WESTERN RIVERSIDE COUNTY MSHCP
BIOLOGICAL MONITORING PROGRAM
FY 2013-14 WORK PLAN AND COST ESTIMATE

1.0 INTRODUCTION

The overall goal of the Biological Monitoring Program (Monitoring Program) is to collect data on the 146 Covered Species and associated habitats for the purpose of assessing the MSHCP's effectiveness at meeting conservation objectives and to provide information for adaptive management. The activities described in this work plan for Fiscal Year 2013-14 continue the activities commenced in the previous fiscal year and follow the framework outlined in section 5.3 of the MSHCP. Fiscal Year 2013-14 continues a significant transition period for the Monitoring Program as it shifts from the Initial Inventory and Assessment Phase (Inventory Phase) to the Long-term Monitoring Phase.

2.0 RESPONSIBILITIES

The Monitoring Program is implemented within the MSHCP Conservation Area on lands that are owned and managed by the various MSHCP participants. The Western Riverside County Regional Conservation Authority (RCA) has primary responsibility for funding the Biological Monitoring Program. To ensure consistency in monitoring efforts throughout the Conservation Area, the Monitoring Program is overseen and implemented by a Monitoring Program Administrator selected by the RCA. The duties and responsibilities of the Monitoring Program Administrator are described in Volume 1, Section 6.6.6 of the MSHCP.

As per the MSHCP, the California Department of Fish and Wildlife (DFW, formerly Department of Fish and Game) was the Monitoring Program Administrator for the first eight years of the permit (June 2004 – June 2012). In 2007 the DFW received a federal State Wildlife Grant to support its role as the Monitoring Program Administrator and develop a long-term monitoring strategy. This grant expired in June 2012. DFW will continue to provide resources to support the Monitoring Program (vehicles and accessible staff) as available. These resources are expected to be minimal moving forward (e.g., one staff and one vehicle in FY 2013-14).

The Monitoring Program Administrator works closely with the RCA to develop and implement the annual work plan and budget. The annual work plan is carried out by the Monitoring Program Administrator using staff contracted by the RCA through the Santa Ana Watershed Association (SAWA) and DFW staff.

3.0 IMPLEMENTATION STRATEGY

The Monitoring Program is responsible for monitoring the status and trend of the 146 Covered Species and associated vegetation communities and wildlife habitats over a 500,000 acre Conservation Area. Because there was little existing scientifically-based

data for the majority of Covered Species, the first eight years of the Monitoring Program were devoted to an Inventory Phase. The purpose of the Inventory Phase was to determine where Covered Species occur within the Conservation Area, to gather more information on their activity patterns, and to develop efficient protocols for detecting them. The development of protocols is necessary to standardize data collection, to test the reliability of survey methods, to determine feasible and useful monitoring metrics, and to provide a confidence level that unobserved species are truly absent at the survey location, rather than overlooked.

The transition from Inventory Phase to Long-term Monitoring Phase will be gradual rather than abrupt. For species with short reporting requirements such as Quino checkerspot butterfly (annual) or coastal California gnatcatcher (every three years) long-term monitoring is already in place. Multiple surveys for species with short reporting requirements have been conducted, providing the initial data points for population trend assessment. For species with longer reporting requirements such as Los Angeles pocket mouse (every eight years) and with species-specific monitoring objectives requiring significant development and testing, the transition from Inventory Phase to Long-term Monitoring Phase is ongoing.

The transition into long-term monitoring will involve developing monitoring metrics that are both efficient to collect, and robust measures of species status and population trend. The baseline monitoring objective for all Covered Species requires at least 75 percent of listed Core Areas or known locations to be documented as occupied at least once every eight years. As described in the Long-term Monitoring Strategy document developed by the Monitoring Program, monitoring protocols that provide additional information such as relative abundance of populations at occupied locations, reproductive success, or health of observed individuals will be employed whenever possible, to provide the most useful representations of species status. Monitoring Program staff anticipate collaboration with the University of California Riverside Center for Conservation Biology in developing conceptual models of Covered Species and their habitats that can help identify key population drivers and environmental stressors upon which management can act.

One of the explicit goals of the Monitoring Program is to develop efficient long-term monitoring protocols that reduce redundancies by collecting information on multiple species where possible. For example, bird species co-occurring in similar habitat (e.g., willow riparian) during the breeding season can be detected using the same survey protocols. There will always be some Covered Species that occur in isolated pockets within the Conservation Area or that are difficult to detect using standard survey protocols; for these species a focused survey effort will be required.

The Long-term Monitoring Strategy describes a two-level design that gives priority to assessing the status of Covered Species as stated in the species-specific conservation objectives of the Plan which emphasize the continued occupancy of MSHCP-defined Core Areas or other areas of known occurrence. For some species, the objectives require that reproduction and/or minimum densities of individuals within species Core Areas be verified. The second level extends sampling for terrestrial vertebrates to the

entire Conservation Area in a cost-efficient manner. The Long-term Monitoring Strategy document also includes chapters describing monitoring goals and objectives, sample design considerations, proper protocol development, data and information management strategies, collaboration and communication with other organizations, and describes the organizational framework of the Monitoring Program.

4.0 STAFF COMPOSITION

Monitoring Program staff work as a team to coordinate, develop, and implement required monitoring activities for the MSHCP. The Monitoring Program is composed of the following staff positions, which are filled based on availability of funding:

- Monitoring Program Administrator
- Lead Biologist(s)
- Database Manager
- GIS Analyst
- Office Manager
- Taxa Program Leads
- General Field Crew, bird specialization
- General Field Crew, mammal specialization
- General Field Crew, amphibian & reptile specialization
- General Field Crew, invertebrate specialization
- General Field Crew, plant specialization

Currently, the majority of staff are funded by the RCA through a contract with SAWA, a local non-profit agency. Any Monitoring Program staff hired to replace departing staff in FY 2013-14 will be hired through SAWA. One Program Lead is currently provided by the DFW, with funding from Caltrans.

5.0 SPECIFIC TASKS OF THE MONITORING PROGRAM

5.1 Administration & Coordination

Administering and coordinating the Monitoring Program requires a significant amount of effort. Sufficient staff and resources must be acquired, field work must be scheduled, land access must be coordinated with other agencies, and survey activities must take place. The Monitoring Program Administrator, Lead Biologist, and Office Manager carry out the following tasks:

- Develop annual work plans and budgets
- Identify contract needs, write scopes of work, manage contracts
- Advertise, interview, and hire Monitoring Program staff; conduct performance reviews
- Develop and maintain training manuals and training programs for staff
- Direct and schedule staff activities

- Identify field supply and equipment needs; submit orders; maintain inventory, including vehicles
- Identify land access needs and coordinate with agencies on access agreements
- Facilitate monthly reserve management/monitoring coordination meeting
- Attend monthly RCA team meetings and other agency meetings
- Give occasional presentations to the RCA Board
- Coordinate with Wildlife Agencies (DFW and U.S. Fish and Wildlife Service) on survey methodology and monitoring activities
- Develop and maintain Program operations manual
- Oversee production of annual survey reports
- Distribute Monitoring Program data as appropriate

5.2 Biological Surveys

Conducting biological surveys is the most visible part of the Monitoring Program. It is also the component that requires the most staff. Prior to collecting data, all aspects of a project must be developed. This includes identifying the purpose of the survey, choosing the data collection methods and sampling locations, selecting data analysis methods, and determining what answers the data are expected to provide. The following tasks are carried out by the Monitoring Program Administrator, Lead Biologist, GIS Analyst, Database Manager, Taxa Program Leads, and Field Crew:

- Develop protocols and sampling designs
- Implement focused species surveys
- Conduct field surveys using multi-species protocols when possible, and specific species protocols when necessary
- Conduct vegetation analyses

5.3 Training

The Monitoring Program is required to have a training program approved by the Wildlife Agencies to ensure consistent data collection, uniform implementation of protocols, handling procedures, and appropriate experience with Covered Species (Vol. 1, Sec. 7.0). The type of species training needed in any given year is dependent on the types of survey activities planned. Safety training (e.g., wilderness first aid, CPR) is provided to all incoming staff, and as often as needed to existing staff to keep certifications up-to-date. Training is provided both by experienced Monitoring Program staff and by qualified outside entities (e.g., U.S. Geological Survey, U.S. Fish and Wildlife Service). The following training is required of Monitoring Program staff:

- Endangered species identification and handling
- Local flora and fauna identification
- Wilderness first aid and CPR training
- Defensive driver training

5.4 Data Management & Reports

All of the data collected by the Monitoring Program must be carefully managed. Prior to field work, data forms are developed and survey locations are mapped. Field data are collected both on paper datasheets and on Personal Digital Assistants. As data return from the field, they are entered into a database and checked for accuracy. After data collection is completed, the data are analyzed and a report is written describing survey results. The results of each year's monitoring efforts are provided in the Annual Report submitted to the RCA. The Monitoring Program Administrator, Lead Biologist, Database Manager, and GIS Analyst support and oversee the Taxa Program Leads and Monitoring Program staff in the completion of the following tasks:

- Field form and protocol development
- GIS mapping to support surveys, analysis, and reports
- Database development and maintenance
- Data entry and quality control
- Data analysis using statistics
- Survey report writing
- Maintaining computer equipment and digital data collection devices

The Monitoring Program has an internal database, developed and managed by the Database Manager. Monitoring Program datasets that have been thoroughly proofed and certified complete by the Database Manager are submitted to DFW's Biogeographic Information and Observation System (BIOS), as well as to local partnering agencies and Reserve Managers at least once per year.

6.0 MONITORING EFFORTS IN FY 2013-14

Monitoring Program activities planned for FY 2013-14 are largely based on the requirements of the MSHCP species objectives found in Volume 2 of the MSHCP. The species objectives specify time intervals for detecting and reporting on each of the Covered Species in the Conservation Area. When the species objectives do not specify a time interval, the status of the Covered Species must be reported on at least once every eight years as per General Management Measure 7 (Vol. 1 Sec. 5.0). In addition to the species objectives, survey priorities are influenced by the quantity and quality of information available for each species (little or poor information means more survey effort sooner), whether another agency is already conducting surveys (less effort required by the Monitoring Program), relative ease of gathering information (e.g., yellow warbler surveys during least Bell's vireo surveys), and priority of the species to the RCA and Wildlife Agencies (e.g., burrowing owl is a high priority species). Funding availability and extent of effort required is also considered when determining monitoring activity priority. Monitoring Program biologists will help with ongoing MSHCP Management Program activities that benefit Covered Species (e.g., aquatic invasive species removal/control) to the fullest extent possible.

An overview of the monitoring efforts planned for FY 2013-14 along with a brief rationale for surveys is provided below. Detailed survey methods can be found in the survey

protocols available at the Biological Monitoring Program office in Riverside, CA. The Monitoring Program's ability to complete these tasks will be dependant upon continued funding from the RCA and the amount of support provided by the DFW.

6.1 Invertebrates

6.1.1 Quino Checkerspot Butterfly

The species objectives for Quino checkerspot butterfly require the documentation of its distribution on an annual basis. The Monitoring Program has surveyed for Quino checkerspot butterfly in the Conservation Area during the last nine biological years. In FY 2013-14 survey efforts will focus on monitoring locations occupied within the last five years and surveying for the species in suitable habitat close to occupied areas.

6.1.2 Delhi Sands Flower-Loving Fly (Delhi Fly)

The species objectives for Delhi fly require documenting successful reproduction by this species at all three Core Areas identified in the MSHCP every year for the first five years of the permit and then as determined to be appropriate. Because Delhi fly is an endangered species with an extremely limited distribution within the Plan Area, Monitoring Program biologists have surveyed for Delhi fly within the lone accessible Core Area during the last nine biological years. Surveys for Delhi fly will continue in FY 2013-14, although previous survey efforts which allowed estimating the density of Delhi fly within its accessible Core Area will be reduced to simply documenting successful reproduction. The resources necessary for the FY 2013-14 effort will thus be greatly reduced compared to previous efforts.

6.1.3 Fairy Shrimp

The species objectives for Santa Rosa Plateau, Riverside, and vernal pool fairy shrimp require the continued use of listed Core Areas at least once every eight years. Surveys on accessible lands within listed Core Areas for covered fairy shrimp were conducted by Monitoring Program biologists in FY 2011-12. The species-specific monitoring objective has been met for Santa Rosa Plateau fairy shrimp but Riverside fairy shrimp and vernal pool fairy shrimp need to be found in additional Core Areas in order for their respective species objectives to be met. While the surveys required as part of the Inventory Phase are now complete, fairy shrimp surveys may be conducted in vernal pools within necessary Core Areas if there is adequate rainfall in FY 2013-14 to create new pools in areas already surveyed, or if additional lands are acquired.

6.2 Birds

6.2.1 Coastal Sage Scrub Bird Survey and Nest Searching

The species objectives for California gnatcatcher require the MSHCP to maintain continued use and successful reproduction within Core Areas once every three years. There are at least two other covered bird species (rufous-crowned sparrow and Bell's sage sparrow) that occur in coastal sage scrub that can be detected using the same survey protocol. Targeted surveys for California gnatcatcher and associated coastal sage scrub birds were last conducted in the spring of 2011. Surveys in FY 2013-14 for coastal sage scrub bird species will be conducted in accessible coastal sage scrub habitat within Core Areas that have not been previously documented as occupied within the current reporting period. Nest searching to demonstrate successful reproduction of the California gnatcatcher will occur in conjunction with the coastal sage scrub bird survey. Although cactus wren requires habitat attributes that may not otherwise be included in regular coastal sage scrub vegetation (i.e., cactus patches), these features will be explicitly included in the sample design to facilitate monitoring of cactus wren during the FY 2013-14 coastal sage scrub survey effort.

6.2.2 Riparian Bird Survey and Nest Searching

The species objectives for the following species require the MSHCP to maintain continued use and successful reproduction within Core Areas once every three or five years: least Bell's vireo, willow flycatcher, yellow warbler, yellow-breasted chat, yellow-billed cuckoo, and white-tailed kite. There are seven other covered bird species that occur in riparian areas that can be detected using the same survey protocol. Targeted surveys for riparian birds were last conducted in the spring of 2011. Surveys in FY 2013-14 for all covered riparian bird species will be conducted in accessible riparian habitat within designated Core Areas. Nest searching to demonstrate successful reproduction of the above species will occur in conjunction with the riparian bird survey.

6.2.3 Raptor Reproduction Monitoring

The species objectives for turkey vulture and golden eagle require the continued use of and successful reproduction at known nesting locations every three, and eight years, respectively. Targeted surveys for turkey vulture nests were last conducted in 2008, and for golden eagle nests in 2012. While small numbers of nests were discovered, the resources expended trapping, fitting turkey vultures with radio transmitters, and following vultures, and monitoring golden eagles for nesting behavior were not an efficient use of time. Future efforts will emphasize the vigilant tracking of raptor behavior while biologists are conducting other targeted survey work (e.g., coastal sage scrub, riparian, lake bird surveys) and regularly visiting known nest locations mentioned in the MSHCP or by local birders during the nesting season. Although the listed objectives for bald eagle do not require documentation of successful nesting within the Conservation Area,

biologists will track bald eagle nests along with turkey vulture and golden eagle nests, as they are discovered. Because of the hopefully more efficient but less dependable nature of data resulting from this opportunistic effort, a report or reports summarizing the current status of these species and progress towards meeting species objectives will be written when there are significant results to convey.

6.2.4 Northern Harrier Survey

The species objectives for northern harrier require the MSHCP to conserve seven Core Areas plus two additional areas, and maintain the continued use of and successful reproduction in 75 percent of the known nesting areas every five years. Targeted surveys for northern harrier were last conducted in the spring of 2009. Because the species nests on the ground in dense, shrubby vegetation, nests are unlikely to be incidentally observed. Additionally, because of the relatively high number of listed Core Areas, northern harrier is ill-suited to opportunistic monitoring with the other species described above. Thus a targeted survey is necessary. Transects will be established in FY 2013-14 within appropriate habitat in the Conservation Area and will be used to locate northern harriers early in the breeding season. Observers will return later in the season to confirm the presence of fledged northern harriers.

6.2.5 Tricolored Blackbird Survey

The species objectives for tricolored blackbird require the MSHCP to document the continued use and successful reproduction in at least one of five Core Areas at least once every five years. Targeted surveys in 2012 confirmed that the objective as written is currently met. However, populations in Riverside County and southern California as a whole remain near historic lows. Tricolored blackbirds concentrate their breeding effort at only a few sites in any given year and survey efforts in FY 2013-14 for coastal sage scrub and riparian should cover much of the habitat suitable for tricolored blackbirds. Therefore, additional follow-up surveys to document population and reproduction status at sites with tricolored blackbird in FY 2013-14 will be conducted pending staff availability in order to continue providing updated information for adaptive management.

6.2.6 Burrowing Owl Monitoring

The species objectives for burrowing owl require the conservation of five Core Areas plus interconnecting linkages, containing a total breeding population of at least 120 owls with no fewer than five pairs in any one Core Area. Several land managers within the Conservation Area have installed artificial burrows and are managing vegetation for burrowing owl. Monitoring Program biologists will coordinate with Reserve Managers to be sure that breeding pair counts are conducted at locations known to recently support more owls than can be easily tracked by a single observer (e.g., El Sol), or where owls have been recently actively translocated (e.g., Lake Mathews – Estelle Mountain Reserve).

Focused surveys for burrowing owl within appropriate habitat were conducted by Monitoring Program biologists in spring and early summer 2011. In FY 2013-14 continued monitoring of artificial burrows installed across the Conservation Area will be conducted three times per year as according to the Western Riverside County MSHCP Burrowing Owl Management Plan. Additional surveys to obtain an accurate count of breeding pairs of burrowing owls within Core Areas will be conducted as needed by Monitoring Program biologists in FY 2013-14 to document distribution and reproduction of burrowing owl whether at artificial or natural burrow locations. Monitoring Program biologists will coordinate with Reserve Managers to avoid duplication of effort.

6.3 Amphibians and Reptiles

6.3.1 Targeted Area Searches for Reptiles

San Bernardino mountain kingsnake, San Diego mountain kingsnake, southern rubber boa, and San Diego banded gecko have proven difficult to detect regardless of survey method. The species objectives for all four reptiles require documentation of the continued use of Core Areas at least once every eight years. Transect-based searches for San Diego banded gecko and artificial cover-based surveys for all species listed above proved inefficient at producing necessary species observation data.

Ultimately, there may be no truly efficient means to reliably detect these species as they are highly secretive and not typically found in high numbers. The importance of collecting incidental observations both from Monitoring Program biologists and from partnering agencies will continue to be stressed. Because surveys conducted to date are insufficient to determine that target species are truly absent from Core Areas where they have not been documented to occur, Monitoring Program biologists will also opportunistically search suitable habitat within Core Areas for these species when time and personnel are available. These targeted area searches will be significantly less labor-intensive than previous survey methods, and will also result in detections of the following Covered Species: Belding's orange-throated whiptail, coastal western whiptail, granite spiny lizard, northern red-diamond rattlesnake, San Diego horned lizard and southern sagebrush lizard.

6.3.2 Amphibian Stream Surveys

After conclusion of the Inventory phase, species objectives for arroyo toad, mountain yellow-legged frog, California red-legged frog, and coast range newt require documentation of successful breeding populations within the Conservation Area at least every five or eight years. California red-legged frog may be extirpated from the Plan Area as no individuals have been observed by Monitoring Program biologists or reported to the Monitoring Program since 2004. Ongoing efforts carried out by the U.S. Forest Service and U.S. Geological

Survey largely account for mountain yellow-legged frog survey needs. Therefore, priority will be given to streams with appropriate habitat for arroyo toad (last targeted in 2010) and coast range newt (last targeted in 2009). Because surveys for stream-dependent amphibians can take more than one year to complete, stream surveys in accessible habitat within the Conservation Area will begin in FY 2013-14, in conjunction with efforts carried out by the U.S. Forest Service and U.S. Geological Survey.

6.3.3 Western Spadefoot Survey

The species objectives for western spadefoot require maintaining successful reproduction at 75 percent of conserved breeding locations as measured once every eight years. Western spadefoot surveys to date have mostly been conducted as part of vernal pool monitoring also targeting covered fairy shrimp species. Surveys targeting western spadefoot in FY 2013-14 will be decoupled from fairy shrimp/vernal pool surveys to better address the species objectives for western spadefoot. Surveys for western spadefoot beyond strictly vernal pool areas will be conducted in applicable Core Areas and conserved breeding locations to determine presence and breeding activity for this species if there is adequate rainfall in FY 2013-14. Isolated pools, road ruts, and creeks that do not strictly follow the definition of vernal pools will be surveyed in order to capture additional potential habitat for breeding spadefoot. Pending adequate rainfall, western spadefoot surveys in FY 2013-14 will conclude the Inventory phase for this species.

6.4 Mammals

6.4.1 Stephens' Kangaroo Rat Trapping

The species objectives for Stephens' kangaroo rat require the MSHCP to maintain occupation of 3,000 acres of habitat outside of the existing Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) Area as measured across any consecutive 8-year period. Monitoring Program surveys targeting Stephens' kangaroo rat were last conducted in 2008, but may take more than one year to complete given the extent of the trapping area required to meet the objective. Monitoring Program Stephens' kangaroo rat surveys in FY 2013-14 will only be conducted at sites outside of the SKR HCP Plan Area.

6.4.2 Carnivore Surveys

Species objectives for bobcat, coyote, long-tailed weasel, and mountain lion require the conservation of contiguous-habitat blocks and the maintenance of corridors that provide an effective means for dispersal. Surveys to detect the above-listed mammals in contiguous habitat blocks, linkages, and movement corridors identified by the MSHCP have been ongoing since 2007. Surveys in the contiguous habitat blocks are finished for the current eight year reporting period.

Work in the linkages will continue in FY 2013-14, primarily using motion-triggered cameras to record images of target species.

6.5 Plants

6.5.1 Rare Plant Surveys

There are 63 covered plant species with species objectives that require conserving and monitoring known populations within the Conservation Area. Surveys for rare plants in FY 2013-14 will continue efforts to update the current status of Covered Species on accessible lands within the Conservation Area. The focal species in any given year are dependent on weather conditions and accessibility of survey sites. Nearly all historic locations of covered plant species within the Conservation Area have been visited in previous years. Thus, rare plant monitoring efforts in FY 2013-14 will focus on conducting surveys for covered plant species at recently acquired properties, documenting required localities for species not adequately conserved, and revisiting locations previously determined to be occupied by covered plant species in a long-term monitoring context.

6.5.2 Riparian Vegetation Monitoring

The MSCHP requires the Monitoring Program to assess the condition of vegetation communities within the Conservation Area (Vol. 1, Sec. 5.3.2). A grant proposal to update the GIS-based vegetation community map was submitted to DFW in 2012 and is pending. FY 2012-13 vegetation community monitoring efforts focused on documenting the status of riparian vegetation within the Conservation Area. A pilot survey to determine a list of feasible goals, optimal methods, and achievable, useful results was initiated in the winter of 2012-13. RCA-managed properties that were high priorities for future restoration efforts were primarily targeted. FY 2013-14 vegetation community monitoring efforts will continue the quantitative percent cover-based sample design with an expanded distribution of sampling locations to better represent the extent of riparian vegetation within the Conservation Area.

6.5.3 Vegetation Surveys

Vegetation surveys are conducted by trained botanists in conjunction with wildlife survey efforts as practicable and appropriate. The purpose of vegetation surveys is to describe the wildlife habitat within survey areas to gain a better understanding of potential drivers for observed species distributions.

7.0 SCHEDULE OF MONITORING EFFORTS FOR FY 2013-14

Below is a tentative calendar of when surveys are planned for FY 2013-14. The "biological year" or "survey season" does not match the fiscal year, thus the calendar represents two different survey seasons. The first half of the calendar continues many of the activities commenced in FY 2012-13.

Survey	Jul 13	Aug13	Sep13	Oct13	Nov13	Dec13	Jan14	Feb14	Mar14	Apr14	May14	Jun14
Quino Checkerspot Survey												
Delhi Fly Survey												
Fairy Shrimp Survey												
CSS Bird Survey												
Riparian Bird Survey												
Raptor Reproduction Survey												
Northern Harrier Survey												
Tricolored Blackbird Survey												
Burrowing Owl Monitoring												
Reptile Searches												
Amphibian Stream Survey												
Western Spadefoot Survey												
SKR Trapping												
Carnivore Surveys												
Rare Plant Surveys												
Riparian Veg Monitoring												

8.0 BIOLOGICAL MONITORING PROGRAM COST ESTIMATE FOR FY 2013-14

The proposed FY 2013-14 Biological Monitoring Program budget is similar to previous budgets submitted to and approved by the RCA Board of Directors. The RCA has primary responsibility for funding the Monitoring Program. The majority of funding is allocated to contracts for monitoring staff. The DFW funds a small portion of the Monitoring Program based on the availability of the State's budget. Although the RCA portion of the FY 2013-14 Monitoring Program budget is similar to previous years, the overall Monitoring Program budget is significantly reduced compared to pre-June 30, 2012 levels due to reductions in DFW support.

ALLOCATION	COST
CDFW Funded Labor & Supplies	
Biologist	74,737
Vehicle Usage (Fuel & Maintenance)	7,200
Office Support (Internet service)	1,000
Subtotal CDFW Funded Labor & Vehicles	$82,937
RCA Funded Contracts	
Santa Ana Watershed Association (staff)	830,930
Santa Ana Watershed Association (staff reimbursements)	2,000
Subtotal RCA Funded Contracts	$832,930
RCA Funded Operating Expenses & Equipment	
Rent – Lease Buildings	83,781
Field Equipment & Misc. (Non-fixed Assets)	4,000
Office Supplies	4,000
Communications (Phones/DSL)	2,000
Maintenance – Computer Equipment	18,600
Training	3,000
Computer Equipment – software (GIS licenses renewal)	1,188
Vehicle Support – fuel, maintenance	20,000
Subtotal RCA Funded O&E	$136,569
Total Program Cost	$1,052,436
Minus Total CDFW Cost	- $82,937
Grand Total RCA Cost	**$969,499**

9.0 Contact Info

The FY 2013-14 Work Plan and Cost Estimate was prepared by the Monitoring Program Administrator and was submitted to the Regional Conservation Authority for approval. For more information, contact:

Western Riverside County MSHCP
Monitoring Program Administrator
Adam Malisch
4500 Glenwood Drive, bldg C
Riverside, CA 92501
amalisch@biomonitoringrca.org