Information and Questions & Answers about the Programmatic Consultation for Endangered Plants on the Santa Rosa Plain

About the plants

Seasonal wetlands on the Santa Rosa Plain support four endangered plant species: Burke's goldfields, Sonoma sunshine, Sebastopol meadowfoam, and many-flowered navarretia. These plants grow only in seasonal wetlands - habitat that is very wet in the winter and very dry in the summer. Burke's goldfields, Sonoma sunshine, and Sebastopol meadowfoam are confined almost entirely to the Santa Rosa Plain. Many-flowered navarretia occurs mostly outside the Santa Rosa Plain, but its only Sonoma County population is on the Plain.

All four of these plant species are annuals, surviving as seed during the dry season and sprouting after the first annual rains. Populations of species using this strategy can typically survive as seed for years until conditions are favorable for growth. Although seasonal wetland plants are well adapted to alternating extreme wet and dry conditions and can therefore grow where other plants are unable to survive, these plants are typically unable to survive outside seasonal wetlands.

The loss of seasonal wetlands on the Santa Rosa Plain has led to a dramatic decline in population levels for these plants. Burke's goldfields, Sonoma sunshine, and Sebastopol meadowfoam were federally listed as endangered on December 2, 1991, and many-flowered navarretia was federally listed as endangered on June 18, 1997, by the U.S. Fish and Wildlife Service (Service).

History of events leading up to the programmatic consultation

In 1991, with the pending Federal listing of seasonal wetland plant species, the local Santa Rosa Plain community became concerned over potential conflicts that could arise between species conservation and local economic development needs. The Santa Rosa Plain Vernal Pool Task Force was formed to pursue a workable solution: The goal of the Task Force was to preserve the Santa Rosa Plain vernal pool ecosystem and, at the same time, to accommodate economic growth through streamlined permitting. The Task Force launched the Vernal Pool Ecosystem Preservation Plan (VPEPP), which was to be completed

in two phases. Phase 1 was completed in 1995, with the release of the VPEPP Phase 1 Final Report. The Phase 1 Report contained a framework of biological, planning, and regulatory information and identified a number of tasks for Phase 2. One task identified was for the local governments to apply to the U.S. Army Corps of Engineers for a General Permit to fill "low quality" seasonal wetlands throughout the Santa Rosa Plain.

In 1997, the local governments on the Santa Rosa Plain applied to the Corps for a General Permit to fill seasonal wetlands, but this permit was never issued because of several unresolved issues related to conservation requirements and permit administration. While the General Permit as proposed would have achieved streamlined permitting, it would not have adequately provided for long-term protection of the listed plants. Several permit applications were later submitted to the Corps for individual projects that would affect the listed plants, but the Service determined that allowing these projects to go forward would be too great a risk to the listed species without a comprehensive regional plan addressing the species' long-term conservation needs. The Corps and the Service chose to produce the Programmatic Consultation as an alternative solution for meeting the Task Force goals.

The Programmatic Consultation, finalized on July 17, 1998, describes two programs - program addressing limited impacts and a more comprehensive program. The program addressing limited impacts is currently in effect. It allows some projects to move forward through a streamlined process while the comprehensive program is being established. The Programmatic Consultation outlines the necessary components of the comprehensive program, which would be developed cooperatively by state, federal, and local entities to provide for long-term species conservation and project planning at a comprehensive level.

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Questions and Answers about the Santa Rosa Plain Programmatic Consultation:

Q: ***What is "consultation" under the Endangered Species Act?***

A: When a Federal agency permits, funds, or carries out a project that may affect an endangered or threatened species, the Endangered Species Act requires the agency to formally consult with the U.S. Fish and Wildlife Service (Service). The purpose of the **consultation** process is to ensure that no Federal action is likely

to jeopardize the continued existence of a species that is federally listed as threatened or endangered. When the formal consultation process is concluded, the Service prepares a document called a **biological opinion** which (1) states whether the project is likely to jeopardize listed species, (2) details how the Federal action affects the species, and (3) summarizes the information upon which the Service's opinion is based.

Q. Why is Endangered Species Act consultation necessary for projects on the Santa Rosa Plain?

A: Under section 404 of the Clean Water Act, a permit (**404 permit**) is required from the U.S. Army Corps of Engineers (Corps) for filling wetlands. The Corps must consult with the Service before issuing 404 permits for wetland fill that may affect listed species. Seasonal wetlands on the Santa Rosa Plain provide habitat for four federally listed plant species, therefore the Corps must consult with the Service on the effects to these species prior to issuance of 404 permits for seasonal wetland fill.

Q. What is a "programmatic consultation"?

A: Typically, a separate consultation process is initiated and a separate biological opinion is prepared for each individual project. Sometimes, however, the Service and the Federal agency will do a **programmatic consultation** addressing multiple projects in a single **programmatic biological opinion**. Projects that fit the criteria outlined in the programmatic biological opinion can be authorized through the Service's preparation of a short letter, which is appended to the programmatic biological opinion. An individual consultation takes up to 135 days to complete, whereas the process for appending a project to a programmatic consultation takes only a few weeks. This provides a streamlined alternative to individual project-by-project consultation, and the pre-defined criteria and conservation requirements provide greater certainty and predictability for each project.

Q. Why is there a limited-impact program and a comprehensive program under the Programmatic Consultation?

Because of the rarity and ongoing decline of the listed plant species on the Santa Rosa Plain, and the complexity of issues related to species conservation and needs for economic growth, the Service believes that a comprehensive strategy is necessary to ensure that projects on the Santa Rosa Plain will not jeopardize

these species' survival and recovery. Once a program is in place that provides for the long-term survival of these species, any projects that are consistent with the program can move forward quickly and efficiently. However, many tasks need to be completed to put the comprehensive program in place. In the meantime, a limited amount of impact can occur for projects meeting specific criteria to assure that the listed species' survival will not be jeopardized while the comprehensive program is being developed.

Q. What is the difference between the limited-impact program and the comprehensive program under the Programmatic Consultation?

A: The **limited-impact program** is currently in effect, and allows some projects to move forward through a streamlined process while the comprehensive program is being developed. The Programmatic Consultation provides details regarding the specific project criteria and conservation requirements which must be met for a project to qualify under the limited-impact program.

The Programmatic Consultation also provides a general outline of the necessary components for a **comprehensive program**, which the Service anticipates would be developed cooperatively between state and federal regulatory agencies and local governments. The comprehensive program would be designed to implement a locally administered regional conservation plan as envisioned in the Vernal Pool Task Force Phase 1 Report. The comprehensive program, once established, would supersede the current limited-impact program.

Q: How will the programmatic consultation streamline the 404 permitting process?

A: The programmatic consultation provides the applicant with certainty regarding the measures that will be needed for mitigating seasonal wetland impacts. Predetermined measures are laid out for projects that meet specific criteria, so that applicants will know these requirements up front and will not need to negotiate conservation measures on a project-by-project basis.

Without the programmatic consultation, each 404 permit application must be processed separately through the individual consultation process, which takes up to 4½ months. Under the programmatic consultation, a project that qualifies for the limited-impact program can be processed within just a few weeks.

The comprehensive component of the programmatic consultation is also expected to streamline the project approval process. The comprehensive program would provide a framework for linking Federal

and State regulations with local land use programs. If the local program is consistent with state and federal regulations, the agencies can sign off on this program and hand land use control and responsibility to the local governments. This can allow State, Federal, and local requirements to be folded into a single process, thereby streamlining the approval process by reducing redundancy and conflicts between regulatory programs, and increasing certainty for private property holders in the land-use planning process.

Q. Why are all seasonal wetlands covered under the Programmatic Consultation, whether or not federally listed species have been found?

A: There are two reasons. One is that the plant's seeds may be present on a site even though no plants can be found. Vernal pool plants depend on particular amounts of water at particular times of year, and the plants may not be able to grow during years when conditions are too wet or too dry. These species survive in a variable and unpredictable environment by persisting as seeds during unfavorable years, until conditions are suitable for the seeds to sprout. A population of the species might go undetected on a site that is surveyed when no plants are present but there is an abundance of seeds lying dormant. A landowner would therefore need to survey a site multiple times during successive years to provide reasonable certainty that the listed species are not present. Most landowners are unable to conduct surveys over multiple years to provide this level of certainty.

In addition, degraded seasonal wetlands may still contain viable seeds of the rare plant species, but the hydrology may have been altered to such an extent that conditions are rarely favorable for seed germination. Because the vernal pool ecosystem was once extensive over the Santa Rosa Plain, it is not difficult to find parcels on which vernal pools have been "smeared" into the landscape, resulting in degraded seasonal wetlands that once supported high quality vernal pools and vigorous populations of the now rare plants. The persistent seed bank may occasionally result in the appearance of small numbers of the listed plants, under favorable conditions. This habitat may still retain the necessary qualities for supporting one or more of the listed plant species, but may require considerable restoration to ensure long-term species survival.

Another reason the Programmatic Consultation addresses habitat where the listed vernal pool plants have not been found is that these plants need enough habitat to be able to survive and recover on the Santa Rosa Plain. To protect against species extinction, habitat that does not currently support the species will need to be

restored, and the species may need to be re-introduced to sites where they have disappeared. The long-term, comprehensive conservation program would identify habitat to be protected and restored and provide a mechanism for assuring this protection and restoration. Until such a program is established, the Service views all remaining habitat as playing a potentially significant role in species survival and recovery.

Q. Why are only 50 acres of seasonal wetlands allowed to be filled through the interim program?

A. Based on the rarity and rapid decline of the listed plants and their habitat on the Santa Rosa Plain, the Service is concerned that further loss could jeopardize the species' long-term survival and recovery. Principles of conservation biology suggest, in the absence of specific data for the Santa Rosa Plain, that we need to provide for the long-term survival and eventual recovery of the listed species through establishment of a large system of preserves that is as interconnected as possible and supports the range of diversity of the listed species. Continued habitat loss prior to the establishment of such a preserve system could make the eventual recovery of these species impossible.

The comprehensive program is expected to incorporate additional information on species biology and enhancement techniques, as identified in the recovery plan currently being developed for the listed plants. It is also expected to incorporate the tasks identified by the Vernal Pool Task Force, such as identifying habitat quality for sites that are currently not evaluated, and developing an overall preserve design. The comprehensive program will involve resolution of technical and implementation issues to allow explicit identification of a perpetual conservation program for the species on the Santa Rosa Plain. The comprehensive program may provide for loss of seasonal wetlands beyond the 50 acres allowed under the interim program, if it can demonstrate the ability to provide an adequate level of conservation and enhancement of remaining habitat value based on regional land planning and species recovery strategies. At present, however, the best available scientific and commercial information supports minimal habitat loss.

To allow for continued economic growth, the Programmatic Consultation allows up to 50 acres of seasonal wetland loss while the comprehensive program is being developed. This is greater than the total amount of seasonal wetland habitat that has been authorized for fill on the Santa Rosa Plain since 1990, therefore the Service believes that the 50-acre allowance is ample for allowing some projects to move forward prior to establishment of

the comprehensive program.

The comprehensive program, once established, will supersede the current limited-impact program. The comprehensive program may allow some development of lands initially designated as "high quality" habitat, because the actual long-term conservation value will have been determined to be lower. Conversely, some lands originally ranked as "low quality" may be determined to be a valuable component of the final conservation plan.

Q: What projects can be authorized under the current limited-impact program?

A: An application to fill seasonal wetlands on the Santa Rosa Plain can be processed through the current limited-impact program if it meets the following criteria:

1. no more than 3 acres of seasonal wetlands will be impacted;

2. the seasonal wetlands have been ranked as "low quality"; and

3. the project is not likely to preclude the ability to develop and implement an effective comprehensive conservation program; that is, the project won't preclude the establishment of an effective regional preserve system.

Q: What are the conservation requirements for projects authorized under the current limited-impact program?

A: Impacts to seasonal wetlands under the current limited-impact program will be offset through a combination of the following: (1) seasonal wetland preservation; (2) seasonal wetland restoration or creation; and, in some cases, (3) soil or seed collection.

For each acre of seasonal wetland habitat impacted, a specific acreage must be preserved based on established ratios (see next question). Also, to be consistent with the Federal "no net loss of wetlands" policy, at least one acre of seasonal wetland will be created or constructed for each acre lost (see next question for specific ratios). The preservation and restoration/construction is area-based, in that it must take place in the same general area where the impacts occur.

When a site has a known listed plant population, soil and/or seed will also be collected from the impact site and deposited in a

suitable area in coordination with the Service.

Q: What are the preservation and restoration/construction ratios for projects authorized under the current limited-impact program?

A: The ratios for preservation and restoration/construction are given in the following table. Ratios are to be read as "acreage of conservation:affected acreage" (e.g., 2:1 = 2 acres of conservation required for 1 acre affected). Affected acreage is based on direct and indirect effects of the project on habitat where the listed species have been observed and on other suitable habitat.

Impacts	Conservation at a Bank, or Comparable[1]		Conservation at Other High-Quality Sites[2]	
	Pres.	Rest./ Cons.[3]	Pres.	Rest/ Const.[3]
Effects to seasonal wetlands where surveys have been conducted and no listed plants have been observed	1:1	1.5:1 or 1:1	2:1	1.5:1 or 1:1
Effects to seasonal wetlands where listed plants have been observed, or are assumed to be present	2:1	1.5:1 or 1:1	3:1	1.5:1 or 1:1

[1] A conservation site will be considered comparable in value to a bank if it is high-quality habitat that either: (I) is adjacent to a Service-approved conservation bank or other large block of preserved habitat; or (ii) consists of all or part of at least 50 contiguous acres which will be preserved for biological values in perpetuity.

[2] All preservation land must consist of high-quality habitat unless otherwise approved by the Service.

[3] Conservation will require restoration/construction at a 1.5:1 ratio for concurrent restoration/construction, or a 1:1 ratio if the restoration/construction has demonstrated successful hydrological conditions for at least 1 year.

Q: Why is the preservation ratio lower for projects that conserve at banks or lands of comparable value?

A: One of the basic principles of conservation biology is that habitat fragmentation is detrimental to species conservation. This is because habitat fragmentation can interrupt species dispersal and gene flow, eliminate necessary components of a species' habitat, and result in numerous negative effects to species and

their habitat resulting from an increase in the amount of wildland/urban interface. Large blocks of habitat, therefore, generally have higher biological value than small habitat fragments, so less land is needed to offset project impacts. The conservation banks will consist of large habitat blocks, and other conservation land in large habitat blocks will be considered to have long-term conservation value comparable to that of a bank.

Q. ***Why is the restoration/construction ratio lower for projects that implement conservation measures prior to impacts?***

A: Because of the Federal policy of "no net loss" for wetlands, at least one acre of seasonal wetlands must be created or restored for each acre lost. Restoration/preservation ratios are often set at a ratio higher than 1:1 for the following reasons: (1) to compensate for the temporary loss in habitat value between the time the original wetlands are impacted and the time new wetlands become functional; (2) in case portions of the restoration/construction effort are not fully successful, to provide greater assurance that at least one acre is successfully restored/constructed for each acre impacted. If the wetlands are successfully restored or constructed prior to project impacts, this reduces the temporary habitat loss and assures 100% success; therefore, the ratio need not be greater than 1:1.

Q. ***How is the comprehensive program expected to achieve the Task Force goals?***

A. The goals of the comprehensive program are the same as the goals of the Vernal Pool Task Force: streamlined permitting and preservation of the vernal pool ecosystem on the Santa Rosa Plain. Phase 1 of the Vernal Pool Ecosystem Preservation Plan resulted in the Phase 1 Report, which listed a number of tasks to be completed in Phase 2. These Phase 2 tasks are expected to be completed through the comprehensive program. Some of the Phase 2 tasks that would be essential aspects of the comprehensive program include: identification of habitat quality for currently unknown sites; development of an overall preserve design prior to establishment of a preserve system; development of a mechanism for incorporating plan recommendations into local land use plans, policies, and ordinances; development of management, maintenance, and monitoring guidelines for the preserve system; and developing permitting strategies that address the requirements of applicable Federal and State laws.

Q. ***What about the General Permit?***

A. A General Permit for seasonal wetlands on the Santa Rosa Plain can still be pursued. The current limited-impact program of the programmatic consultation accomplishes the intent of the General Permit by streamlining the permitting process, therefore the local jurisdictions may decide that a General Period is not necessary for the short term. However, the Service, Corps, CDFG, and local governments need to decide whether a General Permit would be appropriate in conjunction with establishment of the comprehensive program.

More questions?

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