

CHAPTER 6. BIOLOGICAL REPORTS

The SEA Ordinance requires special biological review for any development proposed within a SEA. The biological documentation required to process an application will depend on the extent of impacts to SEA Resources and ability to meet SEA Development Standards, and may include one or all of the following:

- ❖ Biological Constraints Map (BCM)
- ❖ Biological Constraints Analysis (BCA)
- ❖ Biota Report
- ❖ Restoration or Enhancement Plan

All of the above biological materials must be prepared by a biological consultant on the SEATAC Certified Biologist list maintained on the Department's SEATAC website²³. These consultants are familiar with the preparation of biological reports for SEA applications, some of which are very similar to the biological sections of Environmental Impact Reports required for CEQA. They will also be able to provide guidance on avoidance of SEA Resources and best practices for minimizing impacts where Development Standards cannot be met. Additional surveys and reports may be required for SEA CUPs depending on the extent and condition of SEA Resources present on the project site; this may include an oak tree report, oak woodland analysis, rare plant survey, protocol survey for special status species, jurisdictional wetlands delineation, or habitat restoration or enhancement plan. The need for such reports will be determined by the County Biologist as early in the review process as possible, based on the BCM, BCA, and/or a County Biologist site visit.

It is the responsibility of the applicant or applicant's agent to hire one of the listed biologists to prepare the biological reports. Each report will be reviewed by a County Biologist to determine its accuracy and completeness, and the County Biologist may request changes or additions to biological reports to ensure that they are complete and accurate. If a submitted report is more than two (2) years old, the County Biologist may require updated field surveys and report revisions as necessary to accurately assess current conditions and proper classification of SEA Resources.

Early identification of SEA Resources and biological constraints assists in guiding applicants toward projects that are mindful of biological resources. For this reason, all non-exempt projects within a SEA are required to submit a BCM along with a Conceptual Project Design before applying for a development permit. The County Biologist and Case Planner will review the BCM along with the Conceptual Project Design at the SEA Counseling and again when the application is filed with the final site plans.

If the project meets the requirements for Ministerial SEA Review, the project's biological reporting ends here. If the review of the BCM and Conceptual Project Design at the SEA Counseling reveal that any of the Development Standards are not met, the applicant will have the opportunity to redesign the project while it is still in the conceptual phase or to move forward with a SEA CUP application. If the applicant is unable to, or chooses not to, redesign the project to meet all Development Standards, a SEA CUP will be needed, and additional biological reports, such as those indicated above, may be required. Chapters 2 (SEA Ordinance Assessment Process) and 5 (Permit Analysis) provide more detail regarding the SEA

²³ Found online at planning.lacounty.gov/agenda/seatac

assessment and permitting process. The primary biological reports required during the SEA assessment process are detailed below.

BIOLOGICAL CONSTRAINTS MAP (BCM)

The BCM is a tool for quickly identifying areas of potential biological significance in the vicinity of the proposed development. In conjunction with a Conceptual Project Design, the BCM is utilized to evaluate whether SEA Development Standards can be met. The BCM must be drawn to scale and depict:

- ❖ the project site, including the full extent of all project parcels, and extending 200 feet out from the parcel(s) boundaries (“study area”);
- ❖ SEA boundaries (location of the project in relation to SEA boundaries may be shown on an inset or separate map);
- ❖ existing development (structures, graded areas, roads, etc.);
- ❖ natural communities, using descriptions in CNPS Online Manual of California Vegetation²⁴, and indicating the SEA Resource Category for each;
- ❖ location, species and trunk diameter (at standard height) of all trees;
- ❖ tree protected zones for all SEA Protected Trees (see Appendix A);
- ❖ special status species observed during the biological survey as well as any previously recorded observations of special status species within the study area (e.g. using CNDDDB records, prior biological reports, etc.);
- ❖ special habitat features indicative of the presence of a special status or rare animal, such as nests, dens, burrows, and roosts;
- ❖ lands designated as Critical Habitat by USFWS;
- ❖ location and extent of water resources, such as streams, lakes, reservoirs, ponds, wetlands, marshes, seeps, springs, vernal pools, and playas;
- ❖ required setbacks from water resources;
- ❖ any physical site features that are expected to facilitate or restrict wildlife movement across the site, such as ridgelines, remnants or strips of habitat, culverts, fences, etc.;
- ❖ rock outcrops, cliffs, or other geological features that may be utilized by species that specialize in these uncommon structural niches; and
- ❖ protected open space that has been recorded over any part of the project site or on adjacent properties.

The process for preparing a BCM will vary slightly depending on the approach of each individual biologist. Each BCM should be based on the following, at minimum:

- ❖ a review of sensitive biological resources known or expected to occur in the vicinity of the project site utilizing such resources as the California Natural Diversity Database (CNDDDB), California Native Plant Society sensitive plant lists, and other reliable sources;

²⁴ Available at: www.cnps.org/vegetation

- ❖ a minimum of one field survey of the project site parcel(s)²⁵ conducted during the appropriate time of year (typically spring), utilizing survey methods appropriate to the species and habitats being surveyed;
- ❖ geographic coordinates of observed sensitive or rare plants, animals, and special habitat features indicative of the presence of a special status or rare animal;
- ❖ determination of natural communities (i.e. alliances and associations) present on the project site²⁶, based on classifications presented in the CNPS Online Manual of California Vegetation;
- ❖ determination of CDFW imperilment²⁷ and CNPS rare plant rankings²⁸ for biological resources found on site; and
- ❖ preparation of the biological constraints map.

Additionally, a Conceptual Project Design should be provided either on the BCM or as a separate site plan for the SEA Counseling meeting. The Conceptual Project Design should include:

- ❖ the proposed locations of structures,
- ❖ fuel modification/brush clearance zones,
- ❖ utility access and driveways,
- ❖ exploratory testing,
- ❖ other areas of expected disturbance from the proposed project, and
- ❖ any areas of proposed natural open space to be recorded in order to meet Development Standards.

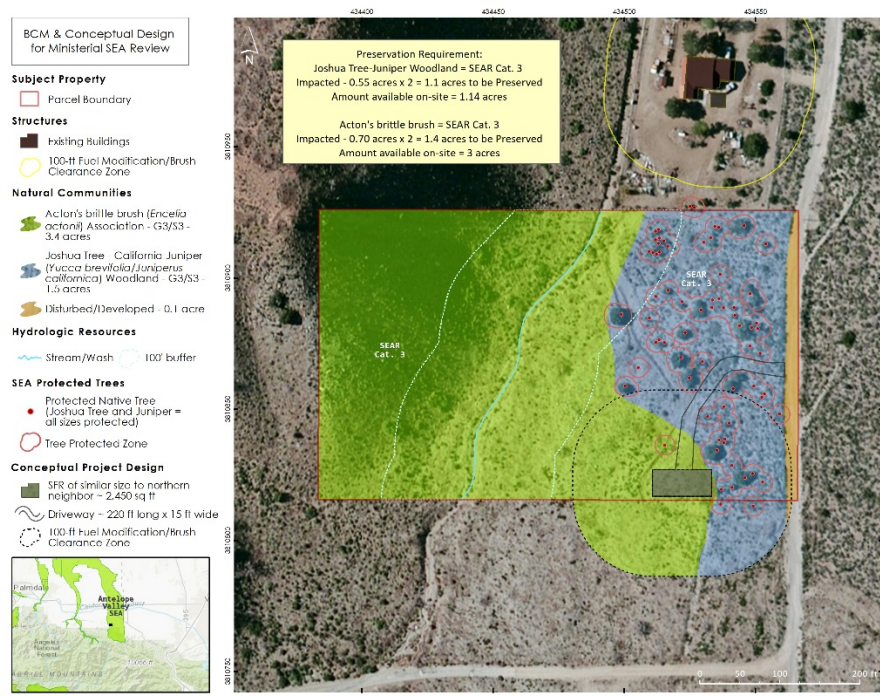


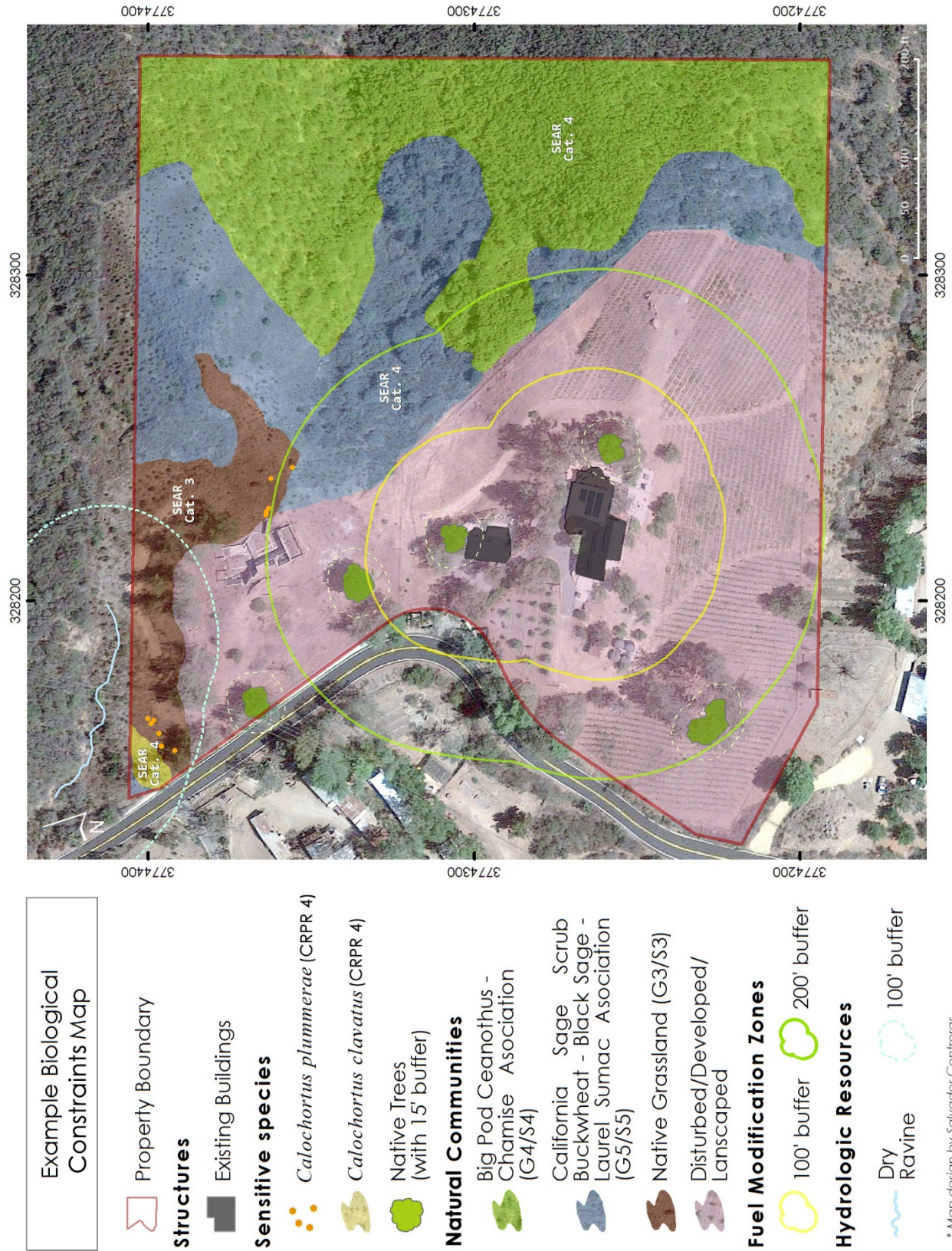
Figure 33. Example BCM with Conceptual Project Design for SEA Counseling.

²⁵ Estimate resources within 200 feet of the project site on neighboring parcels if not physically accessible.

²⁶ In the event that the biologist encounters a natural community that has not been defined in the CNPS Online Manual of California Vegetation or ranked by CDFW Survey of California Vegetation, the biologist should consult with CNPS and CDFW to determine appropriate classification and ranking utilizing NatureServe's Conservation Status Assessment methodology for unranked communities.

²⁷ www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

²⁸ www.cnps.org/cnps/rareplants/inventory/index.php



BIOLOGICAL CONSTRAINTS ANALYSIS (BCA)

A Biological Constraints Analysis (BCA) needs to be submitted with the applicant's SEA CUP application. This report builds on the BCM (which is to be included as part of the report), providing detailed discussions of the biological resources, natural features, and regional context of the project site, and providing a more thorough community-level assessment of the biological resources on the project site and surrounding area. The BCA is based on a combination of literature review and on-site investigations. As is the case with all biological reports prepared for SEA analysis, a SEATAC Certified Biological Consultant must prepare the BCA. At minimum, the report should include:

- ❖ a parcel description, including parcel size, location, and SEA;
- ❖ description of natural geographic features, including drainages and watershed with names;
- ❖ description of methodology of biological survey;
- ❖ vegetation data and natural community descriptions;
- ❖ tables and discussions of sensitive fauna and flora;
- ❖ lists of all plant and animal species observed directly or indirectly on site and in adjacent areas of similar habitat;
- ❖ description and map of existing land uses in the project area;
- ❖ description of open space reserves in the area and depiction of wildlife movement/habitat linkage relationships to open space;
- ❖ reference to and relationship with any conservation plans in the vicinity;
- ❖ description of habitats, alliances, associations and vegetative communities in the vicinity with respect to those on site;
- ❖ rough estimates of the overall population sizes of species of flora and fauna on site and in vicinity;
- ❖ description of overall biological value of the area as it fits in to the biotic mosaic and contributes to SEA ecological functions;
- ❖ regulatory framework; and
- ❖ the Biological Constraints Map.

The Department may waive the BCA requirement if the County Biologist determines that biological resources are sufficiently limited or uncomplicated to be adequately addressed by the BCM and Biota Report alone. A complete checklist of items required in the BCA is included Appendix D.

BIOTA REPORT

The Biota Report is required for all SEA CUPs. The applicant will need to work closely with the project biologist on this report since some of the information required will need to be supplied by the applicant (e.g. the project description). The applicant should be prepared to meet with the project biologist to go over the SEA guidelines together for Biota Reports and assign responsibility as appropriate for the different items.

The Biota Report uses the data provided in the BCM, BCA, and additional surveys (i.e. rare plant survey, oak tree report, jurisdictional wetland delineations, special status species surveys, etc.) to provide a more complete analysis of the project's impacts on SEA Resources. The Biota Report includes a discussion of possible and probable impacts from the development and proposes specific mitigation measures and monitoring to address each impact.

The analysis presented in the Biota Report assists in the consistency review of the project, SEA findings, and in preparation of the Initial Study. If a Mitigated Negative Declaration (MND) or Environmental Impact Report (EIR) is required for the project, the Biota Report forms the basis of the Biological Resources section of the MND or EIR. A complete checklist of items required in the Biota Report is included in Appendix D. At minimum, the report will:

- ❖ incorporate the BCM and BCA as documentation of existing conditions on the project site;
- ❖ include a project description;
- ❖ discuss impacts (direct, indirect, and cumulative) to vegetation, special-status species, protected and noteworthy trees, wildlife habitat, and the integrity of the SEA;
- ❖ propose mitigation measures, such as natural open space preservation and/or habitat restoration;
- ❖ establish a monitoring program;
- ❖ discuss consistency with compatibility criteria; and
- ❖ have a conclusion as to whether any impacts remain after mitigation.

RESTORATION OR ENHANCEMENT PLAN

A restoration or enhancement plan (or equivalent document) is required for any project proposing to restore or enhance natural habitat within a SEA. Habitat restoration is the process of returning a degraded habitat to its pre-existing condition, including restoring self-sustaining ecosystem functions. Enhancement is the process of altering a site to increase one or more functions (e.g., removal of invasive plant species or planting of native species).

Each restoration or enhancement plan should include the following components:

- ❖ A description and map of the area proposed to be restored or enhanced. Include a physical address or description of project location, geographic coordinates, watershed, USGS 7.5' Topographic Quadrangle, and Assessor Parcel Number(s).
- ❖ A description of proposed restoration or enhancement activities and their timelines. Include diagrams, drawings, plans, and/or maps that show the location and dimensions of the proposed restoration. Specify the equipment and machinery (if any) that will be used to complete the project and identify on plans where equipment will enter or exit the area. This description should include incidental and support activities (e.g. staging of equipment and materials, acquisition of plant materials, maintenance, etc.), as well as the principal restoration tasks. Describe best management practices to be employed to prevent sediment from entering watercourses during and after construction and avoidance and/or minimization measures to protect fish, wildlife, and plant resources.
- ❖ Plant palette and source of plant materials to be used.
- ❖ An inventory of SEA Resources on the project site, including an evaluation of existing habitat quality. Discuss how the project will provide a net benefit to SEA Resources (e.g. species and plant communities that are expected to benefit from the project).
- ❖ Clearly stated goals and objectives and well-defined performance standards (i.e. success criteria). Performance standards should be attainable and measurable, and stated quantitatively in biological terms.
- ❖ A description of methodologies to be followed, demonstrating that the project is consistent with sources that describe best available restoration and enhancement methodologies. List references and attach or provide a weblink to the document(s) when available.

- ❖ A description of maintenance tasks (e.g. weeding, watering, and other routine maintenance needed to ensure restoration success) and monitoring provisions. The plan should state type of maintenance, frequency, duration, and responsible party for both short-term and long-term maintenance.
- ❖ A qualitative and quantitative monitoring plan, including a map of proposed sampling locations. Monitoring will ideally include both structural (state) and functional (process) attributes and be measured at multiple levels of biological organizations, from population to landscape scale, as appropriate. The monitoring period for each restoration project will depend on the scale and type of restoration and specific site conditions. The SEA Ordinance requires a minimum monitoring period of five years, but some projects may require a longer monitoring period to ensure success. The length of the monitoring period should be based on realistic projections of the restored habitat becoming self-sustaining.

The restoration plan submitted for review does not necessarily have to be developed specifically for the SEA Ordinance. If a similar document is being/has been prepared for another permitting agency or for CEQA review, the Department will likely accept that document, provided that it contains sufficient detail to evaluate whether the project meets SEA Findings (see Section 22.102.080).

Chapter 7 provides general guidelines and best practices for habitat restoration within SEAs. All restoration projects should incorporate appropriate practices from Chapter 7 into their restoration and enhancement plans.

CHAPTER 7. HABITAT RESTORATION

Many habitats in SEAs have been lost, degraded, or fragmented due to past development or use. This degradation is generally accompanied by loss and impairment of valuable ecosystem functions and amenities that support the health and wellbeing of the human populations of LA County. The County welcomes habitat restoration projects, which aim to restore SEA Resources and ecosystem services to degraded habitats. When done well, habitat restoration can regain and correct ecosystem process and functions that filter our water and air, help control air temperatures, support biodiversity, and provide movement opportunities for wildlife. Failure to restore degraded ecosystems can result in increased environmental cost later, in the extinction of species or natural communities, and in permanent ecological damage.

To improve the County's monitoring of ecosystem health and encourage best practices in habitat restoration, the SEA Ordinance establishes a mandatory (but free) review of habitat restoration projects within SEAs to ensure that the methodologies and practices being implemented are consistent with the goals and policies of the SEA Program. To qualify for this special Habitat Restoration Review, a project should demonstrate, through a Restoration or Enhancement Plan or the equivalent, that it meets the SEA Findings (Section 22.102.080(D)). The project must also be voluntary and not part of a larger project whose primary purpose is not habitat restoration, such as a land use permit for a non-habitat restoration construction activity. Restoration proposed as part of a larger project that includes non-habitat restoration development will be reviewed as part of the permit for that development. If the restoration project does not demonstrate that it meets the SEA Findings, it will be required to go through the same SEA assessment process as is required for a development project.

WHAT IS HABITAT RESTORATION?

Habitat restoration is the process of returning a habitat to a close resemblance of its condition prior to disturbance.

Successful restoration means that both ecosystem structure and function have been recreated or repaired to such degree that the natural ecosystem processes that contribute to self-maintenance of the ecosystem are operating effectively and without the need for further human engineering or interference.

Even small scale or partial ecological restoration can substantially expand or improve SEA Resources and ecosystem services.

For restoration projects that meet the SEA Findings, the Habitat Restoration Review will be used by the County to provide guidance and recommendations for ensuring consistency with the SEA Program. By reviewing and monitoring habitat restoration projects, the County will be able to collect data on where and how restoration is taking place within SEAs, track successes, and identify trends and information gaps. The County will use this information to assist in evaluating the overall success of the SEA Program.

HABITAT RESTORATION REVIEW

The purpose of Habitat Restoration Review is to assist restoration practitioners in designing sound habitat restoration and enhancement projects that are compatible with the goals of the SEA Program. This chapter is also intended to assist Department Staff in evaluating and approving restoration or enhancement projects. These guidelines and principles are general and intended to be applied flexibly on a site-by-site basis. They do not replace or supersede the permit requirements of any other agency, such as the U.S.



Figure 34. Habitat restoration before and after pictures. Source: Puente Hills Habitat Preservation Authority website.

Fish and Wildlife Service, Army Corps of Engineers, State Water Resources Control Board, or CA Department of Fish and Wildlife. However, the County review process is intended to allow for coordination with other permit processes by allowing the use of common application materials and content.

While it is not required by the Ordinance, we highly recommend that applicants schedule a pre-submittal counseling meeting with Department Staff to get feedback on the project and its environmental protection measures. Department Staff can provide valuable insight about local conditions, including likely presence of sensitive species, upcoming development in the project vicinity, and other important information that may affect project plans. Attending a pre-submittal counseling meeting will also help ensure that sufficient technical detail is included in the restoration document to be submitted. To schedule a pre-submittal counseling meeting, contact sea@planning.lacounty.gov.

BASIC PRINCIPLES

- ❖ The desired outcome for all restoration projects is to create and enhance biologically functional habitats that support target species as well as other species that are important to overall biodiversity.
- ❖ Restoration activities should not begin until the restoration plan is reviewed by the Department.
- ❖ The restoration should be led by an experienced restoration ecologist with documented experience of successful native habitat restoration in the region.
- ❖ The restoration should be performed by experienced restoration contractors specializing in native habitat restoration.
- ❖ There are numerous resources available to guide restoration practitioners on successful restoration strategies for the type of habitat being restored. The proposed methodology should be consistent with such manuals and documents that describe best available restoration and enhancement methodologies for the type of habitat being restored.
- ❖ Restoration should be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for the type of community being restored. Identification of restoration sites should involve an analysis of the suitability of potential sites to support the desired habitat, including comprehensive mapping and documentation of physical and biological site conditions through species surveys, soils surveys, drainage mapping, and constraints analysis.

- ❖ Riparian Restoration: All sites should contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community.
- ❖ Priority should be given to restoring areas that occur adjacent to existing areas of native habitat, especially those that support sensitive species, with the goal of increasing habitat patch size and connectivity while restoring habitat values that will benefit sensitive species.
- ❖ Implementation may be phased over a multi-year timeline (often 5-10 years) to provide for greater diversity of planting ages. Strategies for making prompt mid-course adjustments or corrections in response to changing conditions (e.g. rainfall, fire, flood, etc.) should be included in the restoration plan.
- ❖ Prior to implementation, funding sources and responsible entities for carrying out restoration should be secured.
- ❖ Prior to implementation, an explicit work plan should be developed, including schedules and budgets for site preparation, installation and post-installation actions.
- ❖ Practice adaptive management by developing strategies for revisiting implementation or performance standards if necessary. Identify an advisory team of experts to provide advice and direction.

MANDATORY BEST MANAGEMENT PRACTICES

STRESSORS

- ❖ Any stressors causing habitat degradation should be addressed prior to starting restoration.

PLANT MATERIAL

- ❖ Provide details regarding the planned source of their plant material. If the source is from more than ten miles away or from a completely different vegetation or geology, provide reasonable support for why that stock has been chosen.
- ❖ Special consideration should be given to sources of tree seed and other long lived species. In the case of oak trees, it is preferable to grow seedlings from acorns collected in the immediate project vicinity (within approximately two miles of the project site).
- ❖ All stock should be from plants within Counties in or adjacent to the SEA. Nurseries used to grow stock should also be within counties in or adjacent to the SEA to prevent spread of soil borne diseases and insect pests.
- ❖ Plant material used for habitat restoration purposes should consist of native species that are local to the immediate area of the mitigation site.
- ❖ All plant material proposed for use in a habitat restoration program should be inspected by a qualified biological monitor to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species.
- ❖ Container plants and other landscaping materials (including organic mulches) should be inspected to ensure they do not contain Argentine ants.
- ❖ Native seed mixes should be inspected by a biological monitor prior to their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens.
- ❖ Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility.

INVASIVE PLANTS

- ❖ Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native vegetation.

- ❖ Provide a clear description of how green waste will be handled.
- ❖ Use of chemical methods should be utilized only as a last resort.
- ❖ Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates:
 - that other methods of invasive species control have been tested, and that a single application of herbicide has been determined to be the best solution;
 - that there is a post application plan for revegetation and/or mulching; and
 - that the treatment is a one-time application.
- ❖ Preemergent herbicide should never be used, as it may affect rare species in the seed bank.

IMPORTED SOIL

- ❖ Imported soil shall be free of exotic invasive plant species and shall come from a local source.

IRRIGATION

- ❖ Use plugs rather than larger plants to reduce the need for irrigation during establishment in order to conserve water resources. This also helps plants establish new roots that are adapted to the soil in the ground, rather than having a large root mass adapted to the soil in the nursery pot.
- ❖ If irrigation is required, describe the plan to control annual weeds that might occur and thrive from the irrigation.

MULCH

- ❖ Mulch is the least harmful and most beneficial way to prevent weeds, promote healthy soil, and help restore healthy organic material in the soil. One application of mulch can promote storage of large amounts of carbon in soils for years to come, helping with global climate change. It prevents water loss up to 30%. Almost all native habitat, outside of some desert ecosystems, have deep layers of organic material near trees and shrubs, keeping their roots cool and preventing evaporation.
- ❖ An area for native bee nesting without mulch can be set aside and marked. Monthly weeding will be necessary in this area until native plants can be established.

SCHEDULE

- ❖ Provide details regarding the planned schedule. Establishment of restoration/revegetation sites should be conducted during the appropriate time of year (between October 15 and January 30 for most projects), with planting and/or seeding occurring immediately after the restoration sites are prepared.

MAINTENANCE PLAN/GUIDELINES

- ❖ Provide a Maintenance Plan that includes (1) weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting.

SIGNAGE AND FENCING

- ❖ If necessary, the restoration plan should include specifications on fencing to protect biological resources and restrict human access.
- ❖ Signage specifications should be developed to indicate the site is a restoration/preserve area and to either indicate that trespassing is not allowed or to instruct visitors to stay on trails if public access is allowed.