

CHAPTER 10: ASSURANCES

10.1 INTRODUCTION

This chapter provides information on the assurances provided to participants of the South Sacramento Habitat Conservation Plan as federal section 10 (a)(1)(B) permit holders under the federal “No Surprises” policy. It also discusses assurances that will be provided to private landowners bordering HCP preserves.

10.2 FEDERAL “NO SURPRISES” POLICY

In 1998 the U.S. Fish and Wildlife Service’s federal “No Surprises” policy was established. The regulation is located at 50 CFR 17.22 and 17.23 in the federal code.

The “No Surprises” policy provides certain assurances to federal section 10(a)(1)(B) permit holders. Specifically that once a permit is issued, permittees will not be required to provide additional financial compensation or land or be subject to additional restrictions of land or resources should circumstances arise requiring additional mitigation measures, provided that the HCP is being properly implemented. The term “properly implemented” refers to any HCP, Implementing Agreement, or permits whose commitments and provisions have been or are being fully implemented by the permittees.

Permit holders will be responsible for adopting additional measures or changes to measures in response to changed circumstances as defined in section 13.3 of this chapter. Any other circumstances that occur during the life of the permit that require the adoption of additional measures are considered unforeseen and are defined in section 13.4 of this chapter and fall under the “no surprises” rule and will not require additional financial compensation, land acquisitions, restrictions of land or restrictions of resources.

10.3 CHANGED CIRCUMSTANCES

“Changed circumstances” are defined within the “No Surprises” policy as:

Those circumstances affecting a species or geographic area covered by the HCP that can be reasonably anticipated by the applicant or USFWS and to which the parties can plan a response.

An HCP is required to identify the changed circumstances that may occur during the life of the permit and outline the remedial measures that will be taken in response to them.

Changed circumstances tend to come in two general categories each necessitating a different approach and timeline in dealing with them. These would be catastrophic, acute, relatively instantaneous circumstances such as fire and flood and more long-term, chronic circumstances such as climate change and loss of genetic diversity. For the purposes of

this document we will use the term “acute changed circumstance” for the former and “chronic changed circumstance” for the latter.

The responses to acute changed circumstances will require rapid action based on pre-existing disaster type plans which outline action steps and subject matter experts ahead of time. This group of people will be referred to as the Disaster Incident Response Team (DIRT) and will comprise a multi-agency, multi-discipline response team of members/agencies committed by MOU to serve in the event of an emergency. Typical membership would include Plan Operators, County Planners and other Municipal Services Agency Employees such as Hazardous Materials Specialists, County Media Officers, USFWS and USACE biologists, Members of the Biological Sub Committee, Department of Pesticide Regulation, local wildlife rehabilitation centers, the U.C. Davis Raptor Center, Agricultural Commissioner, Mosquito and Vector Control District, etc. See Appendix XXXXXXXX for a DIRT roster and contact list. See Appendix XXXXXXXX for the individual MOU’s. Not all members would be called on in the event of an incident. For example, it is unlikely that the Department of Pesticide Regulation would be needed after a fire. The DIRT roster shall be updated at least every two years or more frequently if necessary to keep contact information current in the event of an emergency.

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Acute circumstances often have far reaching effects beyond the operation of an HCP. It is understood that during certain disasters, infrastructure, resource considerations and public safety concerns may preclude the immediate assembly of the DIRT team. For the purpose of this document, the term “Emergency Status” will refer to that time after an acute circumstance but before a DIRT is convened where it is not feasible or appropriate to meet because the acute circumstance, wildfire, for example, is not controlled or due to infrastructure damage or resource demands that a majority of the offices of the team participants are closed or operating emergency operation centers linked with the Governor’s Office of Emergency Services (OES).

Responses to chronic circumstances will be more methodical and have a longer time line to allow for exploration of different options and the gathering of all possible information and resources. The additional response time would allow the formation of sub-committees to explore the best course of action.

Some circumstances may cross or blend these descriptions, for example, a grass fire is clearly an acute circumstance, however a series of grass fires in the same place for 3 consecutive years is more of a chronic circumstance and warrants a different response. Regardless of artificial categories like “acute” and “chronic”, changing circumstances can be very interrelated. For example climate change can lead to drought, which can lead to more “acute” wildfire incidents, and as a result of the same multi-year drought a short-interval return wildfire situation can develop which in turn leads to invasion by exotic species. It is because of this cause and effect, chain reaction type of change that the response measures discussed below link back to the feedback loop of adaptive management. We always need to be seeking new information, applying it to current circumstances, developing responses and evaluating those responses based on the best available information and methods.

10.3.1 ACUTE CHANGED CIRCUMSTANCES

The following are acute changed circumstances that may require amendment to the permit and implementing agreement:

A. FLOOD

The Federal Emergency Management Agency (FEMA) has defined a “flood” as a flood event that occurs above the 50-year flood level and below or at the 100-year flood level. According to FEMA, a 100-year flood is, “the flood elevation that has a 1% chance of being equaled or exceeded each year”. For the purpose of this document we will define a flood to include the 100-year flood as well as any high water event, above or below the 100-year flood that causes damage or alteration to the habitats, species or ecosystems covered by the plan. The term flood and the response plan herein can also apply to localized flooding events caused by levee breaks, pipeline breaks, dam breaks, drainage blockages and equipment failure.

According to the Sacramento Area Flood Control Agency (SAFCA), “Sacramento’s risk of flooding is the greatest of any major city in the country.” Five record floods occurred in the Sacramento area in the past half century these were in 1951, 1956, 1964, 1986 and finally in 1997. The two primary reasons for this high risk of flooding is the area’s reliance on outdated, deteriorating and insufficient levees and an increasing level of precipitation and subsequent runoff from the neighboring Sierra Nevada Mountain Range.

Comment [JTL3]: Is this true?

In the case of a flood occurring in the HCP plan area the following actions should be taken:

- Within 48 hours of securing from emergency status, the Plan Operator shall convene the plan’s DIRT to determine if there were adverse effects to a covered habitat or species. This often will involve site reconnaissance, sampling or surveying. Specific issues to be addressed should include but not be limited to damage to irrigation, pumping or security equipment, direct mortality of species, erosive forces, materials deposition including sand, gravel or invasive species (especially floating type seeds or plants), and the potential for damaging actions by good Samaritans.
- Within 48 hours re-convene the DIRT to prepare an initial damage assessment report and develop response measures to repair, mitigate or remediate the damage if necessary; such recommendations may be limited to natural regeneration.
- Implement response measures through the Adaptive Management Plan
- Monitor the response of species/habitats to the action(s) taken

B. FIRE

Wildfires, especially grass fires, are common in the SSHCP plan area. These fires are almost entirely human caused in increase in frequency as public access and proximity to major roadways increases. While periodic fire has been shown to be beneficial to ecosystem health, uncontrolled, unplanned fires can have devastating impacts to the ecological balances in the habitats of the SSHCP. Prescribed burning and fire prevention activities are important tools for ecosystem management and will be addressed in the SSHCP management plan. Should a wildfire occur in the HCP plan area the following actions should be taken:

- Within 48 hours of securing from emergency status, the Plan Operator shall convene the plan's DIRT to determine if there were adverse effects to a covered habitat or species. This often will involve site reconnaissance, sampling or surveying. Specific issues to be addressed should include but not be limited to damage to irrigation, pumping or security equipment, direct mortality of species, access points generated by the fire fighting effort, contamination from fire retardants, and the potential for damaging actions by good Samaritans.
- Within 48 hours re-convene the DIRT to prepare an initial damage assessment report and develop response measures to repair, mitigate or remediate the damage if necessary; such recommendations may be limited to natural regeneration.
- Implement response measures through the Adaptive Management Plan
- Monitor the response of species/habitats to the action(s) taken

C. PESTICIDE EXPOSURE

Section V (Vegetation and Wildlife) subsection E (Rare and Endangered Species) of the Sacramento County General Plan contains policies to protect sensitive habitat on public lands that contains endangered or threatened species from pesticide use. The policies seek to limit aerial pesticide spraying within ¼ mile of such areas. However, this policy cannot always be implemented and accidental spraying of pesticides on HCP project areas may occur. In the event an HCP project area is exposed to pesticides, the following actions shall be taken:

- Immediately upon discovery/notification of the application, the Plan Operator shall identify the pesticide, applicator, environmental conditions and elapsed time from exposure.
- Based on the pre-established emergency pesticide response plan (Appendix XXXXXX) the Plan Operator will implement any outlined critical action steps immediately. These steps are identified in the response plan and are aimed at reducing toxicity in the first critical hours after exposure.

- Within 48 hours of discovery/notification of the application the Plan Operator will convene the DIRT and present an interim damage report and summary of critical action steps taken since exposure. The DIRT will then recommend actions to address the continuing threat(s), if any, resulting from the unanticipated pesticide exposure and prepare a monitoring and recovery plan to address direct mortality.
- Monitor the response of species/habitats to the action(s) taken, paying special attention to reproduction and morphology problems arising from pesticide exposure.

D. Toxic/Oil Spills

While unlikely, it is conceivable that a pipeline, vehicle, aircraft or train accident, or point source pollution discharge could result in a spill of a hazardous substance affecting the HCP area. The areas of highest risk would be in the vicinity of Highways 99 and 5, Mather Field, the Union Pacific railroad tracks and the XXXXXXXXXX pipeline. In the event an HCP project area is exposed to a toxic or oil spill, the following actions shall be taken:

Comment [JTL4]: Need to find the various fuel pipelines – also Rancho Seco still stores Nuclear Waste do we need to discuss?

- Within 48 hours of securing from emergency status, the Plan Operator shall convene the plan's DIRT to determine if there were adverse effects to a covered habitat or species.
- The DIRT will identify what agency, if any, has regulatory jurisdiction over the accident and in coordination with them conduct a damage assessment and formulate a response plan to address direct mortality, mitigation and monitoring.
- The Plan Operator will carefully detail all costs and damages associated with the accident, and any monitoring and mitigation plan in order to facilitate a recuperation of costs from the responsible party.
- Implement response through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

E. Unauthorized Take of a Species

The unauthorized take of species may occur through various mechanisms such as illegal hunting, dog training/walking, recreation uses, unauthorized collection, off road vehicles etc. Most people who take species without authorization do so by accident or ignorance, however some acts are committed with forethought and malice. The prevention of unauthorized take is addressed in the management plan, and education plays an important role as does appropriate and visible law enforcement. Should the unauthorized take of a species occur in the plan area, the following steps shall occur:

Immediately upon notification/discovery of unauthorized take, the plan operator shall evaluate the situation for the potential to rescue the species, for example, get a wounded animal to rehabilitation, or reestablish irrigation systems damaged by off road vehicles. See appendix XXXXX for a listing of authorized raptor centers and wildlife rehabilitation facilities.

After rescue attempts are complete, but within 48 hours, the Plan Operator shall convene the DIRT to identify, if possible, the mechanism of take, reason for take, extent of take and/or damage, and a response to mitigate for and/or repair damage as well as to prevent a similar occurrence and prosecute responsible parties.

Implement response through the adaptive management plan including the notification of the appropriate law enforcement agency and advocacy for appropriate prosecution including attendance at court proceedings.

Monitor the response of species/habitats to the action(s) taken.

10.3.2 CHRONIC CHANGED CIRCUMSTANCES

The following are chronic changed circumstances that may require amendment to the permit and implementing agreement, they do not have the same immediacy and time sensitive nature as acute changed circumstances but often affect the HCP area on a larger scale than acute circumstances. While a formal DIRT type setup is not necessary, reference should be made to the DIRT roster as a resource to identify subject matter experts in dealing with each different circumstance.

F. LISTING OF NEW SPECIES

Listing of Species Covered by the HCP

The HCP will cover more species than are currently listed as threatened or endangered under FESA or CESA. While the permit will not cover these non-listed species initially, in the event of a covered species becoming listed, the permit will immediately become effective for that species. No additional changes or amendments to the permit or HCP will be required.

Listing of Species Not Covered by the HCP

If a species not covered by the HCP becomes listed as endangered or threatened under FESA or CESA during the lifetime of the permit, the following steps will be taken:

- Actions that may take the species or adversely modify the species' critical habitat will be immediately identified by the USFWS and avoided by the permittee.
- The USFWS will then evaluate the existing permit to determine if it adequately addresses the protection and mitigation of the species and its critical habitat.

- If the USFWS finds that the permit does adequately provide such protection the permit may be amended to include the new species.
- If the USFWS does not find that the existing permit provides such protection, the permittee will be required to apply for a separate permit for the new species.

G. DROUGHT

The threshold used by the Department of Water Resources (DWR) in identifying drought is considered to be runoff for a single year or multiple years in the lowest ten percent of historical range, and reservoir storage for the same time period at less than 70 percent of average. Droughts lasting more than three years are relatively rare in Northern California according to the DWR. Over the past century there have been eight multi-year drought events, five of which lasted three or more years and two of which lasted six years.

Drought is a natural, cyclical weather phenomenon that generally occurs over a period of several years which may allow plants and wildlife to adapt to the new conditions. However, given the state of our disturbed landscapes due to, increased competition from exotic, non-indigenous species, development pressures, pollution, and habitat loss the adaptation of the covered species and habitats in the HCP area can not be counted on as certain. Therefore we must anticipate that they may not be able to adapt to future drought conditions and be monitoring for adverse effects through the adaptive management plan. If adverse effects are observed the following actions should be taken:

- Prepare a damage assessment report
- Locate subject matter experts, research the current literature and recommend actions to ameliorate the effects of the drought on covered species; such action may include provision of a temporary water source for the benefit of covered species, or selective, hand weeding of competitive drought tolerant invaders for example.
- Implement measures through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

H. INVASION OF EXOTIC SPECIES

Within the context of the HCP an invasion by exotic species is defined as an unexpected increase in the presence of exotic species within an HCP preservation area.

According to the California Invasive Plant Council (Cal-IPC) the presence of various exotic species has already been determined in the HCP plan area including pampas grass, Italian thistle, Spanish broom and purple loosestrife.

In the event of such an increase and a subsequent adverse affect on covered habitats or species the following actions should be taken:

- Prepare a damage assessment report
- Locate subject matter experts, research current literature and recommend actions to address the threat(s) resulting from the unanticipated invasion by exotic species
- Implement response through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

I. CHANGES IN ENVIRONMENTAL BASELINE

It can be anticipated that during the life of the plan that changes in the environmental baseline of a covered species may occur that prohibit the HCP's goals and objectives from being met unless additional measures are taken in addition to the existing conservation strategies. These changes may arise from a number of factors such as, crop conversions and rotations, new survey data or even changes in prey populations. These changes will only be required by new development projects that have been determined to significantly affect the covered species. Existing development projects that are participating in the HCP will be exempt from the new measures. New measures may include but not be limited to the requirement for additional mitigation lands, larger buffers and changes in avoidance measures. [Note to discuss - can the baseline change for the better and someone force us to adopt less mitigation?]

Should changes in environmental baseline adversely affect a covered species, the following steps will be taken:

- The Plan Operator will prepare a report identifying the change(s) in environmental baseline and the species effected.
- The report shall contain an analysis of the mechanism for change and measures required to compensate for the change in environmental baseline
- The report should be based on current scientific research and the input from subject matter experts.
- Implement response through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

J. CLIMATE CHANGE

The evidence and potential adverse affects of climate change are discussed in the physical resources chapter of this HCP in section 3.3.6. Given current scientific evidence it is

Comment [JTL5]: We are removing this and taking a generic approach to all species. Especially seeing how habitats are so linked.

reasonable to assume that climate change may adversely affect the HCP project area and those species that are unable to adapt during the lifetime of the HCP. Although exact effects are unknown some potential impacts include reduced snow pack and subsequent summer droughts and increased flooding. A possible impact of primary concern is the disappearance of pothole and vernal pool systems resulting in the loss of associated unique species.

In the event that climate change causes adverse impacts on the habitat and/or species within the HCP project area the following actions shall be taken:

- Prepare a damage assessment report
- Locate subject matter experts, research current literature and recommend actions to address the threat(s) resulting from the change
- Implement response through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

K. DISEASES & VECTOR CONTROL

The possibility of a disease adversely affecting a species covered by the SSHCP is a conceivable circumstance. Additionally some diseases could be transmitted from the SSHCP area to humans, livestock or other HCP covered species by direct means or vectors. A vector is an organism, such as a mosquito or tick that carries disease-causing microorganisms from one host to another. The habitats of the SSHCP could also provide a home for these vectors. This provides a multi-faceted problem of disease among covered species but also the potential to be a reservoir for vectors or diseases affecting humans. Studies show that a healthy vernal pool ecosystem system, for example, is actually a sink for the disease carrying mosquito, however uneducated public outcry against an HCP preserve must be planned for and a close relationship with the Sacramento-Yolo Vector Control District will need to be fostered especially given the arrival of the West Nile Virus to Sacramento County. Other diseases that may be encountered are rabies, encephalitis, plague and the bird flu. Additionally some Mosquito and Vector Control Districts (MVCD's) are broadening their definition of a vector (or at least their responsibility to handle) to include nuisance insects such as yellow jackets and Africanized honeybees. Due to the need for public outreach and education in issues regarding disease & vector control, both disease among covered species and the presence of vectors/nuisance insects will be dealt with in this section. The arrival of Africanized honeybees, for example, could be considered an invasion by an exotic species but its implications to public health and safety make it a candidate for consideration under this section. Consideration in this section will hopefully prevent a preserve from being a scapegoat during a public health incident. This logic should be applied to other invasive species as necessary.

Should a disease, vector or nuisance organism adversely impact a covered species or create a situation whereby public outcry or public health considerations may call for an action that may adversely affect covered species the following steps shall be taken:

- Prepare a damage/situation assessment report
- Work cooperatively with the Sacramento-Yolo Mosquito and Vector Control District, County Health Officer, County Veterinarian, State Wildlife Labs of Fish and Game, County Media and Communication Office and other necessary partners to identify issues, risks and actions steps to deal with the threat as well as to prepare media information to educate the public.
- Implement response through the adaptive management plan
- Monitor the response of species/habitats to the action(s) taken

J. AVAILABILITY OF NEW SCIENTIFIC INFORMATION

The response to newly available scientific information is addressed in the HCP's adaptive management section, which can be found in section [REDACTED].

K. LOSS OF GENETIC DIVERSITY

The loss of genetic diversity is a major concern for any recovery type project dealing with limited populations of species. The loss of genetic diversity can result in an inability of a population to adapt to change, disease and disturbance. It causes loss of "hybrid vigor" and increases the risk of harmful recessive genetic manifestations. In a nutshell the loss of genetic diversity is a precursor to extinction.

In order to identify the loss of genetic diversity it is necessary to first establish a baseline condition from which to work. Subsequent to establishing a baseline it will be necessary to define what movement from baseline conditions is adverse for a species. Then as part of the adaptive management process, the genetic diversity of the species of the SSHCP will have to be monitored and compared to the baseline conditions and the definition of adverse loss of genetic diversity. If adverse loss of genetic diversity the following steps will be taken:

- The Plan Operator will prepare a report outlining the species affected and the changes from baseline conditions.
- The Plan Operator will convene a meeting of subject matter experts in order to identify the circumstances or causes behind the loss and to outline the steps necessary to increase genetic diversity to an acceptable level.
- Implement response through the adaptive management plan

- Monitor the response of species/habitats to the action(s) taken

10.4 UNFORESEEN CIRCUMSTANCES

“Unforeseen circumstances” are defined by the federal “No Surprises” policy as:

Changes in circumstances affecting a species or geographic area covered by an HCP that could not reasonably have been anticipated by plan developers or the Services at the time of the HCP’s negotiation and development, and that result in a substantial and adverse change in the status of a covered species.

In the event of an unforeseen circumstance causing adverse effects on an HCP habitat or covered species, the HCP can be amended to include remedial measures pending verification by the USFWS. Any amendments made will not, however, require from permittees additional land or natural resources, restrictions on land or natural resources, or financial compensation not already included in the HCP agreement.

10.5 ASSURANCES TO PRIVATE LAND OWNERS

10.5.1 PRIVATE LAND ADJACENT TO HCP PRESERVES

The success of the conservation strategies of an HCP is marked by an increase in the population levels of covered species and by the increase in habitat containing covered species. However, private owners of land bordering HCP preserves may be concerned that such an increase in population could cause listed species to migrate outward inhabiting their land thereby limiting their rights as landowners.

Due to this concern, voluntary participation in the SSHCP is offered to such landowners providing the coverage of an incidental take permit with certain prerequisites. Plan participation will be offered for land that is actively being used for agricultural purposes and that lies 0.5 miles from the border of an HCP preservation at the time of its establishment. The incidental take permit will only cover new populations or newly increased populations of covered species and will not cover existing populations. The following assurances will be provided to plan participants:

- Privately owned land within 0.5 miles of the border of an HCP preserve will be covered by a federal incidental take permit for covered species that inhabit or whose population increases after the preservation is established.
- Only land actively being used for agricultural purposes will be covered by the HCP. Agricultural purposes refer to crop production, animal production, forage production, and grazing activities. Lands used for dairy production and non-agricultural purposes will not be covered. Land will be covered only as long as active agricultural use continues.

- Incidental take permit coverage will be offered for an individual or a population of a covered species that inhabited the bordering land only *after* the establishment of the preserve. Permit coverage will not be offered for species that inhabited the land prior to the preserve being established. A baseline survey will be used to determine what, if any, covered species inhabit the bordering land prior to the establishment of a preserve.
- Prior to the preserve being established the Implementing Entity will send a letter to bordering landowners eligible for participation in the HCP. This letter will explain the HCP, the landowners' eligibility, and the benefits provided by participation in the HCP. If a landowner wishes to participate in the HCP a survey must first be completed to establish the land's environmental baseline. This can be done free of charge by a biologist provided by the Implementing Entity or by a private consultant and the landowner's expense.
- The resulting survey report will include a description of habitat of covered species on the survey land including extent and quality as well as any records or observations of covered species in the area. When the survey report is approved and a *Certificate of Inclusion* is signed and submitted by the landowner HCP participation and coverage will be granted.
- A record of all correspondence and certificates of inclusion, both sent and received, will be kept by the implementing entity. Annually the USFWS will be notified of the number, location, and size of land entered into the HCP program. Additionally, copies of all certificates of inclusion will be available upon request by the USFWS.

10.5.2 PRIVATE LAND USED AS PUBLIC ACCESS TO HCP PRESERVES

Public access to HCP preserves and conservation easements will be discouraged by the implementing entity when possible. However, when allowed, public access will be permitted only with the landowner's consent.