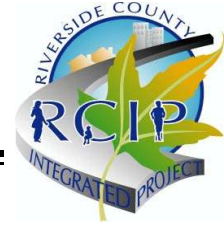


5.0 Management & Monitoring



5.2 MSHCP MANAGEMENT AND ADAPTIVE MANAGEMENT PROGRAMS

➤ Management Goal

The overriding management goal of the MSHCP is to establish and maintain a self-sustaining MSHCP Conservation Area, that focuses on conserving Habitats and species and is consistent with the conservation objectives for the Covered Species. Ecosystems are dynamic environments of interacting processes and biotic and abiotic components; they may exhibit multiple equilibria, and destabilizing forces. Furthermore, ecological processes are not linear; they may function at different spatial and temporal scales simultaneously. Consequently, Adaptive Management of ecosystems, landscapes, and associated species and Habitats requires a flexible, inductive approach where ecological theory and field experimentation are combined to monitor the status of the system and respond to the unexpected. The Adaptive Management Plan for the MSHCP encourages such an informed “learning by doing” approach.

➤ Overview

The management and Adaptive Management Programs developed for the MSHCP are based on the framework presented in *Section 5.1* of this document. They use a flexible approach to management to ensure that the Covered Species and Vegetation Communities within the MSHCP Conservation Area are maintained and/or enhanced during the term of the Permit. To achieve the overriding management goal of the MSHCP to establish and maintain a self-sustaining MSHCP Conservation Area, there will need to be an integrated multidisciplinary effort that incorporates the Adaptive Management principles presented in *Section 5.1* and the monitoring efforts described in *Section 5.3*. Adaptive Management Programs rely on monitoring efforts to detect changes in species, Habitats, and/or threats. When change is detected, Reserve Managers evaluate the information and can respond by initiating, modifying, or even ending a particular management strategy if necessary. The MSHCP Biological Monitoring Program, described in *Section 5.3*, will focus on collecting baseline data during the first five years of the MSHCP. This initial data will include the status of resources (*i.e.*, species, Vegetation Communities, and Habitat conditions) and the status of threats to these resources (*e.g.*, invasive non-native species, disturbed Habitat, and erosion and sedimentation).



5.0 Management & Monitoring

➤ Limitations

The primary limitation of the management plan is the current lack of concrete baseline data on the species, Vegetation Communities, and threats. Currently, quantitative distributional studies have not been conducted to determine accurate population numbers and trends. Data must be collected over time to determine whether populations are fluctuating, increasing, or decreasing (either naturally or human induced). Therefore, the initial objective of this management plan is to develop and quantify baseline data for species, Vegetation Communities, and threats to the species and their Habitat. These data will be gathered in the first five years of the MSHCP Plan in order to develop a functional management plan.

5.2.1 Proposed Management Activities

Management activities will be implemented at the discretion of Reserve Managers and the Reserve Management Oversight Committee (RMOC) commensurate with priorities identified by those entities. Management activities will take place within the MSHCP Conservation Area, and emphasis will be given to maintaining and/or improving Habitat conditions and ecosystem functions within the MSHCP Conservation Area. Management activities implemented by individual Reserve Managers will be documented and included in annual reports to the RMOC to ensure that data are shared and informed decisions can be made regarding management priorities.

General management activities will occur at two levels: Habitat- or landscape-based management activities and species-specific management activities. The Habitat- or landscape-based management activities will ensure that the management plan is working for each species and that trends are not misinterpreted on the species-specific level. The species-specific management activities will ensure that the management needs of individual species are met, in consideration of known information for each species related to core locations, primary Habitats, and known threats.

➤ General Management Measures

Implementation of General Management Measures will include periodically evaluating the management activities in the MSHCP Conservation Area to maintain consistency and to share information to determine whether local fluctuations of Habitat quality or species populations are