

## **HABITAT RESTORATION PROFESSIONAL & CONTRACTOR QUALIFICATIONS**

Two types of persons are required in restoration efforts under these guidelines: 1) a **Restoration Professional** who will evaluate the site, design the restoration, monitor and evaluate the progress of the restoration, provide input to the Restoration Contractor, and submit written reports describing implementation compliance and results of monitoring; and 2) a **Restoration Contractor** who implements the onsite restoration, including site preparation, weeding, replacement or maintenance, and any temporary irrigation needed for establishment.

### **Qualifications of the Restoration Professional:**

- Botanist, Ecologist or Wildlife Biologist having at least five years' experience in native habitat restoration with some demonstrated successful experience in southern California designing restoration programs and overseeing restoration of coastal sage scrub and other native plant communities.
- Demonstrated experience with erosion control in wildland situations.
- Understanding of the taxonomy and ecology of native and exotic species occurring in the Laguna Beach area.
- Successful completion within the last ten years of at least three native habitat restoration projects approved by a public agency such as California Department of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), U.S. Army Corp of Engineers (USACOE), California Conservation Corps (CCC) or other public agency. The Restoration Professional shall be required to provide project contacts and references upon request.
- Bachelor's or Master's degree in ecology, wildlife biology, botany or related field.

### **Qualifications of the Restoration Contractor:**

- Minimum of five years' experience conducting native habitat restoration in coastal southern California.
- Demonstrated ability to successfully implement and complete at least three native habitat restoration projects, including landscape establishment, within the last ten years that were accepted by a public agency, such as DFG, USFWS, USACOE, CCC or other public agency. The Restoration Contractor shall be required to provide project contacts and references upon request.
- Field personnel and supervisors to have at least five years' experience working with native and exotic plants occurring in coastal southern California.
- Shall possess necessary insurance, bonding, and landscaping contractor's license. Shall conduct any necessary herbicide application with staff and that are licensed herbicide applicators.

# **HABITAT RESTORATION GUIDELINES**

These guidelines shall apply to the work of the Restoration Professional in the preparation of a Habitat Restoration Plan, in the monitoring of the implementation of that Plan, and in the preparation of communications with the City. The Restoration Professional shall have primary responsibility for developing the Plan on the basis of her/his experience and on generally accepted best practices. The plan should address the following topics.

## **A. Objectives**

The goal of restoration in the City is to restore and raise the ecological condition of a disturbed site to a high quality condition, equal to the pre-disturbance condition, by using locally adapted plant material to establish a self-sustaining habitat with appropriate plant species richness, diversity and composition, (and not just a few species of canopy shrubs). Therefore, based on the original vegetation, the physical characteristics of the site, the biological context of the site, and the nature and degree of disturbance to the original vegetation, the Habitat Restoration Plan should clearly state the desired result of the habitat restoration for the particular site.

## **B. Standards**

The Plan should set forth explicit standards and success criteria for evaluating the annual or incremental progress and eventual completion of the work. The standards and success criteria, which should be both qualitative and quantitative, should apply to soils and plants.

## **C. Initial Site Evaluation**

The Restoration Professional shall conduct an initial site visit, if necessary in the company of the appropriate member of the City staff, to evaluate the extent and degree of damage to the original habitat and to determine whether there are any immediate steps that may need to be taken to protect the site or any residual biological materials that may still be present or recoverable. The City will provide the Restoration Professional with any available data it may have on the original condition of the site.

## **D. Sensitive Species and Taxa**

As appropriate, the Restoration Professional may consult with the U.S. Fish and Wildlife Service and the California Department of Fish and Game to determine if the original habitat may have been occupied by, or could be capable of supporting, any listed plant or wildlife species or any rare or sensitive taxa. If the site or an area adjacent to the site is inhabited by a sensitive species, restoration activities may be affected.

## **E. Watercourses**

If any part of the site contains or affects a defined watercourse, the Restoration Professional may consult with the Army Corp of Engineers, the Department of Fish and Game, the Regional Water Quality Control Board, and/or any other responsible agency to determine how any proposed restoration measures may affect the watercourse.

## **F. Salvage of On-Site Materials**

If the upper soil profile is still partially intact, it may contain seeds and mycorrhizal fungi. Such soil should be protected from further disturbance and incorporated into the restoration plan. If biomass removed from the site has not been discarded, the Restoration Professional can consider its use as a repository of seeds and mulch, taking care to first eliminate invasives. As a potential supplement or substitute to native mulch, weed-free rice straw may be applied. The Restoration Professional may also consult with the Community Development Department to see whether legally removed soil and native plants from a different site might be available for transfer to and use on the restoration site.

## **G. Source of Plants**

A successional strategy – based on using local seeds in conjunction with native container plants-- should, to the extent feasible, be the basis of the restoration as this is more likely to establish a whole community restoration habitat than restoration relying solely upon container plants. To the extent that nursery-grown plants in containers are to be used, the plants should be grown from seeds or cuttings collected from areas as close as practicable to the site. The Restoration Professional shall specify the source of seeds and plants. If hydroseeding is used, the ratio of seed to wood fiber and the quantities of each will be determined by the Restoration Professional and the brand of tackifier specified.

## **H. Irrigation**

To the extent possible, preference shall be given to utilizing the natural rainfall. To the extent that irrigation may be needed to establish new vegetation, the Plan should clearly specify the type of irrigation system and the required watering schedule. This may include hand watering or low impact watering. In general, potential irrigation use should mimic natural rainfall patterns and be used judiciously to simulate an average to an above average rainy season. Summer irrigation should be minimal. To verify the restoration site is self-sustaining, temporary irrigation should be phased out at least one to two years before the maintenance and monitoring program is complete.

## **I. Planting Schedule**

In general, initial planting is best done in the fall or early winter to coincide with the rainy season and growing season of local plants. However, in special cases, such as when exposed soils on slopes may need immediate protection or where a site is the nesting place of an endangered species, other planting times may be appropriate. Use of local biomass for mulching and punching can be accomplished at any time. Technical factors, such as the need to collect or germinate local seed, may also affect the implementation schedule. The Plan should include an explicit schedule for planting and seeding of all species to be used on the site.

## **J. Landscape Maintenance**

Once initial plant installation is complete, the maintenance of the site will involve periodic weeding, and possibly mulching and other maintenance activities. The Plan should clearly describe the required maintenance activities and levels. It should contain a list of weed species for which there shall be zero tolerance. The Plan should contain a landscape maintenance schedule, which is expected from five to seven years or until the restoration effort is successfully completed.

## **K. Monitoring**

As part of the Plan, the Restoration Professional shall prepare a monitoring program for the site. The program should include specification of the intervals at which the site is to be visited, and it should cover the progress of the work in response to both the qualitative and the quantitative standards and success criteria set forth in the Plan. Standard procedure is to monitor for five to seven years or until compliance with the success criteria are met, and this may vary from project to project. The Restoration Professional shall monitor the site and oversee the monitoring program.

## **L. Restoration Contractors**

The Restoration Professional will review the work of the contractors performing plant installation, weeding, irrigation and other work, and the Restoration Professional shall have the authority to require changes in the contractors' practices. The Restoration Professional may recommend removing or replacing a contractor if, in her/his professional judgment, the contractor is either unqualified to do the work or is failing to do the work properly.

## **M. Reports**

Based on the monitoring of the site, the Restoration Professional will prepare and submit to the Community Development Director annually, or more frequently if appropriate, a report on the progress and current status of the habitat restoration. The reports should include a graphic of the restoration area limits and representative photographs. The reports should also evaluate the habitat based on the initial standards for success, and they should recommend any modifications to the Plan that may help to speed or to improve the process of restoration.

## **N. Acceptance of the Work**

Upon receiving from the RESTORATION PROFESSIONAL a letter certifying that, based on the criteria set out in the Habitat Restoration Plan, the habitat has been successfully restored and can be expected to be self-maintaining and that temporary irrigation systems have been removed, the City may accept the restoration.

## **UNPERMITTED NATIVE VEGETATION REMOVAL CODE ENFORCEMENT PROCEDURE**

The Code Enforcement Division of the Laguna Beach Community Development Department will respond quickly to the unauthorized destruction of habitat to halt further violation.

The Code Enforcement Officer may issue a Cease and Desist order if needed to halt further unauthorized removal of vegetation.

The Code Enforcement Officer should instruct the contractor, the person responsible for removing the vegetation, or the onsite representative of the owner that it is important to retain or recover the disturbed biological materials and any removed soils as they contain materials valuable to a restoration. If the disturbed materials have been hauled away already, they should be redirected back to the site if this is possible. Persons responsible for removing the vegetation will be instructed where on the site to stockpile the material.

The Code Enforcement Officer should determine which contractors, landscapers or workers performed the removal so that they can be informed and educated about the City's policy. This will prevent these companies or individuals from assisting with an illegal habitat removal in the future. The onsite representatives of the owner or contractor should be given the City's policy on removal of native habitat, and any questions they have should be answered, so that the policy is clearly understood.

The Code Enforcement Officer shall visit the site and summarize the visit in a report including: the property address; the name of the property owner; the date and time of the complaint; the date and time of the site visit; whether plant material was left on site; the destination if material was hauled away; the names of contractor or workers on site, if any; any explanation by the owner or a contractor or worker; rough drawing of the disturbed area; and relevant other information deemed relevant by the Code Enforcement Officer.

The report should be directed to the City's Community Development Director.