future, the Services and HCP applicants will clearly and consistently define the expected outcome, *i.e.*, biological goal(s). This rather simple concept will facilitate communication among the scientific community, the agencies, and the applicants by providing direction for the development of HCPs. The HCP Handbook discusses identifying biological goals and objectives (Chapter 3). Since biological goals and objectives are inherent to the HCP process, HCPs have had implied biological goals and objectives, and many recent HCPs include explicit biological goals or objectives. Explicit biological goals and objectives clarify the purpose and direction of an HCP's operating conservation program. They create parameters and benchmarks for developing conservation measures, provide the rationale behind the HCP's terms and conditions, promote an effective monitoring program, and, where appropriate, help determine the focus of an adaptive management strategy.

What Are Biological Goals and Objectives in HCPs?

In the context of HCPs, biological goals are the broad, guiding principles for the operating conservation program of the HCP. They are the rationale behind the minimization and mitigation strategies. For more complex HCPs, biological objectives can be used to step down the biological goals into manageable, and, therefore, more understandable units. Multiple species HCPs may categorize goals by species or by habitat, depending on the structure of the operating conservation program. HCPs that are smaller in scope would have simpler biological goals that may not need to be stepped down into objectives. It should be noted that the biological goals of an individual HCP are not necessarily equivalent to the range-wide recovery goals and conservation of the species. However, if viewed collectively, the biological goals and objectives of HCPs covering the same species should support the recovery goals and conservation. The biological goals and objectives of an HCP are commensurate with the specific impacts and duration of the applicant's proposed action. For example, low-effect HCPs generally have simple measurable biological goals, such as contributing to a regional preserve design through a mitigation bank or avoiding breeding habitat of a particular species.

How Do I Incorporate Biological Goals and Objectives Into an HCP?

Determination of the biological goals and objectives is integral to the development of the operating conservation program. Conservation measures identified in an HCP, its accompanying incidental take permit, and/or IA, if used, provide the means for achieving the biological goals and objectives. We will work with the applicant to develop the biological goals and objectives by examining the applicant's proposed action and the

overall conservation needs of the covered species and/or its habitat. The biological goals and objectives are refined as the operating conservation program takes shape. Initial biological goals and objectives of an HCP begin by articulating the rationale behind the operating conservation program. The Services and applicant improve the initial biological goals by compiling the known information of the species, estimating the anticipated effects to the species, and stating any assumptions made. If the operating conservation program is relatively complex, the biological goal is divided into manageable and measurable objectives. Biological objectives are the different components needed to achieve the biological goal such as preserving sufficient habitat, managing the habitat to meet certain criteria, or ensuring the persistence of a specific minimum number of individuals. The specifics of the operating conservation program are the actions anticipated to obtain the biological objectives; therefore, we can use these objectives to strengthen the initial operating conservation program.

Elzinga *et al.* (1998) provide guidance for developing measurable objectives for rare plant monitoring that can be used for other species. Biological objectives should include the following: species or habitat indicator, location, action, quantity/state, and timeframe needed to meet the objective. They can be described as a condition to be met or as a change to be achieved relative to the existing condition. Biological objectives may be addressed in parallel. Conversely, achieving the biological objectives may need to occur in sequence. For instance, parallel objectives may be (1) maintaining the preserve site free of nonnative weeds and (2) enhancing the population from 4 individuals to 7 individuals. Sequential objectives may be (1) restoring of an area of habitat and then (2) reintroducing the species.

The Services and applicants have many resources to draw upon when determining the biological goals and objectives of an HCP. Both can use the available literature, State conservation strategies, candidate conservation plans, draft or final recovery plans or outlines, and other sources of relevant scientific and commercial information as guides in setting biological goals and objectives. Both can consult with species experts, State wildlife agencies, recovery teams, and/or scientific advisory committees.

What Is the Difference Between a Habitat-Based Goal and a Species-Based Goal?

The biological goals and objectives may be either habitat or species based. Habitat-based goals are expressed in terms of amount and/or quality of habitat. Species-based goals are expressed in terms specific to individuals or populations of that species. Complex multispecies or regional HCPs may use a combination of habitat- and species-specific goals and objectives. However, according to 50 CFR 17.22, 17.32, 222.102, and 222.307, each covered species must be addressed as if it were listed and named on the permit. Although the goals and objectives may be stated in habitat terms, each covered species that falls under that goal or objective must be accounted for individually as it relates to that habitat.

Are Permittees Required To Achieve the Biological Goals and Objectives of the HCP?

How the biological goals fit with the implementation of an HCP may be framed as a series of prescriptive measures to be carried out (a prescription-based HCP) or the ability to use any number of measures that achieve certain results (a results-based HCP). A prescription-based HCP outlines a series of tasks that are designed to meet the biological goals and objectives. This type of HCP may be most appropriate for smaller permits where the permittee would not have an ongoing management responsibility. A

results-based HCP has flexibility in its management so that the permittee may institute the actions that are necessary as long as they achieve the intended result (*i.e.*, the biological goals and objectives), especially if they have a long-term commitment to the conservation program of the HCP. HCPs can also be a mix of the two strategies. The Services and the applicant should determine the range of acceptable and anticipated management adjustments necessary to respond to new information. This process will enable the applicant to assess the potential economic impacts of adjustments before agreeing to the HCP while allowing for flexibility in the implementation of the HCP in order to meet the biological goals. Regardless of the type of goals and objectives used and how they fit within implementation of the HCP, the Services will ensure that the biological goals are consistent with conservation actions needed to adequately minimize and mitigate impacts to the covered species to the maximum extent practicable. Whether the HCP is based on prescriptions, results, or both, the permittee's obligation for meeting the biological goals and objectives is proper implementation of the operating conservation program of the HCP. In other words, under the No Surprises assurances, a permittee is required only to implement the HCP, IA, if used, and terms and conditions of the permit. Implementation may include provisions for ongoing changes in actions in order to achieve results or due to results from an adaptive management strategy.

2. Adaptive Management

What Is Adaptive Management?

Adaptive management is an integrated method for addressing uncertainty in natural resource management (Holling 1978, Walters 1986, Gundersen 1999). It also refers to a structured process for learning by doing. The concept is used in a number of different contexts, including the social science aspects of learning and change in natural resource management. The term adaptive management was adopted by Holling (1978) for natural resource management, who described adaptive management as an interactive process that not only reduces, but benefits from, uncertainty. Additionally, Walters (1986) breaks down categories of learning through implementation as "active" and "passive" adaptive management. Passive adaptation is where information obtained is used to determine a single best course of action. Active adaptation is developing and testing a range of alternative strategies (Walters and Holling 1990). The Services believe that both of these types of adaptive management are appropriate to consider when developing a strategy to address uncertainty. Therefore, we are defining adaptive management broadly as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. Implementation of adaptive strategies has been criticized for failing to resolve uncertainty or effectively implementing good experimental design (Walters 1997; Lee 1999). These failures are typically attributed to agency or stakeholder unwillingness to accept the risk involved in experimentation. The Services do have certain constraints in the HCP Program that may inhibit experimental design. For instance, stakeholder involvement in the development of many HCPs, including the adaptive management design, is largely at the discretion of the applicant. Another restriction we face collectively (Services, applicants, other stakeholders) is the possible risks to species that may arise with using an experimental design. Many adaptive management processes with public/stakeholder involvement address large-scale management issues (*e.g.*, Florida Everglades, Grand Canyon). This type of process is complicated and involved, but appropriate for the scale of the issue. Similarly, more active and involved approaches to adaptive management are appropriate for largescale

HCPs. However, an active approach may pose too much of a risk to the species; therefore, a more passive approach may be the best course of action. An active approach may also be too cumbersome for the scope of the HCP and, therefore, a passive approach may be more appropriate. Despite the potential obstacles to incorporating a comprehensive adaptive management strategy in an HCP, the Services incorporate adaptive management strategies when appropriate. We believe it is important that small- to medium-sized HCPs incorporate the flexibility to change implementation strategies after permit issuance. The HCP Program is flexible enough to develop adaptive management strategies that will facilitate and improve the decisionmaking process for the operating conservation program of a given HCP as well as provide for informative decision-making.

When Should Adaptive Management Be Incorporated Into an HCP?

The Services will consider adaptive management as a tool to address uncertainty in the conservation of a species covered by an HCP. Whenever an adaptive management strategy is used, the approved HCP must outline the agreed-upon future changes to the operating conservation program. Not all HCPs or all species covered in an incidental take permit need an adaptive management strategy. However, an adaptive management strategy is essential for HCPs that would otherwise pose a significant risk to the species at the time the permit is issued due to significant data or information gaps. Possible significant data gaps that may require an adaptive management strategy include, but are not limited to, a significant lack of specific information about the ecology of the species or its habitat (e.g., food preferences, relative importance of predators, territory size), uncertainty in the effectiveness of habitat or species management techniques, or lack of knowledge on the degree of potential effects of the activity on the species covered in the incidental take permit. Often, a direct relationship exists between the level of biological uncertainty for a covered species and the degree of risk that an incidental take permit could pose for that species. Therefore, the operating conservation program may need to be relatively cautious initially and adjusted later based on new information, even though a cautious approach may limit the number of alternative strategies that may be tested. A practical adaptive management strategy within the operating conservation program of a long-term incidental take permit will include milestones that are reviewed at scheduled intervals during the lifetime of the incidental take permit and permitted action. If a relatively high degree of risk exists, milestones and adjustments may need to occur early and often. Adaptive management should not be a catchall for every uncertainty or a means to address issues that could not be resolved during negotiations of the HCP. There may be some circumstances with such a high degree of uncertainty and potential significant effects that a species should not receive coverage in an incidental take permit at all until additional research is conducted.

What Are the Elements of an Adaptive Management Strategy in HCPs?

In an HCP, adaptive management strategies can assist the Services and the applicant in developing an adequate operating conservation program and improving its effectiveness. An adaptive management strategy should (1) identify the uncertainty and the questions that need to be addressed to resolve the uncertainty; (2) develop alternative strategies and determine which experimental strategies to implement; (3) integrate a monitoring program that is able to detect the necessary information for strategy evaluation; and (4) incorporate feedback loops that link implementation and monitoring to a decision-making process (which may be similar to a dispute-resolution

process) that result in appropriate changes in management. If you are developing adaptive management strategies, we encourage you to review the scientific literature that discusses adaptive management (for a starting point see literature cited at the end of the addendum). Identifying the uncertainty to be addressed is the foundation of the adaptive management strategy. Other components include a description of the goal of the operating conservation program (*i.e.*, the biological goals and objectives of the HCP) and the identification of the parameters that potentially affect that goal. This requires communication between the applicant and the Services to identify expectations for the adaptive management strategy and may also involve assistance from scientists. After this step, we (the Services, applicants, and any other participants) will develop the range of possible “experimental” strategies which may involve some type of modeling (which can be as simple as a written description of the expected outcomes or as complex as a mathematical model demonstrating expected outcomes) of the resource in question. If modeling is involved, we must clearly articulate the assumptions and limitations of the model used. Many factors may influence the type of alternatives to explore, including, but not limited to, economics, policies and regulations, and amount of risk to the species. This stage may be an appropriate time to involve other stakeholders to help identify the alternative strategies. Next, a monitoring program needs to be designed that will adequately detect the results of the adaptive management strategy. Integration of the HCP’s monitoring program into the adaptive management strategy is essential. The monitoring program plays an essential role of determining whether the chosen strategy(ies) is providing the desired outcome (*i.e.*, achieving the biological goals of the HCP). If a scientific advisory committee is being used, this may be an appropriate item for their review. An applicant may also submit a monitoring program for independent peer review. Finally, an adaptive management strategy must define the feedback process that will be used to ensure that the new information gained from the monitoring program results in effective change in management of the resource.

How Does Adaptive Management Affect No Surprises Assurances?

HCP assurances (No Surprises) and the use of adaptive management strategies are compatible. The assurances apply once all appropriate HCP provisions have been mutually crafted and agreed upon and approved by the Services and the applicant. Adaptive management strategies, if used, are part of those provisions, and their implementation becomes part of a properly implemented conservation plan. When an HCP, permit, and IA, if used, incorporate an adaptive management strategy, it should clearly state the range of possible operating conservation program adjustments due to significant new information, risk, or uncertainty. This range defines the limits of what resource commitments may be required of the permittee. This process will enable the applicant to assess the potential economic impacts of adjustments before agreeing to the HCP.

Is Adaptive Management the Only Method for Changing the Operating Conservation Program of an HCP?

HCPs may be designed to provide flexibility other than through the use of adaptive management. The No Surprises final rule lays a foundation for contingency planning in HCPs that may or may not include adaptive management. This contingency planning is addressed largely under the topic of “changed circumstances.” Changed circumstances are circumstances that can be reasonably anticipated, and the HCP can

incorporate measures to be implemented if the circumstances occur. The permittee or another responsible party may need the flexibility provided by the “changed circumstances” regulation to employ alternative methods or strategies within the operating conservation program to achieve the biological goals and objectives. This flexibility also allows previously agreed upon management and/or mitigation actions to be implemented or discontinued, as needed, in response to changed circumstances. These actions are not necessarily adaptive management and may be a process for implementing change to the operating program or simply a different conservation measure. The HCP, incidental take permit, and IA, if any, must describe the agreed upon range of management and/or mitigation actions and the process by which the management and funding decisions are made and implemented.

How Can an HCP Use Adaptive Management Without a Large and Expensive Experimental Design?

Adaptive management has traditionally been viewed and designed for large-scale systems. However, in some situations we may want to retain the flexibility of addressing uncertainty through an adaptive management strategy at a smaller scale. In such situations, an adaptive management strategy could take many forms including creating a simple feedback loop so that management changes could be implemented based on results of the HCP’s monitoring program. Similarly, the agreed-upon strategy may be integration of an HCP with any ongoing research, recovery planning, and conservation planning by Federal, State, and local agencies. This integration is an efficient way to address uncertainty and provide the information needed to guide changes in small to medium sized HCPs. We can also view smaller, yet similar HCPs collectively across a landscape in order to adapt our approaches in future HCPs (Johnson 1999). This approach will require us to coordinate information among similar HCPs, including communication with the individual applicants regarding their role in such a landscape approach.

3. Monitoring

What Is Monitoring in the HCP Program?

Monitoring is a mandatory element of all HCPs (See 50 CFR 17.22, 17.32, and 222.307). When properly designed and implemented, monitoring programs for HCPs should provide the information necessary to assess compliance and project impacts, and verify progress toward the biological goals and objectives. Monitoring also provides the scientific data necessary to evaluate the success of the HCP’s operating conservation programs with respect to the possible use of those strategies in future HCPs or other programs that contribute to the conservation of species and their habitat. The HCP Handbook already provides guidance for developing monitoring measures (Chapter 3, section B.4.) and discusses reporting requirements (Chapter 6, section E.4.). The following information further clarifies and provides additional guidance for the monitoring component of an HCP, permit, or IA.

What Are the Types of Monitoring That Can Be Incorporated Into HCPs?

The Services and the applicant must ensure that the monitoring program of an HCP provides information to: (1) Evaluate compliance; (2) determine if biological goals and objectives are being met; and (3) provide feedback information for an adaptive

management strategy, if one is used. HCP monitoring is divided into two types.

Compliance Monitoring is verifying that the permittee is carrying out the terms of the HCP, permit, and IA, if one is used.

Effects and Effectiveness Monitoring evaluates the effects of the permitted action and determines whether the effectiveness of the operating conservation program of the HCP are consistent with the assumptions and predictions made when the HCP was developed and approved; in other words, is the HCP achieving the biological goals and objectives. Scientific literature discussing monitoring uses similar terms as the addendum but the terms may have different meanings. For instance, the term “validation monitoring” is the same concept as the addendum’s term “effectiveness monitoring.” However, “effectiveness monitoring” in the scientific literature simply means measuring the status of species. “Implementation monitoring” is roughly equivalent to the addendum’s term “compliance monitoring” with the added regulatory nature of the involvement of a permit.

What Determines the Extant of a Monitoring Program?

The scope of the monitoring program should be commensurate with the scope and duration of the operating conservation program and the project impacts. Biological goals and objectives provide a framework for developing a monitoring program that measures progress toward meeting those goals and objectives. If an HCP, permit, and/or IA has an adaptive management strategy, integrating the monitoring program into this strategy is crucial in order to guide any necessary changes in management. Monitoring programs for large-scale or regional planning efforts may be elaborate and track more than one component of the HCP (e.g., habitat quality or collection of mitigation fees). Conversely, monitoring programs for HCPs with smaller impacts of short duration might only need to file simple reports that document whether the HCP has been implemented as described. For example, if an HCP affects only a portion of a population, the permittee should not generally be responsible for monitoring the entire population. In addition, it may not be appropriate for a monitoring program to involve counting of populations or individuals or making an assessment of habitat. The appropriate unit of measure in a monitoring program depends upon the specific impacts and operating conservation program within an HCP. The Services are responsible for ensuring that the appropriate units of measure and protocols are used and should coordinate monitoring programs to obtain a larger view of the status of a population. The applicant and the Services should also design the monitoring program to reflect the structure of the biological goals and objectives. The monitoring program should reflect the measurable biological goals and objectives. The following components are essential for most monitoring protocols (the size and scope of the HCP will dictate the actual level of detail in each item):

- (1) Assess the implementation and effectiveness of the HCP terms and conditions (e.g., financial responsibilities and obligations, management responsibilities, and other aspects of the incidental take permit, HCP, and the IA, if applicable);
- (2) determine the level of incidental take of the covered species;
- (3) determine the biological conditions resulting from the operating conservation program (e.g., change in the species’ status or a change in the habitat conditions); and

(4) provide any information needed to implement an adaptive management strategy, if utilized. An effective monitoring program is flexible enough to allow modifications, if necessary, to obtain the appropriate information. Monitoring programs will vary based on whether they are for low-effect or for regional, multi-species HCPs; however, the general elements of each program are similar.

Post-activity or post-construction monitoring, along with a single report at the end of the monitoring period, will often satisfy the monitoring requirements for low-effect HCPs. For other HCPs, monitoring programs will be more comprehensive and may include milestones, timelines, and/or trigger points for change.

Effects and effectiveness monitoring includes, but is not limited to, the following:

1. Periodic accounting of incidental take that occurred in conjunction with the permitted activity;
2. Surveys to determine species status, appropriately measured for the particular operating conservation program (e.g., presence, density, or reproductive rates);
3. Assessments of habitat condition;
4. Progress reports on fulfillment of the operating conservation program (e.g., habitat acres acquired and/or restored); and
5. Evaluations of the operating conservation program and its progress toward its intended biological goals.

What Units Should Be Monitored in an HCP?

Each HCP's monitoring program should be customized to reflect the biological goals, the scope, and the particular implementation tasks of the HCP. In order to obtain meaningful information, the applicant and the Services should structure the monitoring methods and standards so that we can compare the results from one reporting period to another period or compare different areas, and the monitoring protocol responds to the question(s) asked. Monitored units should reflect the biological objective's measurable units (e.g., if the biological objective is in terms of numbers of individuals, the monitoring program should measure the number of individuals). The monitoring program will be based on sound science. Standard survey or other previously established monitoring protocols should be used. Although the specific methods used to gather necessary data may differ depending on the species and habitat types, monitoring programs should use a multispecies approach when appropriate.

What Role Do the Services Have in Monitoring?

Both the Services and the permittee are responsible for monitoring the implementation of the HCP. The Services' primary monitoring responsibilities (with the assistance of the permittee) are ensuring compliance with the permit's terms and conditions, including proper implementation of the HCP by the permittee. Permittee assistance with compliance monitoring includes monitoring the implementation and reporting their

findings/results. The permittee, with the assistance of the Services, is responsible for verifying the effects and effectiveness of the HCP. To monitor all aspects of an HCP effectively, and to ensure its ultimate success, the entire monitoring program should incorporate both types of monitoring. The Services and the applicant should coordinate the two aspects of monitoring, and the monitoring program should also clearly designate who is responsible for the various aspects of monitoring. The Services are responsible for ensuring that the permittee is meeting the terms and conditions of the HCP, its accompanying incidental take permit, and IA, if any (*i.e.*, compliance monitoring). The Services should verify adherence to the terms and conditions of the incidental take permit, HCP, IA, and any other related agreements and should ensure that incidental take of the covered species does not exceed the level authorized under the incidental take permit. Regulations at 50 CFR §§ 13.45 and 222.301, provide the authority for the Services to require periodic reports unless otherwise specified by the incidental take permit. Also, the Services will ensure that the reporting requirements are tailored for documenting compliance with the incidental take permit (*e.g.*, documentation of habitat acquisition, use of photographs). These reports help determine whether the permittee is properly implementing the terms and conditions of the HCP, its incidental take permit, and any IA, and will provide a long-term administrative record documenting progress made under the incidental take permit. In addition to reviewing reports submitted by the permittee, it is important for the Services to make field visits to verify the accuracy of monitoring data submitted by the permittees. These visits allow the Services to check for information, identify unanticipated deficiencies or benefits, develop closer cooperative ties with the permittee, prevent accidental violations of the incidental take permit's terms and conditions, and assist the permittee and Services in developing corrective actions when necessary. For large-scale or regional HCPs, oversight committees, made up of representatives from significantly affected entities (*e.g.*, State Fish and Wildlife agencies), are often used to ensure proper and periodic review of the monitoring program and to ensure that each program properly implements the terms and conditions of the incidental take permit. For example, the Wisconsin Statewide HCP for the Karner blue butterfly includes an auditing approach to ensure incidental take permit compliance. The lead permittee, Wisconsin Department of Natural Resources (Wisconsin DNR), will initially conduct annual on-site audits of each partner. FWS will audit the Wisconsin DNR in a similar fashion. In addition, FWS will accompany the Wisconsin DNR on the partner audits as appropriate to understand partner compliance levels. Over time, if performance levels are acceptable, Wisconsin DNR will conduct the audits less frequently. Each partner will provide an annual monitoring report and will submit these along with their audit report to FWS. For large-scale or regional HCPs, oversight committees should periodically evaluate the permittee's implementation of the HCP, its incidental take permit, and IA and the success of the operating conservation program in reaching its identified biological goals and objectives. Such committees usually include species experts and representatives of the permittee, the Services, and other affected agencies and entities. Submitting the committee's findings to recognized experts in pertinent fields (*e.g.*, conservation biologists or restoration specialists) for review or having technical experts conduct field investigations to assess implementation of the terms and conditions would also be beneficial. Because the formation of these committees may be subject to the Federal Advisory Committee Act, the role of the participants and the purpose of the meetings must be clearly identified. Oversight committees should meet at least annually and review implementation of the monitoring program and filing of reports as defined in the HCP, permit, and/or IA, if one is used.

What Role Does the Permittee Have in Monitoring?

Not only do permittees provide regular implementation reports, they are also involved in effects and effectiveness monitoring. Effects monitoring determines the extent of impacts from the permitted activity. Effectiveness monitoring, in the HCP program, assesses progress toward the biological goals and objectives of the HCP (e.g., if the conservation strategies are producing the desired habitat conditions or population numbers). Effects and effectiveness monitoring may also involve assessing threats and population trends of the covered species related to the permitted activities, as well as monitoring the development of targeted habitat conditions. Permittees, with assistance from the Services, should ensure that the HCP includes provisions for monitoring the effects and effectiveness of the HCP. The Services and the HCP permittee will cooperatively develop the effects and effectiveness monitoring program and determine responsibility for its various components. In multi-party HCPs, different parties may monitor different aspects of the HCP. The Services must periodically review any monitoring program to confirm that it is conducted according to their standards.

What Should Be Included in Monitoring Reports?

The Services will streamline the reporting requirements for monitoring programs by requesting all reports in a single document. The HCP, permit, or IA should specifically state the level of detail and quantification needed in the monitoring report and tailor report due dates to the activities conducted under the incidental take permit (e.g., due at the end of a particular stage of the project or the anniversary date of incidental take permit issuance). Most monitoring programs require reports annually, usually due on the anniversary date of incidental take permit issuance. Wherever possible, the Services will coordinate the due dates with other reporting requirements (e.g., State reports), so the permittee can satisfy more than one reporting requirement with a single report. The following list represents the information generally needed in a monitoring report:

1. Biological goals and objectives of the HCP (which may need to be reported only once);
2. Objectives for the monitoring program (which may need to be reported only once);
3. Effects on the covered species or habitat;
4. Location of sampling sites;
5. Methods for data collection and variables measured;
6. Frequency, timing, and duration of sampling for the variables;
7. Description of the data analysis and who conducted the analyses; and
8. Evaluation of progress toward achieving measurable biological goals and objectives and other terms and conditions as required by the incidental take permit or IA. These elements may be simplified for periods of no activity or low-effect HCPs. If a required report is not submitted by the date specified in the HCP or incidental take permit terms and conditions, or is inadequate, the Services will notify the permittee. The Services have discretion to offer the permittee an extension of time to demonstrate compliance.

The Services have examined this reporting guidance under the Paperwork Reduction Act of 1995 and found that it does not contain requests for additional information or an increase in the collection requirements other than those already approved for incidental take permits (OMB approval for FWS, # 1018–0094; for NMFS, # 0648–0230).

How Are Monitoring Programs Funded?

The ESA and the implementing regulations (50 CFR 17 and 222) require that HCPs specify the measures the permittee will adopt to ensure adequate funding for the HCP. The Services should not approve an HCP that does not contain an adequate funding commitment from the applicant/permittee to support an acceptable monitoring program unless the HCP establishes alternative funding mechanisms. The Services and the applicant should work together to develop the monitoring program and determine who will be responsible for monitoring the various components of the HCP. Specific monitoring tasks may be assigned to entities other than the permittee (e.g., State or Tribal agencies) as long as the Services and parties responsible for implementing the HCP approve of the monitoring assignment. The terms of the HCP, incidental take permit, and IA may contain funding mechanisms that provide for a public (e.g., local, State, or Federal) or a private entity to conduct all or portions of the monitoring. This funding mechanism must be agreed upon by the Services and the parties responsible for implementing the HCP.

4. Permit Duration

How Do We Decide the Length of Time for Which the Permit Is in Place?

Both FWS and NMFS regulations for incidental take permits outline factors to consider when determining incidental take permit duration (50 CFR 17.32 and 222.307). These factors include duration of the applicant's proposed activities and the expected positive and negative effects on covered species associated with the proposed duration, including the extent to which the operating conservation program will increase the long-term survivability of the listed species and/or enhance its habitat. For instance, if the permittee's action or the implementation of the conservation measures continually occur over a long period of time, such as with timber harvest management, the permit would need to encompass that time period. The Services will also consider the extent of information underlying the HCP, the length of time necessary to implement and achieve the benefits of the operating conservation program, and the extent to which the program incorporates adaptive management strategies. Significant biological uncertainty may necessitate an adaptive management strategy. The gathering of new information through the monitoring program requires an appropriate period of time for meaningful interpretation of new information into changes in management; this analysis could necessitate a permit with a longer duration. However, if an adaptive management strategy that significantly reduces the risk of the HCP to that species cannot be devised and implemented, then, if the issuance criteria are met, a shorter duration may be appropriate. The varying biological impacts resulting from the proposed activity (e.g., variations in the length of timber rotations and treatments versus a real estate subdivision buildout) and the nature or scope of the permitted activity and conservation program in the HCP (e.g., housing or commercial developments versus long-term sustainable forestry; conservation easements) account for variation in permit duration. Longer permits may be necessary to ensure long-term active commitments to the HCP and typically include up-front contingency planning for changed circumstances to allow

appropriate changes in the conservation measures.

5. Public Participation

What Is the Public Participation Requirement for HCPs?

As stated in the HCP Handbook in Chapter 6.B, we currently require a minimum 30-day public comment period for all HCP applications. This comment period is required by section 10(c) of the ESA and the implementing regulations at 50 CFR 17 and 222. The Services recognize the concern of the public regarding an inadequate time for the public comment period, especially for large-scale HCPs. With a few exceptions, we are extending the minimum comment period to 60 days for most HCPs. The exceptions to a 60-day comment period would be for low-effect HCPs, individual permits under a programmatic HCP, and large-scale, regional, or exceptionally complex HCPs. The Services believe the current 30-day public comment period provides enough time for interested parties to review major HCP amendments and low-effect HCPs. Low-effect HCPs have a categorical exclusion from NEPA and, therefore, do not have a NEPA public participation requirement. Similarly, in some cases, individual permits issued under a programmatic HCP may not need additional public review since the larger, programmatic HCP would have undergone more extensive review. However, for large-scale, regional, or exceptionally complex HCPs, the Services are increasingly encouraging applicants to use informational meetings and/or advisory committees. In addition, the minimum comment period for these HCPs is now 90 days, unless significant public participation occurs during HCP development. With the extension of the public comment periods, the recommended timeline targets for processing incidental take permits are extended accordingly: The target timeline from receipt of a complete application to the issuance of a permit for low-effect HCPs will remain up to 3 months, HCPs with an Environmental Assessment (EA) will be 4 to 6 months, and HCPs with a 90-day comment period and/or an Environmental Impact Statement (EIS) may be up to 12 months.

How Do the Services Let Interested Parties Know About the HCP's Comment Period?

During the public comment period, any member of the public may review and comment on the HCP and the accompanying NEPA document, if applicable. If an EIS is required, the public can also participate during the scoping process. We announce all complete applications received in the **Federal Register**. When practicable, the Services will announce the availability of HCPs in electronic format and in local newspapers of general circulation.

How Do the Services or Applicants Incorporate Public Participation During the Development of an HCP?

The Services will strongly encourage potential applicants to allow for public participation during the development of an HCP, particularly if non-Federal public agencies (e.g., State Fish and Wildlife agencies) are involved. Although the development of an HCP is the applicant's responsibility, the Services will encourage applicants for most large-scale, regional HCP efforts to provide extensive opportunities for public involvement during the planning and implementation process. The Services encourage the use of scientific advisory committees during the development and implementation of an HCP. The integration of a scientific advisory committee and perhaps other stakeholders

improves the development and implementation of any adaptive management strategy. Advisory committees can assist the Services and applicants in identifying key components of uncertainty and determining alternative strategies for addressing that uncertainty. We also encourage the use of peer review for an HCP. An applicant, with guidance from the Services, may seek independent scientific review of specific sections of an HCP and its operating conservation strategy to ensure the use of the best scientific information.

How Do the Services Consider Tribal Interest in an HCP?

We recommend that applicants include participation by affected Native American tribes during the development of the HCP. If an applicant chooses not to consult with Tribes, under the Secretarial Order on Federal-Tribal Trust Responsibilities and ESA, the Services will consult with the affected Tribes to evaluate the effects of the proposed HCP on tribal trust resources. We will also provide the information gained from the consulted tribal government to the HCP applicant prior to the submission of the draft HCP for public comment and will advocate the incorporation of measures that will conserve, restore, or enhance Tribal trust resources. After consultation with the tribal government and the applicant and after careful consideration of the Tribe's concerns, we will clearly state the rationale for the recommended final decision and explain how the decision relates to the Services' trust responsibility.

Literature Cited

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