

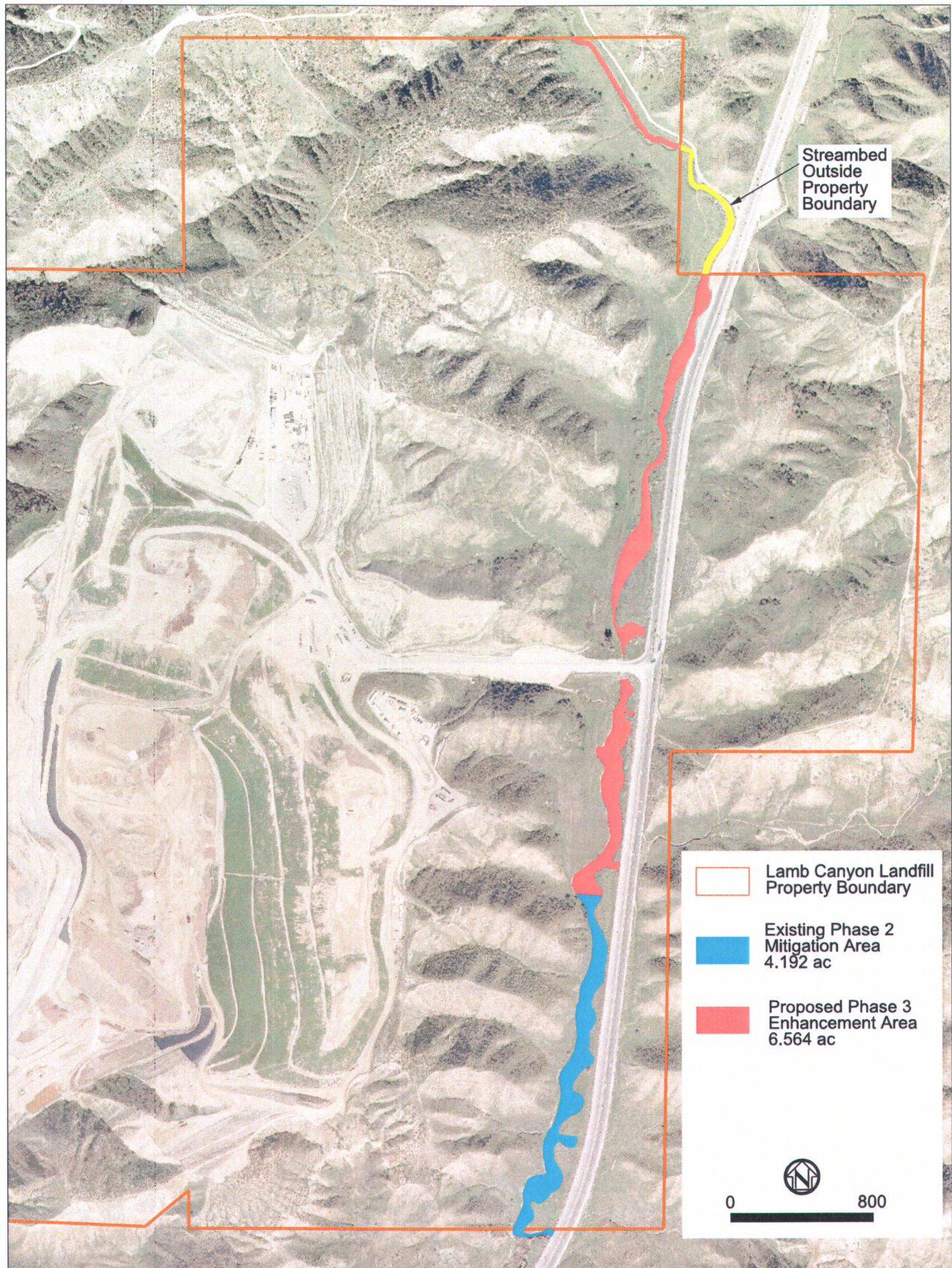
2.4 - MITIGATION ACTIONS

Onsite Habitat Mitigation Program

As mitigation for impacts to “waters of the U.S.” and “waters of the State”, approximately 6.56 acres of habitat will be enhanced on land within the LCCA. This will be in addition to the 2.3 acres of offsite mitigation bank credit purchase, as described further in this section.

AMEC Earth & Environmental (AMEC), the previous consultant responsible for mitigation monitoring and reporting within the LCCA, had identified areas within Drainage G that support Riparian vegetation, as well as an area adjacent to the LCCA Riparian corridor that supports large colonies of non-native species (AMEC, 2008 & 2009). Riverside County Environmental Programs Division (EPD) has been monitoring the LCCA since 2010 to evaluate the level of non-native plants and to confirm areas within the riparian drainage suitable for enhancement and restoration activities. Proposed onsite mitigation efforts will focus primarily on the removal and eradication of exotic non-native vegetation as well as promoting a more robust riparian corridor by applying a native seed mix and hand planting of riparian container stock within jurisdictional areas of Drainage G. These activities will contribute to the current and long-term success of the onsite restoration and will help prevent establishment of non-natives in the mitigation area.

Non-natives within the proposed mitigation area consist of tocalote (*Carduus pycnocephalus*, *Centaurea calcitrapa*, *C. melitensis*, *C. solstitialis*, *Cirsium arvense*, *Cynara cardunculus*), short-pod mustard (*Hirschfeldia incana*), tamarisk (*Tamarix ramosissima*) and tree tobacco (*Nicotiana glauca*). Proposed restoration and enhancement techniques are described in Section 4 of this HMMP. Section 6 describes the targeted success criteria identified for this habitat.



Functions and Values of Habitat to be Enhanced/Restored as a Result of the Project

The Lamb Canyon Landfill Expansion Project will result in impacts to jurisdictional waters. The following is a summary of the existing functions and values in the habitat mitigation drainages as well as the functional gains following mitigation activities:

Existing Habitat Functions

Habitat functions - The existing drainages are ephemeral in nature and are sparsely vegetated. These drainages provide limited habitat functions and values including limited cover and nesting habitat.

Biogeochemical/water quality functions- The existing drainages are currently fed primarily by rainfall events from the immediate watershed. During storm events, exposed soil is picked up and transported into the drainages and eventually are carried downstream and off-site, affecting habitat and water quality further down in the watershed. There are no wetland areas onsite to significantly slow water flow, provide nutrient removal, transformation, toxicant trapping, or biogeochemical exchange.

Anticipated Functions and Values following Habitat Mitigation on LCCA

Habitat functions – Habitat restoration within the LCCA is ongoing. Removal of exotic, invasive species along with seeding and some hand planting should promote native species diversity along the riparian corridor. Limiting non-native plants within the system will strengthen the ecological value and habitat function of the LCCA. Habitat enhancement activities will also increase the temporal connectivity and density of cover which will increase the nesting and live-in habitat of the riparian system.

Biogeochemical/water quality functions - The enhancement of the Riparian habitat and the planting and establishment of deep rooted shrubs and trees will provide improved biogeochemical and water quality functions. The stabilization of the soil through deep root penetration will allow for water recharge and the reduction of sediment into receiving waters.

Present and Proposed Uses of Mitigation Area and Adjacent Areas

The LCCA mitigation area is undeveloped land dominated by ruderal vegetation but also supports a large riparian tributary. Fencing and signage have been installed in strategic areas on and along the boundaries of the LCCA to protect the site and prevent decline of its natural habitat conditions. The signs describe the LCCA as a conservation area and clearly inform the public of the conservation effort in progress. The proposed use of the mitigation areas shall remain as a managed open space conservation area.

Rational to Expect Success

Reducing the prevalence of exotic non-native vegetation along with encouraging native species establishment through seed application and/or hand planting will, over time, produce a fully functional riparian community that will have a higher ecological value than today. Active management and monitoring will track the progression of the restoration activities and will be the key component in determining the level of success.

The mitigation area (Drainage G) is located directly west of Highway 79 in a remote area of Riverside County known as the Badlands. The surrounding area includes the existing Lamb Canyon Landfill and additional open space. The primary access to the mitigation area is via Lamb Canyon Drive and additional infrastructure including frontage roads, trails, fire hydrants, or other irrigation sources is highly limited. Herbicide application for the treatment of exotic non-native species has proven to be highly successful in a variety of habitat types. However expected success for seeding and hand planting will be much more variable and subjected to annual hydrological cycles since installation of irrigation along the enhancement areas of Drainage G is infeasible due to lack of infrastructure and access.

Mitigation Bank Credits (In-lieu Fee) Purchase

In addition to the above proposed mitigation activities within the LCCA, approximately 2.3 acres (minimum) of mitigation bank credits would be purchased from the Santa Ana River Wetlands Mitigation Bank. This bank is approved by the USACE, RWQCB, and CDFG for restoration, enhancement and creation of wetlands and waters within the Santa Ana River Drainage. The purchase of mitigation credits would result in the enhancement, restoration, or creation of ephemeral or riparian habitat. Since impacts are to low functioning ephemeral drainages, the purchase of mitigation bank fee credits would likely result in the overall functional gain for riparian habitat as that fee paid for credits is applied toward a restoration project.

2.5 - TIME LAPSE BETWEEN IMPACTS AND ESTABLISHMENT OF MITIGATION

Both mitigation measures would be conducted in an “upfront” manner, with the initiation of on-site restoration activities and the purchase of mitigation bank credits within the next 2 years. Project impacts to the jurisdictional drainages would occur incrementally over the ~36 year life of the project. Therefore, the temporal losses typically associated with the lag time between project regulatory authorization/impact and the installation of permittee-responsible mitigation would be avoided.

When viewed in terms of the temporal gains associated with conducting and funding mitigation in an “upfront” manner, the functional gains associated with mitigation for higher value resources than those impacted, and the diversity of mitigation strategies (local permittee-responsible mitigation within the Lamb Canyon watershed, a tributary to the San Jacinto River, as well as the contribution of funds to an agency-approved, mitigation banking instrument), the proposed mitigation measures would result in appropriate habitat mitigation for the onsite impacts.

2.6 - OWNERSHIP AND RESPONSIBLE PARTIES

The RCWMD is the responsible party for implementation and monitoring of the onsite LCCA mitigation area. All remedial and/or contingency measures required during the initial monitoring period would be the responsibility of the RCWMD. The USACE, the CDFG, and the RWQCB will be contacted in the case of a change in ownership or parties responsible for implementation of this mitigation plan.

RCWMD can be contacted at the address listed below.

Riverside County Waste Management Department
14310 Frederick Street
Moreno Valley, CA 92553
Contact: Ryan Ross
Telephone: 951.486.3351

Damage to the enhancement effort due to vandalism or other unexpected causes shall be evaluated by the RCWMD and the regulatory agencies to determine responsibility for corrective actions, if any.

2.7 – SITE PROTECTION INSTRUMENT & LONG TERM MANAGEMENT

The onsite LCCA mitigation area will be protected through the recordation of a conservation easement to the RCA. Long-term protection and management of the LCCA habitat mitigation area will be under the direction of the RCWMD. Offsite mitigation bank credit purchase would be applied toward the restoration/enhancement of an area preserved and endowed by the Santa Ana River Wetlands Mitigation Bank.

SECTION 3 –SITE SELECTION & BASELINE INFORMATION

3.1 – SITE SELECTION

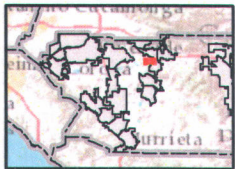
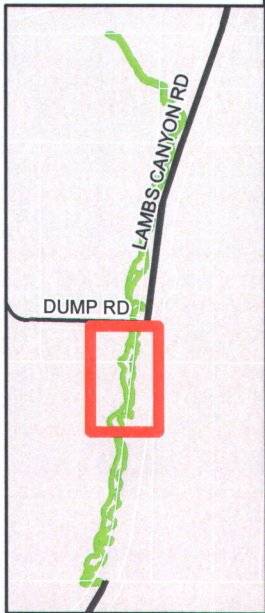
Mitigation goals for the 207.1 acre LCCA are based upon the findings and conclusions of a biological resource assessment conducted by AMEC (AMEC, 2007). The primary goal for the LCCA is to enhance the biological values of the 10.756 acre riparian corridor that runs north-south on the east side of Highway 79. A portion of the riparian corridor was burned in the Esperanza fire. The ultimate goal of this restoration effort is to improve forage, cover, nesting sites and connectivity for wildlife while reducing the presence of exotic non-native plant species. Non-native vegetation is present in both the Riparian and upland areas. Exhibits 7, 8, 9, & 10 depict the areas selected for onsite restoration.

3.2 – BASELINE INFORMATION




The proposed 6.56 acre enhancement area is located in the northern portion of the existing riparian corridor known as Drainage G (see Exhibit 7- LCCA Onsite Habitat Enhancement Areas). Vegetation primarily consists of mulefat scrub, with only a small amount of willow scrub habitat near the southern boundary of the LCCA. The northern portion of the riparian area is comprised of San Emigdio fine sandy loam, becoming interspersed with Metz loamy sand near the landfill entrance road and transitioning entirely to Metz loamy sand further south where the riparian channel exits the LCCA property. Non-native, invasive species such as Tocolote/ thistle Short-pod Mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), and Tamarisk (*Tamarix ramosissima*) are interspersed with native mule fat scrub and southern willow scrub habitats within the jurisdictional drainages. These species have substantial and apparent ecological impacts on physical processes, plant and animal communities, and vegetative structure within the riparian corridor.



Exhibit 8 Phase 3 Seeding Area



RCIT GIS July 2012

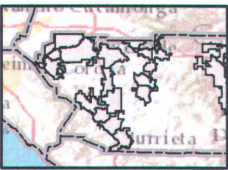
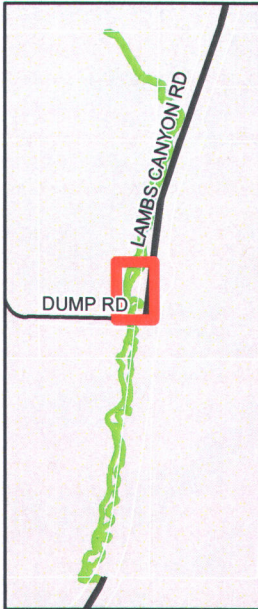
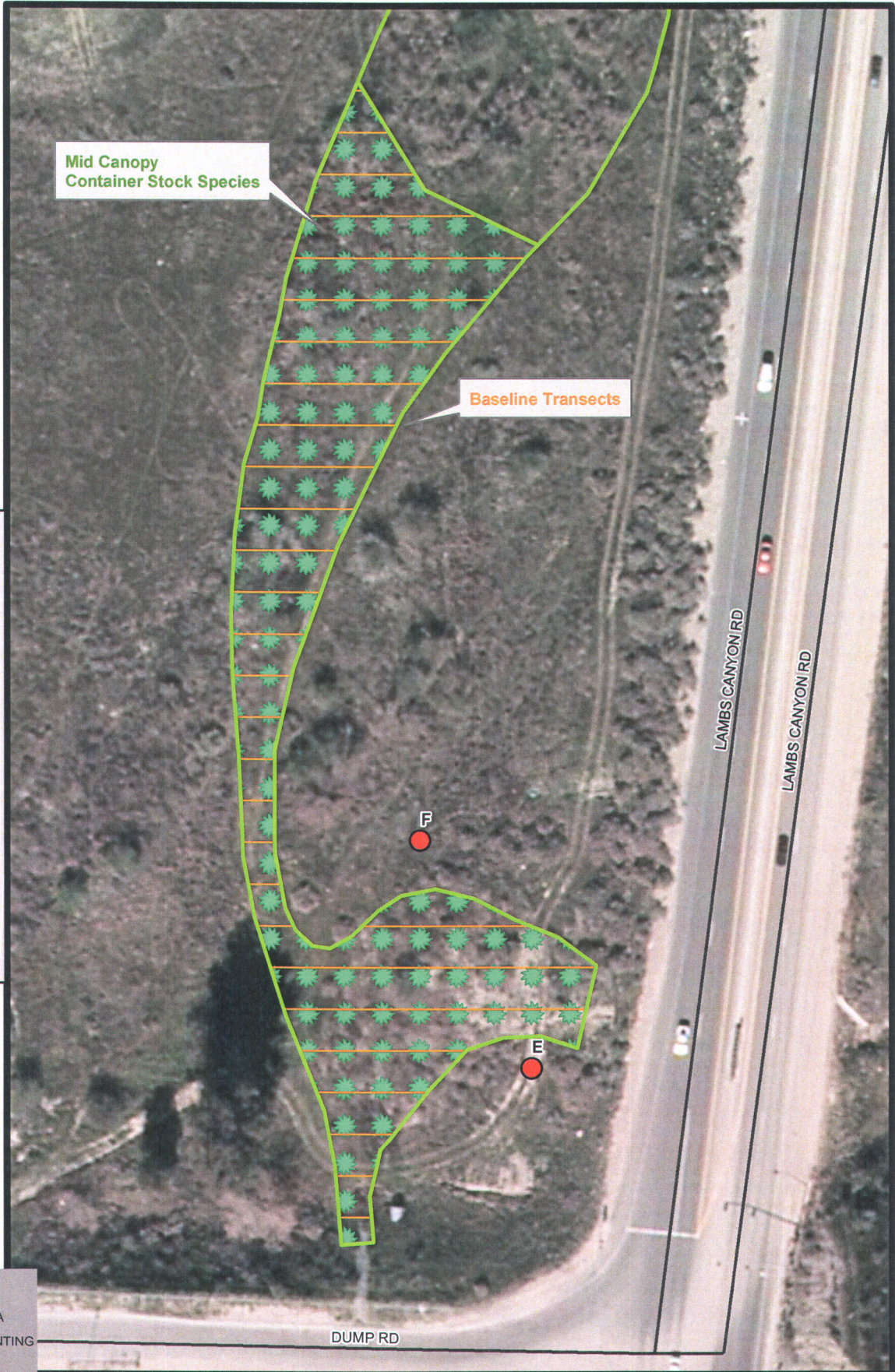
-  PhotoSpots
- Phase 3 Enhancement Area**
-  ENHANCEMENT AREA
-  HydroSeed: 0.43 acres

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.





Exhibit 9 Phase 3 Enhancement Planting Area



July 2012

- PhotoSpots
 - ENHANCEMENT AREA
 - ENHANCEMENT PLANTING
- 0.87 acres**

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



Exhibit 10 Phase 3 Priority Treatment Areas



8/1/2012



-  Tree Tobacco
-  Priority Treatment Areas - 0.68 ACRES
-  Enhancement Area

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Section 4 –RESTORATION & MAINTENANCE PLAN

4.1 – RESTORATION CONCEPT AND SCHEDULE

The primary concept behind the proposed restoration activities is to eradicate non-native invasive plant species from the proposed mitigation area while also improving the density, cover, and temporal connectivity of the riparian system by applying native seed and planting riparian vegetation in suitable areas. Restoration activities including herbicide application and seeding/planting will occur during different times throughout the year depending on project timelines and seasonal variations. The restoration effort is attempting to enhance the density of the native riparian vegetation and eliminate non-natives which will provide for a stronger vertical and lateral connection between vegetated areas of the system and will ultimately increase the foraging and live-in habitat of the feature as well as species diversity. Riparian systems are influenced by internal connectivity which allows the exchange of resources between patches of riparian habitat.

The ephemeral riparian drainage currently supports mulefat scrub and willow scrub riparian vegetation communities and enhancement of the feature would be achieved through a combination of invasive species removal along with supplemental seeding and planting of native tree and shrub species in select areas. The drainage is an ecological community that experiences seasonal inundation and flooding throughout the wet season and thus the feature supports riparian scrub plant communities at varying levels of ecological succession. Ecological succession in general is the orderly process of change in the species composition of an ecological community over time. Within a specified time interval certain species may become more or less abundant over time while other species may start to emerge or vanish within the given ecological community based on changes in the environmental condition.

Portions of the enhancement area are subjected to seasonal flood events that create high velocity flows that scour soil, remove debris, and washes vegetation downstream. This disturbance provides a change in the environmental condition that allows for the establishment of early successional plant species including herbaceous grasses, non-native invasive, and riparian vegetation. Other areas of the drainage are subjected to different environmental conditions that has allowed portions of the enhancement area to transition from an early succession plant community to a mid-canopy plant community that supports a more complex canopy of trees and shrubs including, western cottonwood (*Populus fremonti*), arroyo willow (*salix lasiolepis*), and Mexican elderberry (*Sambucus mexicana*). The mulefat scrub community associated with the enhancement area is currently in varying stages of succession.

The 6.56 acre enhancement area, as seen on Exhibit 7, is bisected by Lamb Canyon Road. Hydrological flows are conveyed under the access road from the northern portion of the riparian corridor to the southern portion of the LCCA via an existing culvert. Restoration activities (i.e. removal of non-native invasive plant species) will occur within the entire 6.56 acre enhancement area. For enhancement, maintenance, and discussion purposes the 6.56 acre enhancement area can be split in to a northern section and southern section with Lamb Canyon Road being the divide. The southern section of the enhancement area that contains the areas selected for seeding can be

seen in Exhibit 8, while the northern enhancement section containing areas for plantings can be seen in Exhibit 9.

Eradication of target non-native species will occur within the entire 6.56 acre enhancement area wherever they are encountered. Treatment areas in the northern section, which currently support target non-natives in higher densities than other sections of the enhancement area, will be a priority for first year treatment and can be seen in Exhibit 10. The northern section also supports a large grove of tree tobacco (*Nicotiana glauca*), also identified on Exhibit 10, of approximately 15 trees. Removal of this grove will occur in accordance with weeding and eradication schedule discussed in Section 4.3. Tree tobacco individuals, which can quickly emerge on an annual basis, also occur randomly throughout the entire 6.56 acres and will be treated when encountered.

Enhancement planting using native mid canopy successional species will occur in the 0.87 acre enhancement planting area located in the northern section of the mitigation area (Exhibit 9). Target non-natives that are observed in this area will also be treated on an annual basis by spot treatment or hand removal to prevent any overspray into areas identified for enhancement planting. This enhancement planting area will be planted with sapling/container stock of tree and shrub species representing the mid –canopy and climax community stage of the riparian system, including arroyo willow (*Salix lasiolepis*), western sycamore (*Plantanus racemosa*), and western cottonwood (*Populus fremontii*). Planting species were selected based on community type, hydrology and the potential to function as mid canopy or climax community species. The candidate location for mid-canopy enhancement planting already supports a moderate understory of low growing vegetation and also supports mid canopy species in low densities. Encouraging the growth of mid canopy and climax community species will add ecological complexity, species diversity, improve wildlife habitat, and will enhance the lateral connection between patches of riparian vegetation within the system. Over time as the planted vegetation continues to mature the larger shrubs and trees will eventually begin to shade out competing non-natives and hopefully reduce the need for continued treatment.

In total approximately 100 individuals will be planted within the 0.87 acre enhancement planting area. Each of the three mid-canopy plantings species, arroyo willow, western sycamore, and western cottonwood, will be planted in equal amounts to maximize planting diversity. Approximately 33 individuals of each species will be utilized in the enhancement planting area. The 0.87 acre enhancement planting area is approximately 37,461 sq ft. To ensure that planted individuals are not overcrowded and allowed the proper area to become established, individuals will be planted approximately every 300 sq ft. East to west transects will be laid across the enhancement planting area approximately every 19 feet. Along each transect pin flags will be placed at 19 ft intervals and will represent a 300 sq ft planting area in which one individual will be planted at the center of each 300 sq ft area (see Exhibit 9 and Photo Exhibit 3).

Planting of container stock should take place between October 15 and February 1 in order to coincide with the appropriate weather conditions. Planting taking place during the wet season will allow new plantings time to become established before the dry summer season which decreases mortality and may achieve the desired success more quickly. To encourage new plantings to establish root systems and locate existing ground water sources, natural microhabitats such as

depressions should be selected when possible Supplemental water will be limited as Lamb Canyon is not set up for formal irrigation. Individual plantings may receive minimal water via a backpack sprayer on a very limited base. No enhancement activities will occur in the very northern portion of the Phase 3 enhancement area as this area is upland in nature and does not support target non-natives in any low, moderate, or high densities. It would not be cost effective to propose hydroseed or planting as this area of the LCCA is stable and functions as upland ephemeral conveyance of water. See Photo Exhibit 2.

Recording initial planting efforts is crucial to the management of the enhancement planting area. Planting data will be included in each monitoring report and each annual work plan. Any deviations in the planting will be reported. An annual work plan will be prepared by the project manager prior to initiating annual planting efforts. The work plan will describe in detail the planting procedure, quantity, and exact location of all enhancement activities. Initial planting efforts, including base line conditions, transect locations, and vegetation monitoring data sheets will be included. Photo locations and GPS coordinates of enhancement and reference sites will also be part of the annual work plan.

4.2 – SEEDING

No hand planting will occur in the southern section of the Phase 3 enhancement area. The southern area is dominated by dense stands of mature *Baccharis salicifolia* (mulefat). Attempting to plant in this area would cause more damage to mature and emergent riparian species and could potential increase the amount of non-native species due to new disturbance. However target non-natives including *Nicotiana glauca* and invasive thistle species have become established along the perimeter of the drainage where scoured slopes have caused new erosion. See Photo Exhibit 1. Restoration activities proposed south of the road include removal of non-native target invasives throughout the entire section where they occur and the application of Inland Sage Scrub hydroseed mix along alluvial benches for enhancement purposes where mulefat is less dense and upland species are dominate. Exhibit 8 shows the areas proposed for seeding. These areas also currently support non-natives in higher densities than other areas of the southern enhancement area and are a priority for eradication. All target non-native species will be treated when encountered within the entire 6.56 acre enhancement area.

The Inland Sage Scrub mix is a quick start non-irrigated blend of grasses and shrubs that will protect soil and allow slower perennials to provide their permanent cover in years to come. A list of species included in the Inland Sage Scrub can be found in Table 2. Inland seed mix will be applied to a several areas totaling approximately 0.43 acres along the southern section of the Phase 3 enhancement area (see Exhibit 8). In addition, seeding will also occur in portions of the treatment areas located in the northern section of the enhancement area as shown in Exhibit 10.

Removal of non-natives may by mechanical or chemical means can create bare ground conditions that may provide establishment opportunities for non-native seeds. Native seed mix will be applied to treatment areas to offset those opportunities for continued non-native establishment and re-introduce native seeds back into the seed bank. It is estimated that in total one acre of treated habitat in the enhancement area will receive a native seed mix application. Seeding will not occur

in the northern section where hand planting of individual container stock is being proposed, as shown in Exhibit 9. Seeding will be applied either by hand or through hydroseeding. Seeding shall occur after the first significant rain event has occurred, typically between December and January to allow soil moisture to be sufficient for germination to occur.

Seeds shall be supplied on the basis of bulk weight, percent purity, and percent germination from a qualified Southern California native seed supplier. Seed shall be less than two years old. Seed shall be obtained from a certified California native plant supplier and shall be of Southern California origin. To the extent possible, all plant material for the restoration shall be obtained from the site or from native plant communities growing within a 30-mile radius of the site.

4.3 - WEED ERADICATION AND WEEDING SCHEDULE

Invasion of exotic weeds is one of the greatest threats to the success of the mitigation projects. Seed rain of non-native species from outside sources can quickly colonize barren areas and can out-compete native species. Once established, the competitive exclusion of light, water, and nutrients by exotic plants makes it difficult for native species to re-establish and grow. A comprehensive weed eradication program shall be implemented to minimize the adverse effects of weed invasion.

Weed densities and control demands will depend on the seasonal rains and temperatures each year of project implementation. The timing of weed control may be different for each of the different target exotic species. Monitoring will be effective for early identification of seedling weed species and to schedule control methods according to the phenology of each weed species.

For efficient control of exotic species, specified weeds must be controlled before they produce viable seed. Methods of control will depend on the species, the density of weeds, the area of infestation, and the ecological sensitivity of the habitat. Hand or mechanical means are preferred methods for control of weed species. Some species may be controlled by a combination of cutting and removal, followed by spot foliar herbicide spray application on re-growth. All exotic plants and their associated humus shall be removed and disposed of at an off-site location.

Limited use of selected herbicides is specified when no other effective alternative is available to remove and control certain noxious weed species. Herbicide treatment is specified for weed species that may re-sprout from roots or rhizomes. Herbicides that are registered for use in California for natural areas are specified for particular weed species at specific rates noted on the labels. For this weed management plan, recommended herbicides include mainly glyphosate (e.g., Round-up or Rodeo). Only EPA approved, glyphosate base, systemic herbicides (e.g., Rodeo) will be allowed when applying herbicides within 100 feet of a natural watercourse or body of water. Glyphosate is a non-selective herbicide, and its mode of action works against both broadleaf weeds and grasses. The application of herbicides must be implemented without harming non-target native species.

The following glyphosate concentrations shall be used according to the type of application required as per the product label:

Foliar spray application - a minimum of two percent solution.

Foliar wick application - a 33 percent solution.

Cut stump treatment - a 100 percent solution.

Herbicide treatment shall be conducted only when weather conditions are conducive to effective uptake of the herbicide by the target species (e.g., sunny, dry with ambient temperatures 65 degrees Fahrenheit, and when plants are at the specified growing stage), and when wind conditions are such that herbicide drift is minimized (five mph or less). Herbicide preparation shall be allowed only in approved staging areas more than 100 feet from a stream course or body of water. Treated plants or stumps shall not be disturbed until the applied herbicide has had time to take effect per the manufacturer's instruction.

Year 1

1. Initial treatment of tree tobacco [and other targeted species] with basal bark application of Garlon 4. Re-spray as necessary following re-sprouting or seed germination. Leave all specimens in place to continue to provide cover and perching spots while minimizing soil disturbance.
2. Depending upon rainfall and resulting germination of Tocolote [and other identified species] chemically or mechanically eradicated this species. Treat during the spring season when plants are actively growing but less than six (6) inches tall [or] before flowering, whichever comes first. In any year where there is negligible germination and/or growth of this species, defer treatment until following year.
3. Document all activities and results of the HMMP in an annual report to be send to the CDFG.

Year 2

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 3.
4. Document all activities and results of the HMMP in an annual report to be send to the CDFG.

Year 3

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 4.
4. Document all activities and results of the HMMP in an annual report to be send to the CDFG.

Year 4

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 5.
4. Document all activities and results of the HMMP in an annual report to be send to the CDFG.

Year 5

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. Treat any surviving or seedling of Tree tobacco, tocolote and short-pod mustard, if necessary.

3. Year five will provide an indication of HMMP success. The goal is to have the plant cover and exotic cover success criteria identified in this HMMP to be met.
4. Document all activities and results of the HMMP in an annual report to be send to the CDFG.

Below are recommended species-specific eradication techniques:

Tree tobacco (*Nicotiana glauca*)

All individuals of these species should be removed from the project area. Seedling plants can be removed by hand pulling. For larger individuals, stump treatment with glyphosate should be used. The plants should be treated in spring when actively growing. A phased treatment is recommended. Phase 1: The plants shall be cleanly cut, horizontally, close to the ground (using a saw, rotary brush cutter or similar tool). All the cut vegetation shall be removed from the project area the same day it is cut and disposed of legally off-site. Phase 2: The stumps or stems shall be re-cut, cleared of sawdust, and immediately painted with 100 percent glyphosate within two minutes of cutting before the cut surface begins to congeal to ensure penetration of the herbicide. Plants should be checked a month after application to determine the success of the herbicide treatment. Any re-growth from the treated stumps should be treated with the foliar herbicide application in the same season or as re-growth appears in the next growing season.

Tocalote (*Carduus pycnocephalus*, *Centaurea calcitrapa*, *C. melitensis*, *C. solstitialis*, *Cirsium arvense*, *Cynara cardunculus*)

Invasion of thistle into wildland areas is a persistent problem in California. They displace native species, and can deplete soil moisture reserves in grassland areas. Most animals avoid grazing on it because of its spines.

Most large-scale infestations are difficult to control. In small populations spot eradication is the most effective method of preventing large-scale infestations. In established stands, the elimination of new seed production coupled with long term management, monitoring and follow-up treatment will be the most effective method for eradication. Thistle control can include physical removal but root must be severed at least four inches below ground level. Plants should be pulled well before seed is set. Once plants have reached the bolting stage, effective control can be achieved with glyphosate (1 percent solution). A foliar spray of 2 percent glyphosate (as Roundup® or equivalent) can be effective on bolting plants. The best time to treat with glyphosate is after annual grasses or forbs have senesced, but prior to seed production (May-June). Follow-up and a minimum of twice-yearly monitoring are needed.

Tamarisk (*Tamarix ramosissima*, *T. chinensis*, *T. gallica*, *T. parviflora*)

Saltcedar has been associated with dramatic environmental changes in riparian geomorphology, groundwater availability, soil chemistry, fire frequency, plant community composition, and native wildlife diversity. Salt cedar is known to trap and stabilizing alluvial sediments, which can result in the narrowing of stream channels and increased flooding frequency. An increase in soil salinity

level may result from large populations of this invasive plant. Soil salinities increase as a result of inputs of salt from glands on saltcedar leaves, resulting in the inhibition of growth and germination of native riparian species. Saltcedar can reproduce both vegetatively and by seed, and can regenerate from branches, which fall on moist soil. Prolific seed production and its rapid germination and growth can result in a rapid colonization.

Once established, saltcedar is difficult to eradicate. Resprouting following cutting or burning makes this species difficult to kill with mechanical methods. Individual seedling can be physically removed (entire plant). For heavily infested areas root plowing and cutting are initially effective but must be combined with follow-up treatment with herbicide. Several herbicides are commonly used to combat saltcedar, including imazapyr, triclopyr, and glyphosate. An effective method is to foliar apply imazapyr (Arsenal®) combined with glyphosate (Rodeo® or equivalent). The cut stump method is also effective when triclopyr, (Garlon 4® or Garlon 3A®) is applied. Triclopyr (as Pathfinder II®) can be applied directly to the basal bark of stems less than about four inches in diameter without cutting the stem (the bark must be wetted completely around the base of each stem). Garlon 3A® should be applied during the growing season. Resprouts can be treated with foliar applications of herbicide. Foliar applications of glyphosate or imazapyr achieve are best applied in late spring to early fall during good growing conditions. Triclopyr can be diluted with diesel or natural oils, a dilution of 3 parts water to 1 part of Garlon 4® has proven effective.

Shortpod Mustard (*Hirschfeldia incana*)

A foliar spray of 2 percent glyphosate (as Roundup® or equivalent) is effective on bolting plants. The best time to treat with glyphosate is in early spring when plants are emerging, and prior to seed production (May-June). Follow-up and minimum twice-yearly monitoring are needed.

4.4 - GENERAL MAINTENANCE

During each maintenance visit, the habitat mitigation areas shall be inspected for trash, vandalism, erosion or slope failure, disease and pest infestation that may threaten the long-term health of the revegetated community. Trash will be removed, vandalism and erosion will be repaired, and appropriate pest control techniques will be employed as necessary. In addition, any signs of distress or mortality will be noted and rectified if the cause is apparent. If there are reoccurring or persistent indicators of distress or mortality and/or the cause of these problems is not apparent, the appropriate regulatory agencies will be notified.

Table 2 – Inland Sage Scrub Seed Mix

Scientific Name	Common Name
<i>Artemisia californica</i>	California Sagebrush
<i>Atriplex canescens</i>	Four-wing saltbrush
<i>Encelia farinosa</i>	Brittlebush
<i>Eriogonum fasciculatum</i>	California Buckwheat
<i>Eriophyllum confertiflorum</i>	Golden Yarrow
<i>Eschscholzia californica</i>	California Poppy
<i>Isomeris arborea</i>	Bladderpod
<i>Lasthenia glabrata</i>	Goldfields
<i>Lotus scoparius</i>	Deerweed
<i>Lupinus succulentus</i>	Arroyo Lupine
<i>Salvia mellifera</i>	Black Sage
<i>Salvia apiana</i>	white sage
<i>Vulpia microstachys</i>	Small Fescue

Section 5 - MONITORING PLAN

A monitoring program is necessary to document performance of the mitigation areas relative to the identified success criteria, as well as to identify any shortcomings or problems in the mitigation areas. Early detection of problems or other unforeseen issues allows for adaptive management and mid-course adjustments to the mitigation program that will maximize the likelihood of success.

5.1 - HABITAT MONITORING PROTOCOLS

It is important to monitor both the physical and the biological aspects of the habitat within the mitigation areas, as both are indicative of the functional condition of an area. The routine monitoring will include evaluation of plant species richness, plant cover, percentage of exotic vegetation, and percent survival.

Biological Monitoring

Plant monitoring shall be performed along transects using the point or line intercept method (Bonham, 1989). A minimum of one transect shall be run the entire length of each enhancement planting area. Data on the biological composition of the planted area will be collected at one-foot intervals along each transect. The following plant data will be collected and calculated for mitigation areas. These data will be used to assess the success of the mitigation areas and to identify any necessary remedial actions:

1. Relative cover of both native and exotic species - percent of the ground surface covered by the crown area of a species. Because plant crowns overlap relative cover can exceed 100 percent
2. Plant density - number of individual per unit area
3. Species richness - number of species in the sample area
4. Species diversity - a combination of species diversity and relative abundance. This will be expressed using a Shannon Index (Magurran, 1988)
5. Structural diversity - number of vegetative strata present
6. Percent Survival- measuring the percent survival among native plants installed

In addition, the general health, growth rate, and mortality of plant species will be noted along each transect, to include newly planted species.

Photo Documentation

Photograph stations will be established along the perimeter of each enhancement planting area. Site photographs will be taken from the photograph stations during the last scheduled monitoring visit per year and the photographs and a map showing the locations of each station will be included in every monitoring report. These locations are approximate and every effort should be taken to maintain the location of the stations throughout the duration of the monitoring period.

5.2 - MONITORING REPORTS

Annual reports summarizing the habitat monitoring results shall be submitted to CDFG and other regulatory agencies, as required, beginning the year after commencement of the mitigation program, and continuing throughout the monitoring period. Monitoring reports will discuss maintenance activities performed; the results of the monitoring; an assessment of the progress made towards achievement of the success criteria; and recommendations of any remedial or adaptive management measures that may be necessary or prudent. Also included in the report will be: planting and seeding locations/quantities, date and time of invasive plants removal events, number of hours worked, frequency and timing of removal and treatment, description/list of invasive plants removed, amount of invasive plants removed, description of techniques and tools used to remove invasive plants, description of method of disposal of invasive plants that were removed. The specific content of the monitoring reports will follow the Corps Regulatory Guidance Letter for Mitigation Guidelines and Monitoring Report Requirements (2004) and shall, at a minimum include:

1. Names of persons conducting field data, analysis, and report preparation
2. Results of field data collection and analysis of quantitative and qualitative data
3. Comparison of current site conditions with previous conditions (i.e., results of baseline and earlier monitoring)
4. Performance of site relative to success criteria
5. Problems and remedial actions taken
6. Log of maintenance activities performed previous year and
7. Site photographs from reference stations.

5.3 - HABITAT MONITORING SCHEDULE

Habitat mitigation monitoring typically is conducted for five years. Planting, seeding, non-native plant removal, and monitoring may cease prior to the 5 years if the success criteria have been met. The mitigation sites shall be monitored quarterly during the first year, semi-annually during the second and third years, and annually thereafter for at least two more years. Required maintenance will be performed within three weeks of identification of any damage or needs. Monitoring will begin one month after the first major eradication treatment is conducted and will continue until either:

- 1) The mitigation areas have met the final success criteria,
- 2) The USACE and CDFG determine that monitoring is no longer required; or
- 3) Alternative mitigation sites or strategies are adopted (and approved by the USACE and CDFG).

Section 6 – PERFORMANCE STANDARDS AND CONTINGENCY MEASURES

This section provides success criteria based on the biologic conditions of the habitat mitigation areas. The ultimate success criteria will be used as the basis for certification of mitigation success and/or the need for contingency measures.

6.1 - SUCCESS CRITERIA BASED ON GENERAL SITE CHARACTERISTICS

To be considered successful, the onsite habitat mitigation area must achieve the following standards:

- The Enhancement Planting Area: (1) shall have a minimum of 65% survival for all plantings, and (2) shall attain 80% cover after 5 years.
- The enhancement area shall not contain more than 5 percent nonnative plant species.

6.2 - ADAPTIVE MANAGEMENT AND CONTINGENCY MEASURES

An integral part of a successful mitigation program is the ability to detect problems with the mitigation early in the process, determine the cause of the problem, and attempt to modify the mitigation program to accommodate emerging issues or situations. Problems, such as trash, vandalism, isolated instances of plant mortality, or small-scale weed or pest infestations will be rectified as they are discovered during routine site monitoring.

6.3 - CERTIFICATION OF SUCCESS AND AGENCY NOTIFICATION

The 6.56 acres of onsite habitat mitigation areas will be considered a success when all criteria identified in Sections 6.1 of this document are met. When the 5-year monitoring period is complete, and/or if the permittee believes all performance standards have been met, the permittee shall notify applicable regulatory agencies. The notification will be accompanied by the most recent annual monitoring report and any supplemental information necessary to document attainment of the success criteria.

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Photo Exhibit 1

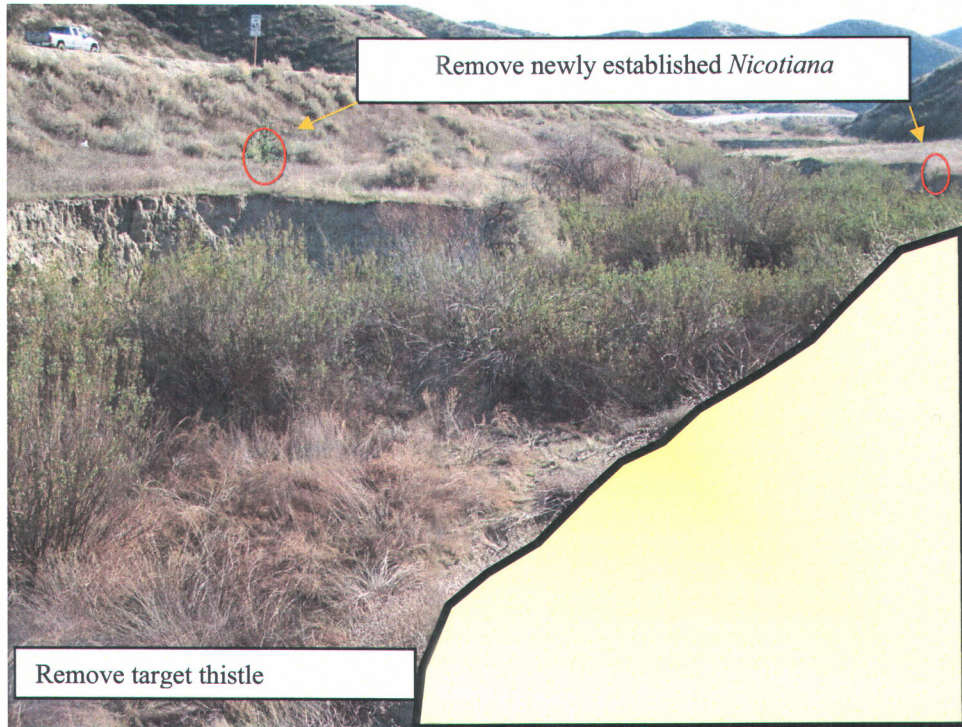


Photo Location A: South of access road looking south along LCCA

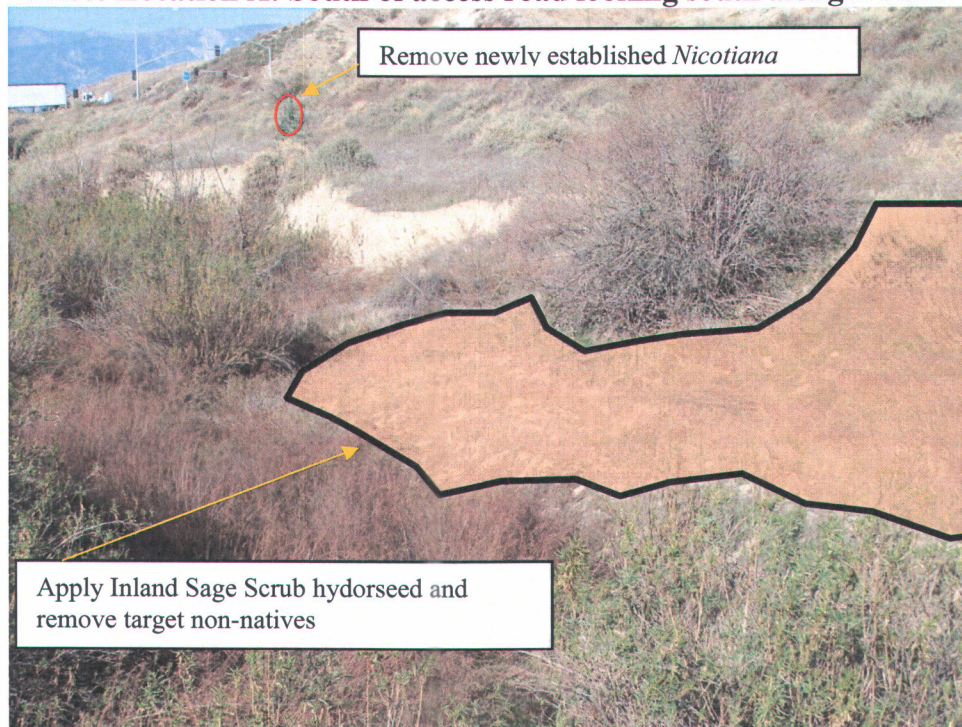


Photo Location B: South of access road looking northeast along LCCA

Photo Exhibit 2



**Photo Location C: Looking west along northern most portion of LCCA –
No enhancement activities proposed**



Photo Location D: Looking east along northern most portion of LCCA

Photo Exhibit 3

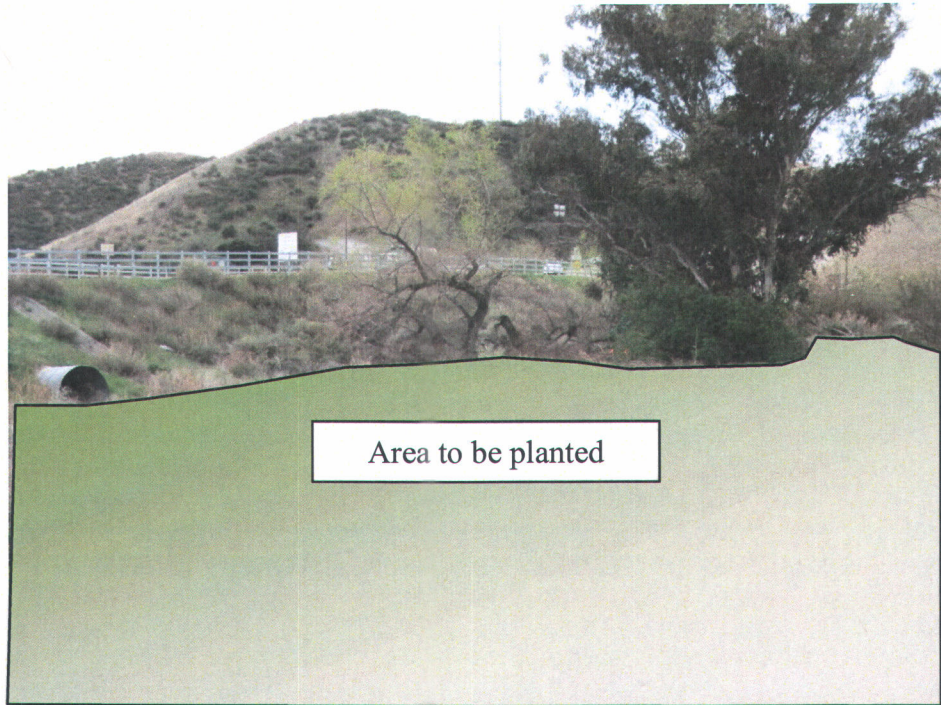


Photo Location E: Looking west along northern section enhancement planting area to be planted



Photo Location F: Looking west along northern section enhancement planting area to be planted



Habitat Mitigation and Monitoring Plan

Lamb Canyon Landfill 202.2-acre Expansion Project

Unincorporated Riverside County, California

Riverside County Waste Management Department
14310 Fredrick Street
Moreno Valley, CA 92553
Contact: Ryan Ross
Telephone: 951.486.3200

April 2013

TABLE OF CONTENTS

List of Exhibits.....2

List of Tables2

Executive Summary3

Section 1 – Project Information4

 1.1 Project Description.....4

 Location of Project.....4

 Project Summary.....4

 Responsible Parties5

 1.2 - Jurisdictional Delineation & Impacts5

Section 2 – Objectives/Mitigation Goals12

 2.1 - Goal of the Mitigation Program12

 2.3 – Habitat Mitigation Summary12

 2.3 - Restoration Definitions.....12

 2.4 - Mitigation Actions.....13

 Onsite Habitat Mitigation Program.....13

 Functions and Values of Habitat to be Enhanced/Restored as a Result of the Project.....14

 Present and Proposed Uses of Mitigation Area and Adjacent Areas.....14

 Rational to Expect Success15

 Mitigation Bank Credits (In-lieu Fee) Purchase15

 2.5 - Time Lapse Between Impacts and Establishment of Mitigation.....15

 2.6 - Ownership and Responsible Parties16

 2.7 – Site Protection Instrument & Long Term Management16

Section 3 –Site Selection & Baseline Information19

 3.1 – Site Selection19

 3.2 – Baseline Information.....19

Section 4 –Restoration & Maintenance Plan20

 4.1 – Restoration Concept and Schedule20

 4.2 - Weed Eradication and Weeding Schedule22

 Tree tobacco (*Nicotiana glauca*).....25

Tocalote (*Carduus pycnocephalus, Centaurea calcitrapa, C. melitensis, C. solstitialis, Cirsium arvense, Cynara cardunculus*)25

Tamarisk (*Tamarix ramosissima, T. chinensis, T. gallica, T. parviflora*)26

Shortpod Mustard (*Hirschfeldia incana*)26

4.3 - General Maintenance.....26

Section 5 - Monitoring Plan.....27

5.1 - Habitat Monitoring Protocols27

 Biological Monitoring.....27

 Photo Documentation.....27

5.2 - Monitoring Reports28

5.3 - Habitat Monitoring Schedule28

Section 6 – Performance Standards and Contingency Measures.....29

6.1 - Success Criteria based on General Site Characteristics29

6.2 - Adaptive Management and Contingency Measures29

6.3 - Certification of Success and Agency Notification29

Literature Cited30

LIST OF EXHIBITS

Exhibit 1 - Regional Map.....6

Exhibit 2 - Vicinity Map7

Exhibit 3 - Proposed Project Map.....8

Exhibit 4 – USGS Topographic Map.....9

Exhibit 5 - Jurisdictional Areas & Impacts.....10

Exhibit 6 – LCCA Onsite Habitat Enhancement Areas.....11

Exhibit 7 – Phase 3 Enhancement Planting Areas.....177

Exhibit 8 – Phase 3 Priority Treatment Areas.....18

LIST OF TABLES

Table 1 - Project Information..... 4

EXECUTIVE SUMMARY

This Habitat Mitigation and Monitoring Plan (HMMP) has been prepared for the replacement and enhancement of ephemeral drainages as mitigation for the 202.2 acre Lamb Canyon Landfill Expansion Project, located within a larger 1,189-acre Lamb Canyon Landfill Property, situated in the unincorporated area of Riverside County, California. Approximately 1.167 acres of Waters of the U.S. and of the State, under the jurisdiction of the Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) will be impacted as a result of project implementation. Impacts are to low quality, ephemeral drainages.

As mitigation for impacts to jurisdictional features, the Riverside County Waste Management Department (RCWMD) proposes the following:

1) On-Site Mitigation:

The on-site habitat mitigation area is located within the Lamb Canyon Landfill property, east of the 202.2 acre active landfill area, within the Lamb Canyon Conservation Area. Mitigation will focus on restoring the riparian habitat by removing exotic non-native vegetation as well as planting riparian container stock to increase the connectivity of the 3.987 acres riparian corridor (Drainage G). Improving connectivity of the riparian corridor, in addition to exotic removal, will provide increased habitat functions and values, as well as promote new riparian habitat, and reduce exotic encroachment. Approximately 2.14 acres of USACE jurisdictional waters will be enhanced onsite as part of our on-site mitigation efforts.

2) Off-Site Mitigation

In-lieu fees purchased from the Santa Ana Watershed Association In-Lieu Fee Program is proposed at a 2:1 ratio (2.34 acres). This bank allows for the creation, restoration, and enhancement of riparian habitat for projects located within the Santa Ana River Drainage area.

Therefore, a total of 4.48 acres of habitat mitigation is proposed for impacts associated with the Lamb Canyon Landfill Expansion project. This results in a 3.8:1 mitigation ratio for impacts to USACE jurisdictional features.

Section 1 – PROJECT INFORMATION

1.1 PROJECT DESCRIPTION

Table 1 - Project Information

Project Name	Lamb Canyon Landfill Expansion Project
Applicant	Riverside County Waste Management Department Ryan Ross 951.486.3200 rmross@co.riverside.ca.us
Project Impacts	1.167 acres of "waters" of the United States (USACE) and of the State of California (RWQCB)
Total Mitigation	2.14 acres of onsite mitigation (restoration) 2.34 acres of replacement mitigation through mitigation bank (in-lieu) fees Total Mitigation : 4.48 acres
Project Schedule	Lamb Canyon expansion project scheduled to begin late 2013. Mitigation implementation to begin upon acquisition of 404 SIP.
Project Location	16411 Lamb Canyon Rd, Riverside, CA 92223

Location of Project

The Lamb Canyon Landfill is owned and operated by the RCWMD. The Lamb Canyon Landfill expansion project is a 202.2-acre site and is located at 16411 Lamb Canyon Road, off of State Highway 79 (SH79), between the City of Beaumont and City of San Jacinto, in an unincorporated area of Riverside County. The project site is accessed from State Highway 79, which links Interstate 10 to the north with Gilman Springs Road and State Highway 74 to the south (Exhibit 1, Regional Location Map, and Exhibit 2, Vicinity Map).

The Lamb Canyon Landfill property encompasses 1,189 acres. Within the 1,189-acre property, 580.5 acres are permitted by the current Solid Waste Facility Permit (SWFP) for landfill operations and associated activities. The 202.2-acre Site is hereby defined as the 202.1 acre "Expansion Area", plus a 0.062 acre area located immediately adjacent to the 202.1 acre "Expansion Area" (Exhibit 3, Proposed Project Map). The project site lies within Sections 29, Township 3 South, Range 1 West of the San Bernardino Base and Meridian. The project site is also located at 33°52'51" N, 117°0'12" W, on the United States Geological Survey (USGS) 7.5' El Casco Quadrangles (Exhibit 4, USGS Map).

Project Summary

The RCWMD proposes to conduct landfill operations and supporting activities within the 202.2-acre Site. For the purpose of this report, "project area," "project site," or "impact footprint" will

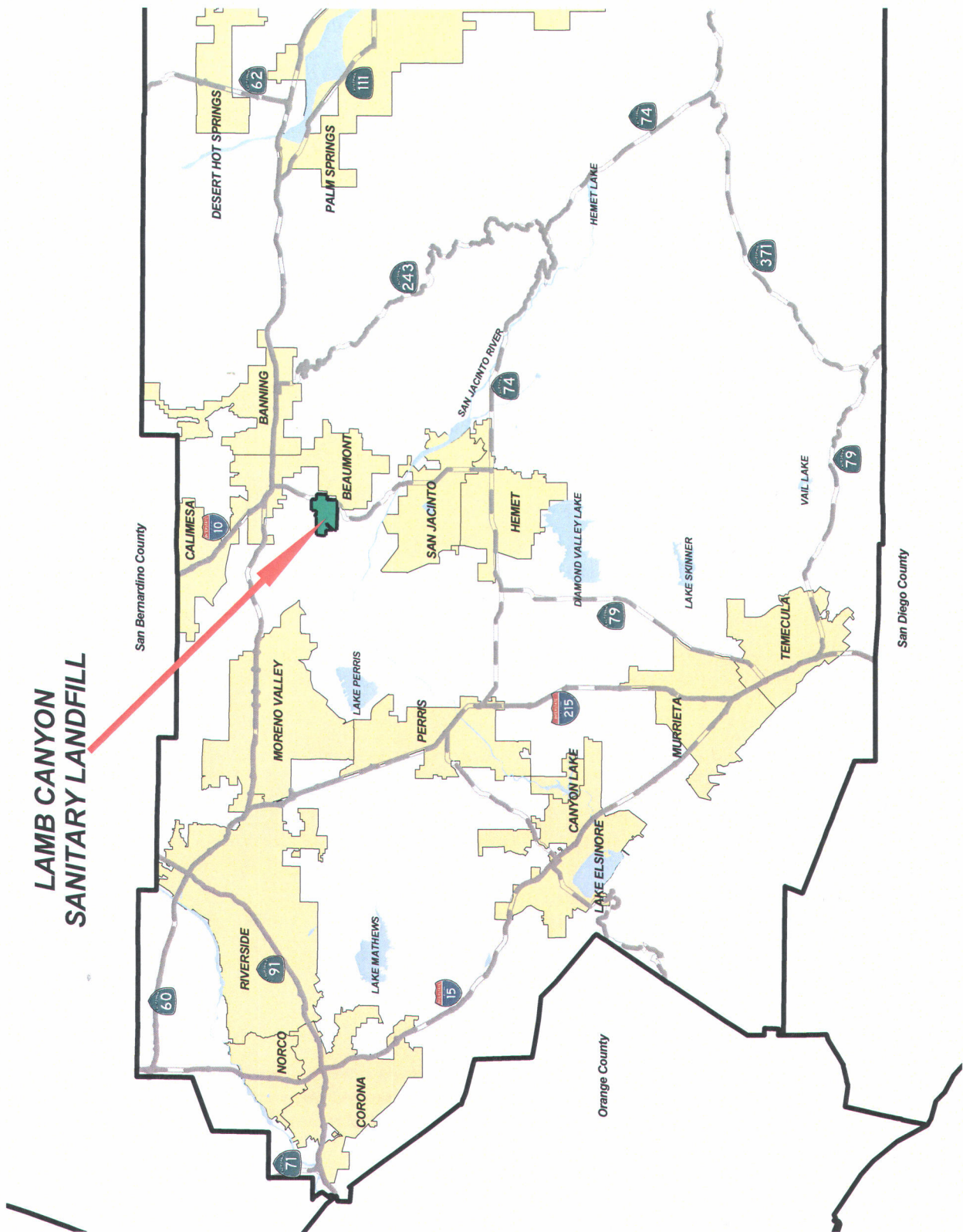
refer to the 202.2-acre site. The 202.2-acre project site will be used for landfill operations and supporting activities in order to meet current and future waste disposal demands in the region.

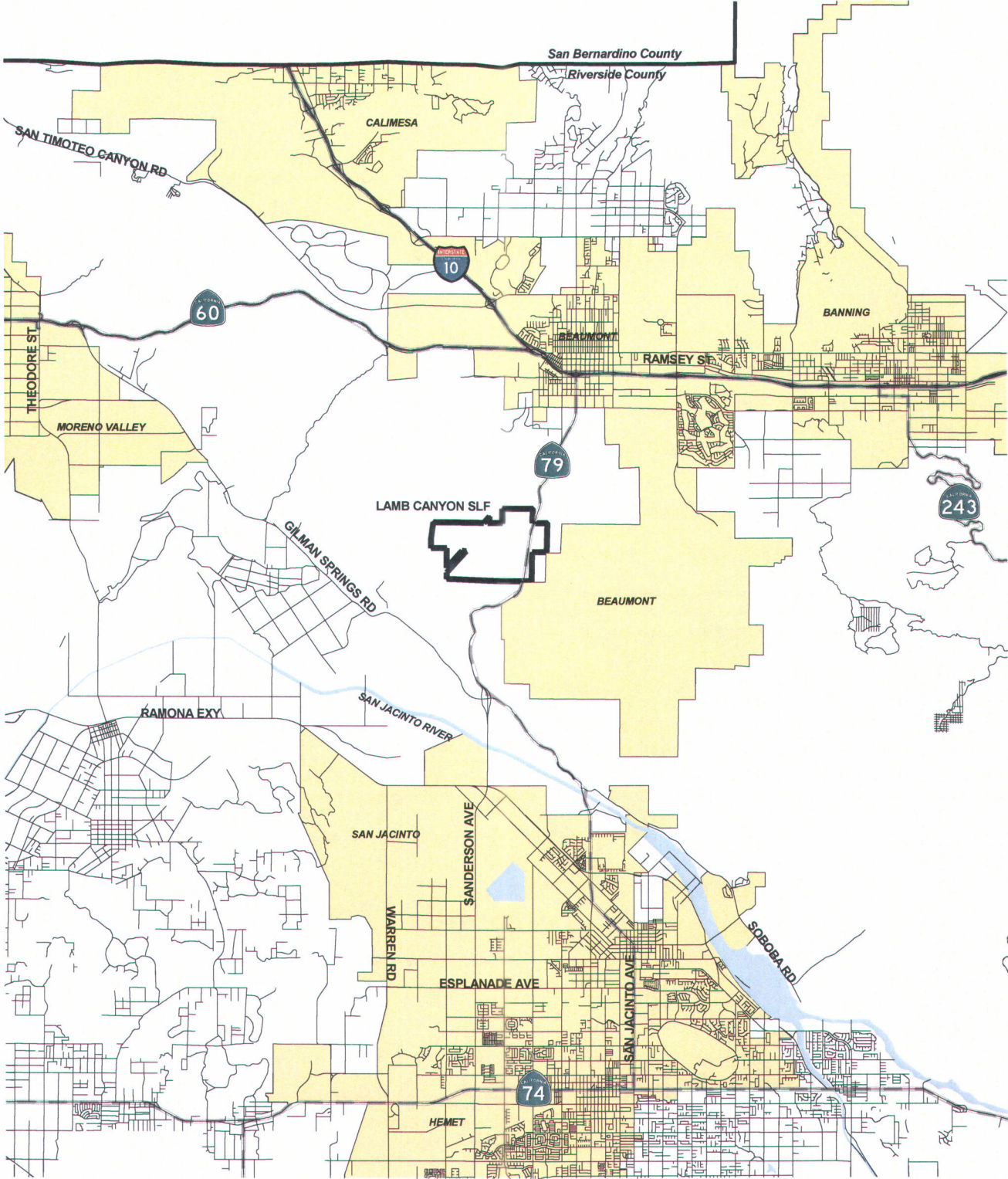
Responsible Parties

This HMMP was prepared as part of the requirements to procure environmental permits from federal and state agencies. RCWMD will be the responsible party for implementing the habitat mitigation project.

1.2 - JURISDICTIONAL DELINEATION & IMPACTS

An unnamed ephemeral drainage channel runs through the center of the project site in a north-south direction, which supports numerous tributaries that are connected directly to the main drainage. The ephemeral streams throughout the project area are unvegetated and typically surrounded by upland habitats such as Riversidean sage scrub (RSS), chaparral and non-native grasslands. A total of 1.167 acres of waters of the US regulated by the USACE and waters of the State regulated by the RWQCB are present within the project limits. All drainages will be impacted as a result of project implementation (Exhibit 5 Jurisdictional Areas).



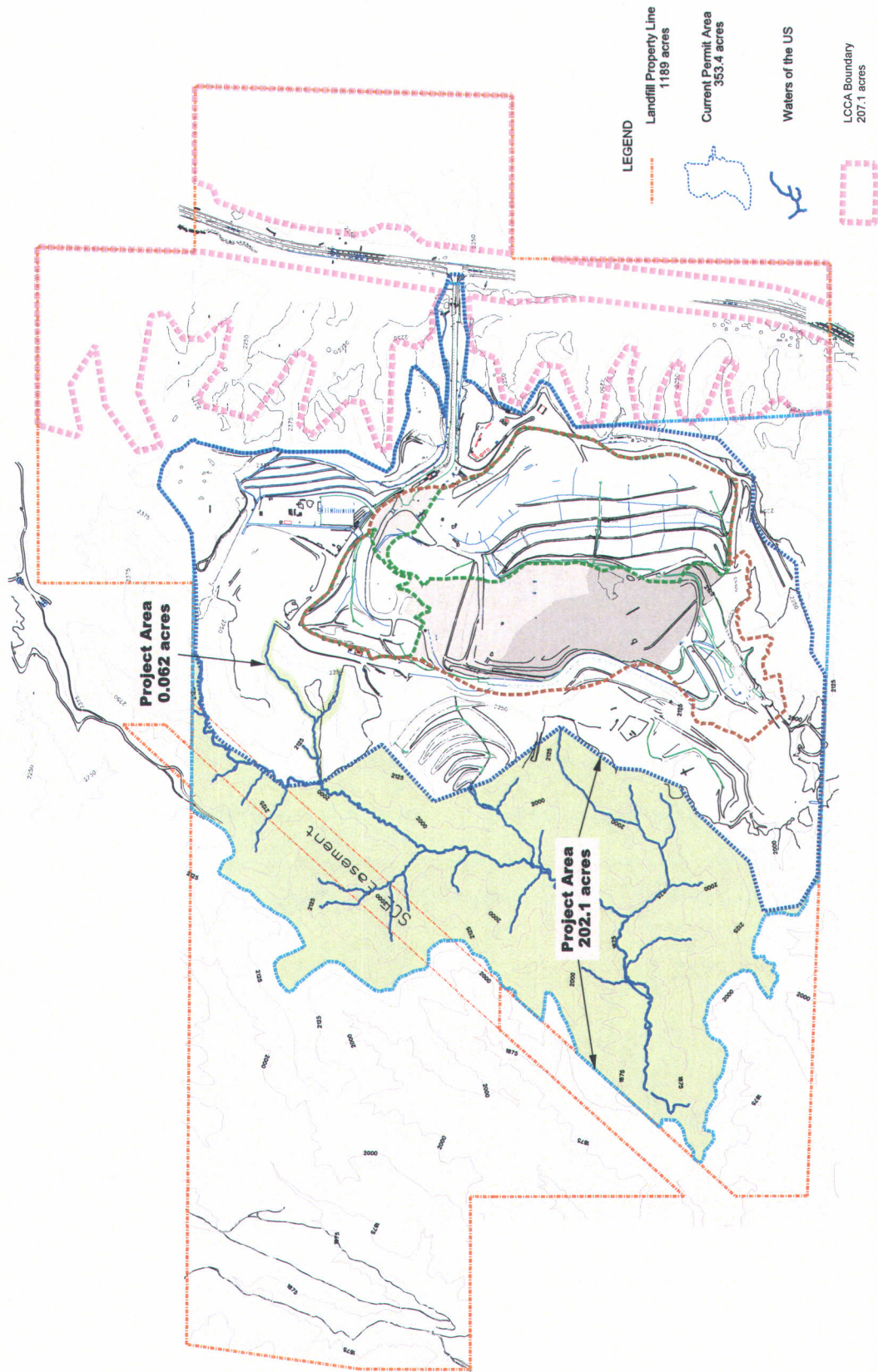


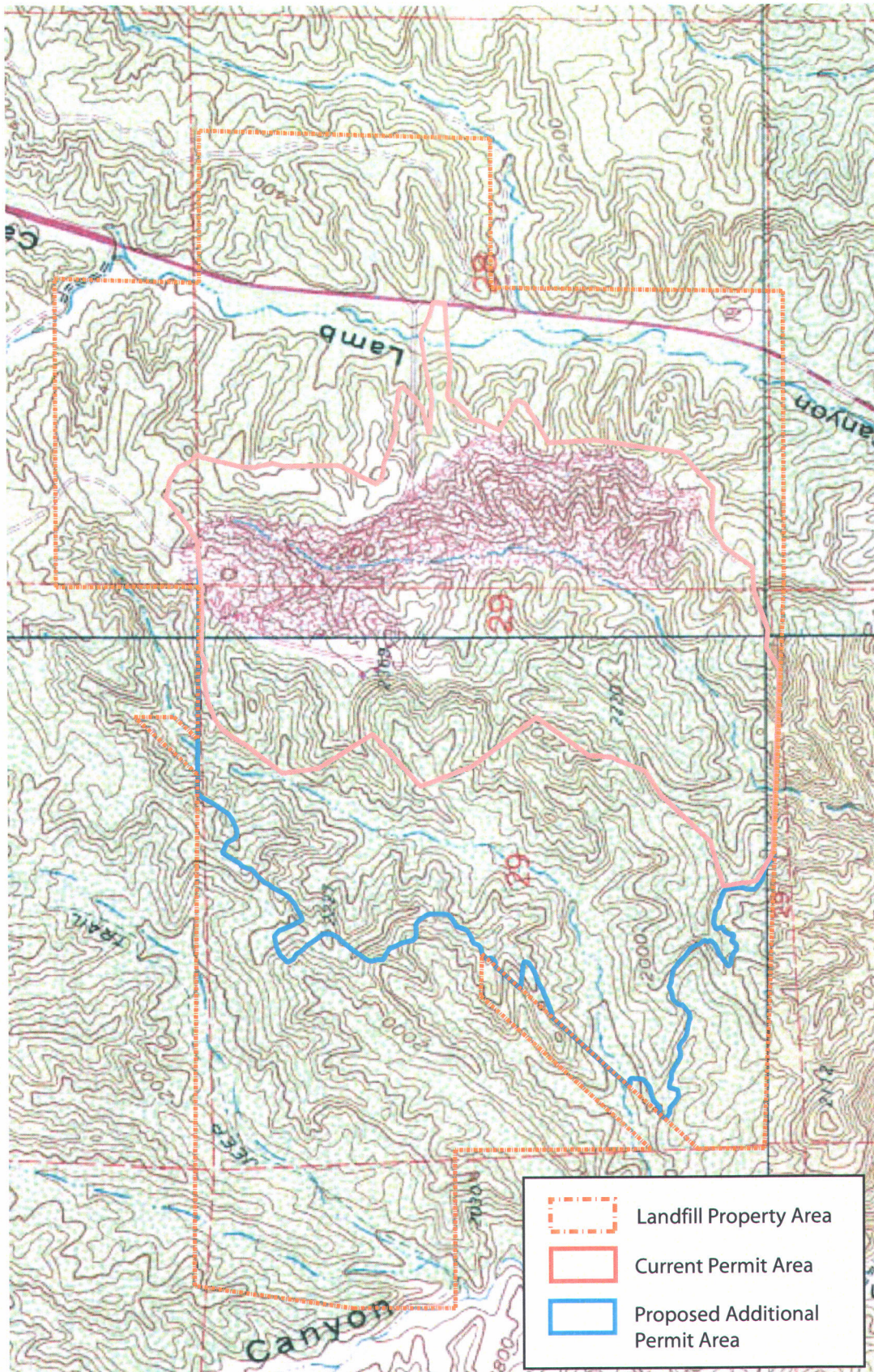
Vicinity Map



Exhibit 2

March 2013



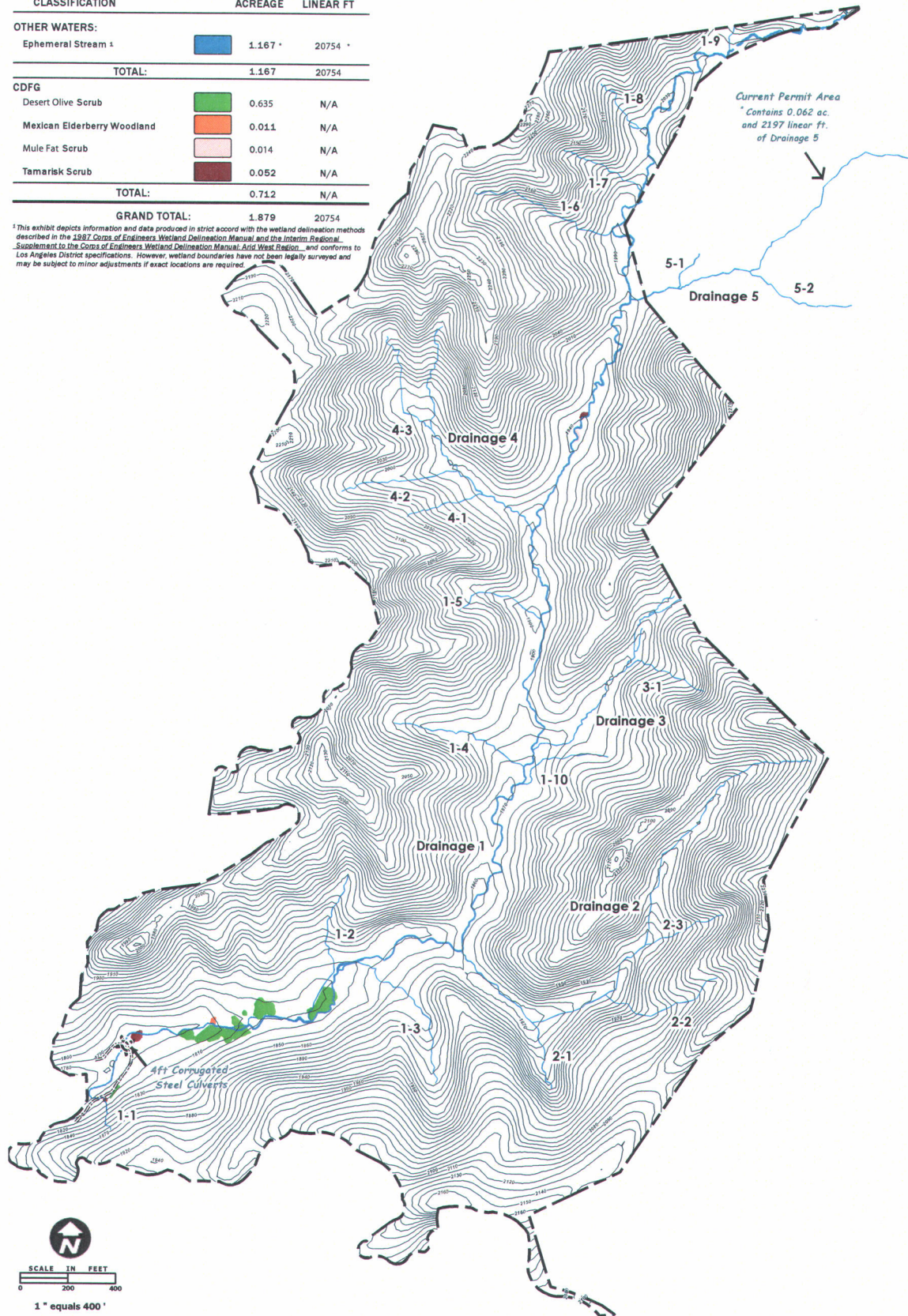


WATERS OF THE U.S. ACREAGE

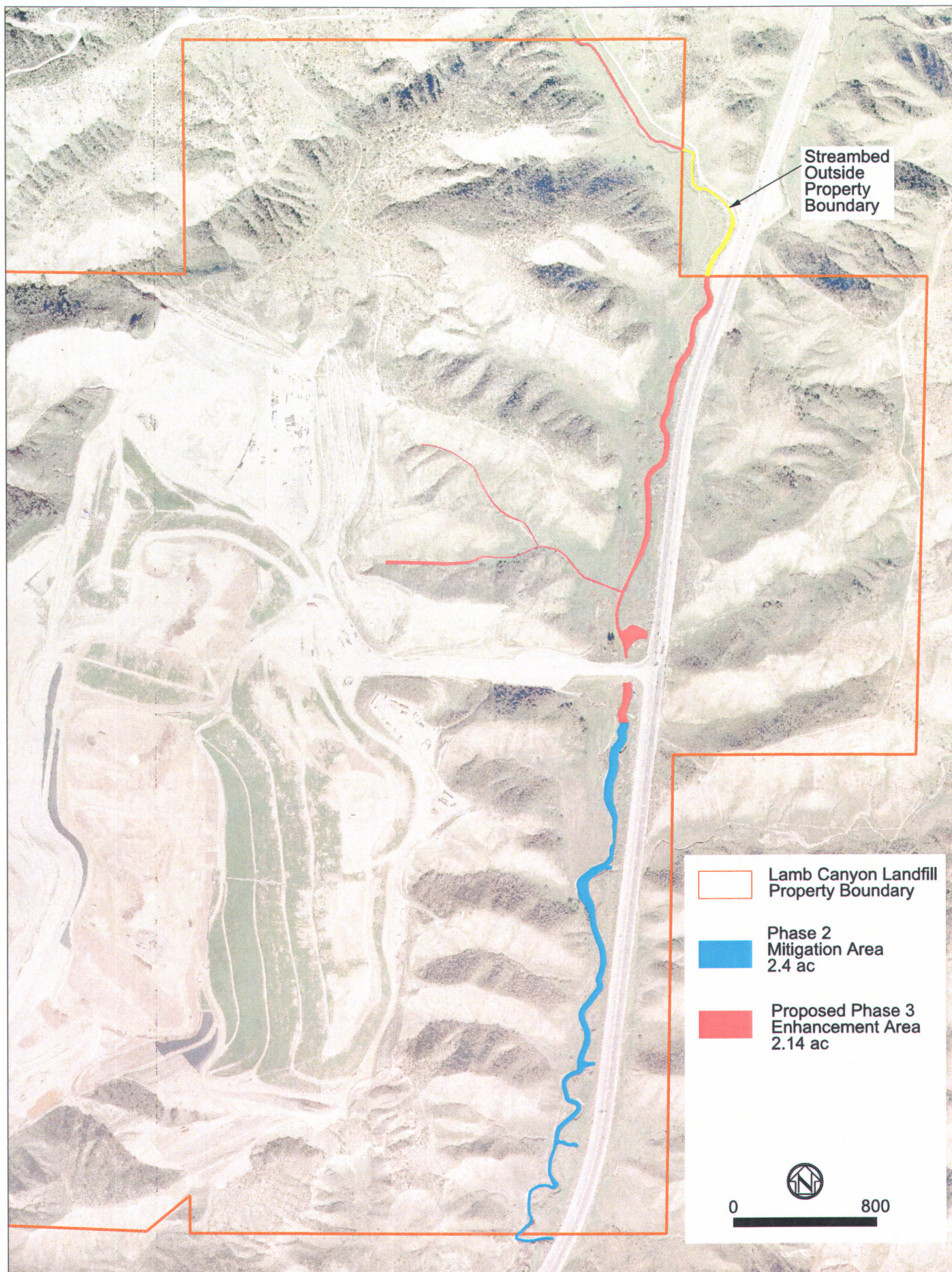
Topo: Interpolated from USGS 10m DEM (Approximate)

CLASSIFICATION	EXISTING ACREAGE	EXISTING LINEAR FT
OTHER WATERS:		
Ephemeral Stream ¹	1.167	20754
TOTAL:	1.167	20754
CDFG		
Desert Olive Scrub	0.635	N/A
Mexican Elderberry Woodland	0.011	N/A
Mule Fat Scrub	0.014	N/A
Tamarisk Scrub	0.052	N/A
TOTAL:	0.712	N/A
GRAND TOTAL:	1.879	20754

¹ This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual, Arid West Region, and conforms to Los Angeles District specifications. However, wetland boundaries have not been legally surveyed and may be subject to minor adjustments if exact locations are required.



Delineator: S. Taylor



Section 2 – OBJECTIVES/MITIGATION GOALS

2.1 - GOAL OF THE MITIGATION PROGRAM

The goal of the habitat mitigation program is to replace functions and values lost as a result of project implementation. The onsite goal is to improve existing habitat within the Lamb Canyon Landfill Conservation Area (LCCA) by performing restoration activities, including exotic removal, and hand planting, along the existing riparian corridor (Drainage G).

2.3 – HABITAT MITIGATION SUMMARY

Mitigation for the loss of jurisdictional drainages which will result from project implementation will be achieved through a combination of habitat creation, enhancement and restoration activities within the LCCA situated east of the project site and within the 1,189-acre landfill property (Exhibit 6, LCCA Onsite Habitat Enhancement Areas). This includes restoration of 2.14 acres within Drainage G. In addition to onsite mitigation, RCWMD shall purchase 2.34 acres (2:1 ratio) of mitigation bank (*in-lieu* fee) credits from an approved Mitigation/In-Lieu Fee program.

2.3 - RESTORATION DEFINITIONS

Restoration is a general term for the rehabilitation of natural systems. More specifically, it has been defined by the Society of Ecological Restoration (SER) as “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed” (SER, 2002). For the purpose of this report, habitat restoration, creation, enhancement, and management are terms that will describe the different type of restoration activities to take place, as defined by Lewis (1990), taken from the US Army Corps of Engineers Special Public Notice on Restoration Guidelines and Monitoring Requirements (2004).

- **Restoration** - the return to a pre-existing condition.
- **Creation** - the conversion of a persistent non-wetland habitat into wetland (or other aquatic) habitat. Two recognized subdivisions include artificial (requiring irrigation) and self-sustaining.
- **Enhancement** - the increase in one or more functions due to intentional activities (e.g. plantings).
- **Passive Re-vegetation** - allowing a disturbed area to naturally re-vegetate without plantings.
- **Management** - includes actions that ensure the project goals will be met, both in the long- and short-term.

2.4 - MITIGATION ACTIONS

Onsite Habitat Mitigation Program

As mitigation for impacts to “waters of the U.S.” and “waters of the State”, approximately 2.14 acres of habitat will be enhanced on land within the LCCA. This will be in addition to the 2.3 acres of offsite mitigation bank credit purchase, as described further in this section.

AMEC Earth & Environmental (AMEC), the previous consultant responsible for mitigation monitoring and reporting within the LCCA, had identified areas within Drainage G that support Riparian vegetation, as well as an area adjacent to the LCCA Riparian corridor that supports large colonies of non-native species (AMEC, 2008 & 2009). Riverside County Environmental Programs Division (EPD) has been monitoring the LCCA since 2010 to evaluate the level of non-native plants and to confirm areas within the riparian drainage suitable for enhancement and restoration activities. Proposed onsite mitigation efforts will focus primarily on the removal and eradication of exotic non-native vegetation as well as promoting a more robust riparian corridor by hand planting riparian container stock within jurisdictional areas of Drainage G. These activities will contribute to the current and long-term success of the onsite restoration and will help prevent establishment of non-natives in the mitigation area.

Non-natives within the proposed mitigation area consist of tocalote (*Carduus pycnocephalus*, *Centaurea calcitrapa*, *C. melitensis*, *C. solstitialis*, *Cirsium arvense*, *Cynara cardunculus*), short-pod mustard (*Hirschfeldia incana*), tamarisk (*Tamarix ramosissima*) and tree tobacco (*Nicotiana glauca*). Proposed restoration and enhancement techniques are described in Section 4 of this HMMP. Section 6 describes the targeted success criteria identified for this habitat.

Functions and Values of Habitat to be Enhanced/Restored as a Result of the Project

The Lamb Canyon Landfill Expansion Project will result in impacts to jurisdictional waters. The following is a summary of the existing functions and values in the habitat mitigation drainages as well as the functional gains following mitigation activities:

Existing Habitat Functions

Habitat functions - The existing drainages are ephemeral in nature and are sparsely vegetated. These drainages provide limited habitat functions and values including limited cover and nesting habitat.

Biogeochemical/water quality functions- The existing drainages are currently fed primarily by rainfall events from the immediate watershed. During storm events, exposed soil is picked up and transported into the drainages and eventually are carried downstream and off-site, affecting habitat and water quality further down in the watershed. There are no wetland areas onsite to significantly slow water flow, provide nutrient removal, transformation, toxicant trapping, or biogeochemical exchange.

Anticipated Functions and Values following Habitat Mitigation on LCCA

Habitat functions – Habitat restoration within the LCCA is ongoing. Removal of exotic, invasive species along with hand planting should promote native species diversity along the riparian corridor. Limiting non-native plants within the system will strengthen the ecological value and habitat function of the LCCA. Habitat enhancement activities will also increase the temporal connectivity and density of cover which will increase the nesting and live-in habitat of the riparian system.

Biogeochemical/water quality functions - The enhancement of the Riparian habitat and the planting and establishment of deep rooted shrubs and trees will provide improved biogeochemical and water quality functions. The stabilization of the soil through deep root penetration will allow for water recharge and the reduction of sediment into receiving waters.

Present and Proposed Uses of Mitigation Area and Adjacent Areas

The LCCA mitigation area is undeveloped land dominated by ruderal vegetation but also supports a large riparian tributary. Fencing and signage have been installed in strategic areas on and along the boundaries of the LCCA to protect the site and prevent decline of its natural habitat conditions. The signs describe the LCCA as a conservation area and clearly inform the public of the conservation effort in progress. The proposed use of the mitigation areas shall remain as a managed open space conservation area.

Rational to Expect Success

Reducing the prevalence of exotic non-native vegetation along with encouraging native species establishment through hand planting of riparian species will, over time, produce a fully functional riparian community that will have a higher ecological value than today. Active management and monitoring will track the progression of the restoration activities and will be the key component in determining the level of success.

The mitigation area (Drainage G) is located directly west of Highway 79 in a remote area of Riverside County known as the Badlands. The surrounding area includes the existing Lamb Canyon Landfill and additional open space. The primary access to the mitigation area is via Lamb Canyon Drive and additional infrastructure including frontage roads, trails, fire hydrants, or other irrigation sources is highly limited. Herbicide application for the treatment of exotic non-native species has proven to be highly successful in a variety of habitat types. However expected success for hand planting will be much more variable and subjected to annual hydrological cycles since installation of irrigation along the enhancement areas of Drainage G is infeasible due to lack of infrastructure and access.

Mitigation Bank Credits (In-lieu Fee) Purchase

In addition to the above proposed mitigation activities within the LCCA, approximately 2.3 acres (minimum) of mitigation bank credits would be purchased from an approved Mitigation/In-Lieu Fee Program for restoration, enhancement and creation of wetlands and waters within the Santa Ana River Drainage. The purchase of mitigation credits would result in the enhancement, restoration, or creation of ephemeral or riparian habitat. Since impacts are to low functioning ephemeral drainages, the purchase of mitigation bank fee credits would likely result in the overall functional gain for riparian habitat as that fee paid for credits is applied toward a restoration project.

2.5 - TIME LAPSE BETWEEN IMPACTS AND ESTABLISHMENT OF MITIGATION

Both mitigation measures would be conducted in an “upfront” manner, with the initiation of on-site restoration activities and the purchase of mitigation bank credits within the next 2 years. Project impacts to the jurisdictional drainages would occur incrementally over the ~36 year life of the project. Therefore, the temporal losses typically associated with the lag time between project regulatory authorization/impact and the installation of permittee-responsible mitigation would be avoided.

When viewed in terms of the temporal gains associated with conducting and funding mitigation in an “upfront” manner, the functional gains associated with mitigation for higher value resources than those impacted, and the diversity of mitigation strategies (local permittee-responsible mitigation within the Lamb Canyon watershed, a tributary to the San Jacinto River, as well as the contribution of funds to an agency-approved, mitigation banking instrument), the proposed mitigation measures would result in appropriate habitat mitigation for the onsite impacts.

2.6 - OWNERSHIP AND RESPONSIBLE PARTIES

The RCWMD is the responsible party for implementation and monitoring of the onsite LCCA mitigation area. All remedial and/or contingency measures required during the initial monitoring period would be the responsibility of the RCWMD. The USACE and RWQCB will be contacted in the case of a change in ownership or parties responsible for implementation of this mitigation plan.

RCWMD can be contacted at the address listed below.

Riverside County Waste Management Department
14310 Frederick Street
Moreno Valley, CA 92553
Contact: Ryan Ross
Telephone: 951.486.3200

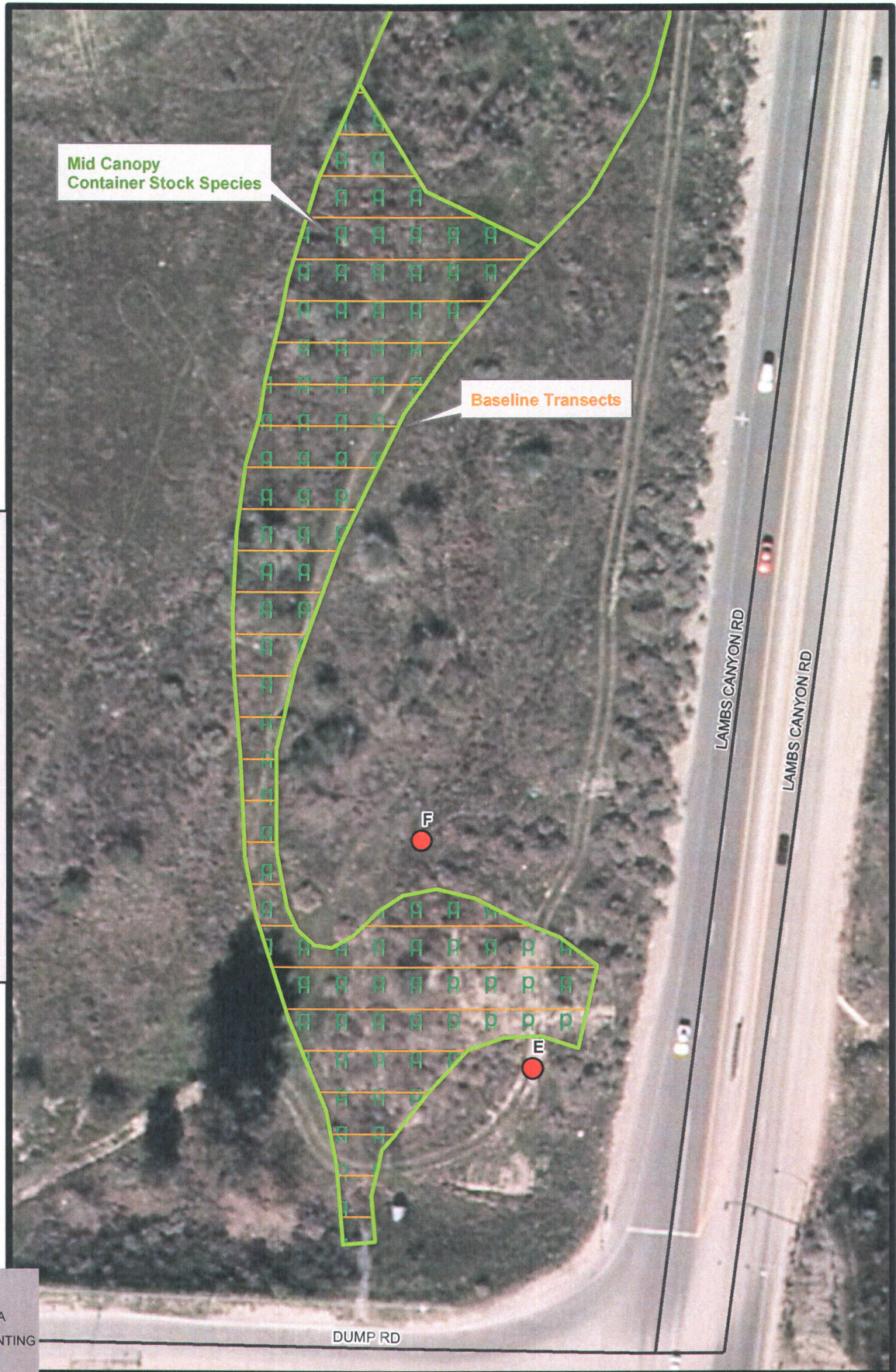
Damage to the enhancement effort due to vandalism or other unexpected causes shall be evaluated by the RCWMD and the regulatory agencies to determine responsibility for corrective actions, if any.

2.7 – SITE PROTECTION INSTRUMENT & LONG TERM MANAGEMENT

The onsite LCCA mitigation area will be protected through the recordation of a conservation easement to the RCA. Long-term protection and management of the LCCA habitat mitigation area will be under the direction of the RCWMD. Offsite mitigation bank credit purchase would be applied toward the restoration/enhancement of an area preserved and endowed by an approved Mitigation/In-Lieu Fee Program.

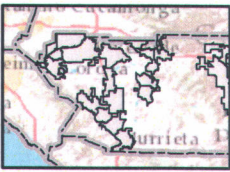
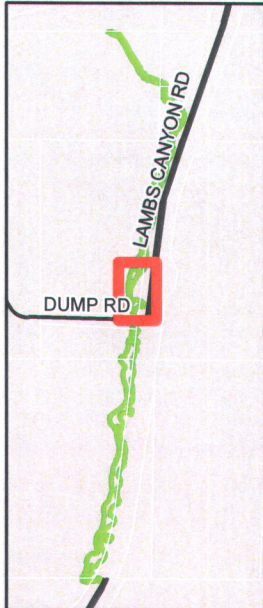


Exhibit 7 Phase 3 Enhancement Planting Area



Mid Canopy Container Stock Species

Baseline Transects



March 2013

- PhotoSpots
- ENHANCEMENT AREA
- ENHANCEMENT PLANTING
0.87 a cres

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

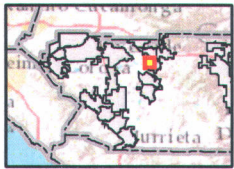







Exhibit 8 Phase 3 Priority Treatment Areas



March 2013



-  Tree Tobacco
-  Priority Treatment Areas - 0.68 ACRES
-  Enhancement Area

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.



SECTION 3 – SITE SELECTION & BASELINE INFORMATION

3.1 – SITE SELECTION

Mitigation goals for the 207.1 acre LCCA are based upon the findings and conclusions of a biological resource assessment conducted by AMEC (AMEC, 2007). The primary goal for the LCCA is to enhance the biological values of the 3.987 acre riparian corridor that runs north-south on the east side of Highway 79. A portion of the riparian corridor was burned in the Esperanza fire. The ultimate goal of this restoration effort is to improve forage, cover, nesting sites and connectivity for wildlife while reducing the presence of exotic non-native plant species. Non-native vegetation is present in both the Riparian and upland areas. Exhibits 6 & 7 depict the areas selected for onsite restoration.

3.2 – BASELINE INFORMATION

The proposed 2.14 acre enhancement area is located in the northern portion of the existing riparian corridor known as Drainage G (see Exhibit 6- LCCA Onsite Habitat Enhancement Areas). Vegetation primarily consists of mulefat scrub, with only a small amount of willow scrub habitat near the southern boundary of the LCCA. The northern portion of the riparian area is comprised of San Emigdio fine sandy loam, becoming interspersed with Metz loamy sand near the landfill entrance road and transitioning entirely to Metz loamy sand further south where the riparian channel exits the LCCA property. Non-native, invasive species such as Tocolote/ thistle Short-pod Mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), and Tamarisk (*Tamarix ramosissima*) are interspersed with native mule fat scrub and southern willow scrub habitats within the jurisdictional drainages. These species have substantial and apparent ecological impacts on physical processes, plant and animal communities, and vegetative structure within the riparian corridor.

Section 4 –RESTORATION & MAINTENANCE PLAN

4.1 – RESTORATION CONCEPT AND SCHEDULE

The primary concept behind the proposed restoration activities is to eradicate non-native invasive plant species from the proposed mitigation area while also improving the density, cover, and temporal connectivity of the riparian system by planting riparian vegetation in suitable areas. Restoration activities including herbicide application and planting will occur during different times throughout the year depending on project timelines and seasonal variations. The restoration effort is attempting to enhance the density of the native riparian vegetation and eliminate non-natives which will provide for a stronger vertical and lateral connection between vegetated areas of the system and will ultimately increase the foraging and live-in habitat of the feature as well as species diversity. Riparian systems are influenced by internal connectivity which allows the exchange of resources between patches of riparian habitat.

The ephemeral riparian drainage currently supports mulefat scrub and willow scrub riparian vegetation communities and enhancement of the feature would be achieved through a combination of invasive species removal along with planting of native tree and shrub species in select areas. The drainage is an ecological community that experiences seasonal inundation and flooding throughout the wet season and thus the feature supports riparian scrub plant communities at varying levels of ecological succession. Ecological succession in general is the orderly process of change in the species composition of an ecological community over time. Within a specified time interval certain species may become more or less abundant over time while other species may start to emerge or vanish within the given ecological community based on changes in the environmental condition.

Portions of the enhancement area are subjected to seasonal flood events that create high velocity flows that scour soil, remove debris, and washes vegetation downstream. This disturbance provides a change in the environmental condition that allows for the establishment of early successional plant species including herbaceous grasses, non-native invasive, and riparian vegetation. Other areas of the drainage are subjected to different environmental conditions that has allowed portions of the enhancement area to transition from an early succession plant community to a mid-canopy plant community that supports a more complex canopy of trees and shrubs including, western cottonwood (*Populus fremonti*), arroyo willow (*salix lasiolepis*), and Mexican elderberry (*Sambucus mexicana*). The mulefat scrub community associated with the enhancement area is currently in varying stages of succession.

The 2.14 acre enhancement area, as seen on Exhibit 6, is bisected by Lamb Canyon Road. Hydrological flows are conveyed under the access road from the northern portion of the riparian corridor to the southern portion of the LCCA via an existing culvert. Restoration activities (i.e. removal of non-native invasive plant species) will occur within the entire 2.14 acre enhancement area.

Eradication of target non-native species will occur within the entire 2.14 acre enhancement area wherever they are encountered. Treatment areas in the northern section, which currently support target non-natives in higher densities than other sections of the enhancement area, will be a priority for first year treatment and can be seen in Exhibit 8. The northern section also supports a large grove of tree tobacco (*Nicotiana glauca*), also identified on Exhibit 8, of approximately 15 trees. Removal of this grove will occur in accordance with weeding and eradication schedule discussed in Section 4.3. Tree tobacco individuals, which can quickly emerge on an annual basis, also occur randomly throughout the enhancement area and will be treated when encountered.

Enhancement planting using native mid canopy successional species will occur in a 0.87 acre enhancement planting area located in the northern section of the mitigation area (Exhibit 7). Target non-natives that are observed in this area will also be treated on an annual basis by spot treatment or hand removal to prevent any overspray into areas identified for enhancement planting. This enhancement planting area will be planted with sapling/container stock of tree and shrub species representing the mid –canopy and climax community stage of the riparian system, including arroyo willow (*Salix lasiolepis*), western sycamore (*Plantanus racemosa*), and western cottonwood (*Populus fremontii*). Planting species were selected based on community type, hydrology and the potential to function as mid canopy or climax community species. The candidate location for mid-canopy enhancement planting already supports a moderate understory of low growing vegetation and also supports mid canopy species in low densities. Encouraging the growth of mid canopy and climax community species will add ecological complexity, species diversity, improve wildlife habitat, and will enhance the lateral connection between patches of riparian vegetation within the system. Over time as the planted vegetation continues to mature the larger shrubs and trees will eventually begin to shade out competing non-natives and hopefully reduce the need for continued treatment.

In total approximately 100 individuals will be planted within the 0.87 acre enhancement planting area. Each of the three mid-canopy plantings species, arroyo willow, western sycamore, and western cottonwood, will be planted in equal amounts to maximize planting diversity. Approximately 33 individuals of each species will be utilized in the enhancement planting area. The 0.87 acre enhancement planting area is approximately 37,461 sq ft. To ensure that planted individuals are not overcrowded and allowed the proper area to become established, individuals will be planted approximately every 300 sq ft. East to west transects will be laid across the enhancement planting area approximately every 19 feet. Along each transect pin flags will be placed at 19 ft intervals and will represent a 300 sq ft planting area in which one individual will be planted at the center of each 300 sq ft area (see Exhibit 7 and Photo Exhibit 3).

Planting of container stock should take place between October 15 and February 1 in order to coincide with the appropriate weather conditions. Planting taking place during the wet season will allow new plantings time to become established before the dry summer season which decreases mortality and may achieve the desired success more quickly. To encourage new plantings to establish root systems and locate existing ground water sources, natural microhabitats such as depressions should be selected when possible. Supplemental water will be limited as Lamb Canyon is not set up for formal irrigation. Individual plantings may receive minimal water via a backpack sprayer on a very limited base. No enhancement activities will occur in the very northern portion

of the Phase 3 enhancement area as this area is upland in nature and does not support target non-natives in any low, moderate, or high densities. It would not be cost effective to propose hydroseed or planting as this area of the LCCA is stable and functions as upland ephemeral conveyance of water. See Photo Exhibit 2.

Recording initial planting efforts is crucial to the management of the enhancement planting area. Planting data will be included in each monitoring report and each annual work plan. Any deviations in the planting will be reported. An annual work plan will be prepared by the project manager prior to initiating annual planting efforts. The work plan will describe in detail the planting procedure, quantity, and exact location of all enhancement activities. Initial planting efforts, including base line conditions, transect locations, and vegetation monitoring data sheets will be included. Photo locations and GPS coordinates of enhancement and reference sites will also be part of the annual work plan.

4.2 - WEED ERADICATION AND WEEDING SCHEDULE

Invasion of exotic weeds is one of the greatest threats to the success of the mitigation projects. Seed rain of non-native species from outside sources can quickly colonize barren areas and can out-compete native species. Once established, the competitive exclusion of light, water, and nutrients by exotic plants makes it difficult for native species to re-establish and grow. A comprehensive weed eradication program shall be implemented to minimize the adverse effects of weed invasion.

Weed densities and control demands will depend on the seasonal rains and temperatures each year of project implementation. The timing of weed control may be different for each of the different target exotic species. Monitoring will be effective for early identification of seedling weed species and to schedule control methods according to the phenology of each weed species.

For efficient control of exotic species, specified weeds must be controlled before they produce viable seed. Methods of control will depend on the species, the density of weeds, the area of infestation, and the ecological sensitivity of the habitat. Hand or mechanical means are preferred methods for control of weed species. Some species may be controlled by a combination of cutting and removal, followed by spot foliar herbicide spray application on re-growth. All exotic plants and their associated humus shall be removed and disposed of at an off-site location.

Limited use of selected herbicides is specified when no other effective alternative is available to remove and control certain noxious weed species. Herbicide treatment is specified for weed species that may re-sprout from roots or rhizomes. Herbicides that are registered for use in California for natural areas are specified for particular weed species at specific rates noted on the labels. For this weed management plan, recommended herbicides include mainly glyphosate (e.g., Round-up or Rodeo). Only EPA approved, glyphosate base, systemic herbicides (e.g., Rodeo) will be allowed when applying herbicides within 100 feet of a natural watercourse or body of water. Glyphosate is a non-selective herbicide, and its mode of action works against both broadleaf weeds and grasses. The application of herbicides must be implemented without harming non-target native species.

The following glyphosate concentrations shall be used according to the type of application required as per the product label:

Foliar spray application - a minimum of two percent solution.

Foliar wick application - a 33 percent solution.

Cut stump treatment - a 100 percent solution.

Herbicide treatment shall be conducted only when weather conditions are conducive to effective uptake of the herbicide by the target species (e.g., sunny, dry with ambient temperatures 65 degrees Fahrenheit, and when plants are at the specified growing stage), and when wind conditions are such that herbicide drift is minimized (five mph or less). Herbicide preparation shall be allowed only in approved staging areas more than 100 feet from a stream course or body of water. Treated plants or stumps shall not be disturbed until the applied herbicide has had time to take effect per the manufacturer's instruction.

Year 1

1. Initial treatment of tree tobacco [and other targeted species] with basal bark application of Garlon 4. Re-spray as necessary following re-sprouting or seed germination. Leave all specimens in place to continue to provide cover and perching spots while minimizing soil disturbance.
2. Depending upon rainfall and resulting germination of Tocolote [and other identified species] chemically or mechanically eradicated this species. Treat during the spring season when plants are actively growing but less than six (6) inches tall [or] before flowering, whichever comes first. In any year where there is negligible germination and/or growth of this species, defer treatment until following year.
3. Document all activities and results of the HMMP in an annual report to be send to the USACE.

Year 2

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 3.

4. Document all activities and results of the HMMP in an annual report to be send to the USACE.

Year 3

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 4.
4. Document all activities and results of the HMMP in an annual report to be send to the USACE.

Year 4

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.
2. If determined to be necessary, re-treat Tree tobacco by cutting the plant fist and applying the herbicide on the cut stump.
3. If rainfall has resulted in germination of Tree tobacco, tocolote, and short-pod mustard, treat prior to flowering by manually removing or spraying with glyphosate in concentrations described below, or other appropriate compound. If no germination has occurred, defer this task to Year 5.
4. Document all activities and results of the HMMP in an annual report to be send to the USACE.

Year 5

1. Conduct at least two site visits (recommended during spring and summer) to assess and document percent cover and condition of Tree tobacco, tocolote and short-pod mustard and need (if any) for re-treatment. Evidence of succession of native species in previously treated areas will also be documented.

2. Treat any surviving or seedling of Tree tobacco, tocolote and short-pod mustard, if necessary.
3. Year five will provide an indication of HMMP success. The goal is to have the plant cover and exotic cover success criteria identified in this HMMP to be met.
4. Document all activities and results of the HMMP in an annual report to be send to the USACE.

Below are recommended species-specific eradication techniques:

Tree tobacco (*Nicotiana glauca*)

All individuals of these species should be removed from the project area. Seedling plants can be removed by hand pulling. For larger individuals, stump treatment with glyphosate should be used. The plants should be treated in spring when actively growing. A phased treatment is recommended. Phase 1: The plants shall be cleanly cut, horizontally, close to the ground (using a saw, rotary brush cutter or similar tool). All the cut vegetation shall be removed from the project area the same day it is cut and disposed of legally off-site. Phase 2: The stumps or stems shall be re-cut, cleared of sawdust, and immediately painted with 100 percent glyphosate within two minutes of cutting before the cut surface begins to congeal to ensure penetration of the herbicide. Plants should be checked a month after application to determine the success of the herbicide treatment. Any re-growth from the treated stumps should be treated with the foliar herbicide application in the same season or as re-growth appears in the next growing season.

Tocalote (*Carduus pycnocephalus, Centaurea calcitrapa, C. melitensis, C. solstitialis, Cirsium arvense, Cynara cardunculus*)

Invasion of thistle into wildland areas is a persistent problem in California. They displace native species, and can deplete soil moisture reserves in grassland areas. Most animals avoid grazing on it because of its spines.

Most large-scale infestations are difficult to control. In small populations spot eradication is the most effective method of preventing large-scale infestations. In established stands, the elimination of new seed production coupled with long term management, monitoring and follow-up treatment will be the most effective method for eradication. Thistle control can include physical removal but root must be severed at least four inches below ground level. Plants should be pulled well before seed is set. Once plants have reached the bolting stage, effective control can be achieved with glyphosate (1 percent solution). A foliar spray of 2 percent glyphosate (as Roundup® or equivalent) can be effective on bolting plants. The best time to treat with glyphosate is after annual grasses or forbs have senesced, but prior to seed production (May-June). Follow-up and a minimum of twice-yearly monitoring are needed.

Tamarisk (*Tamarix ramosissima*, *T. chinensis*, *T. gallica*, *T. parviflora*)

Saltcedar has been associated with dramatic environmental changes in riparian geomorphology, groundwater availability, soil chemistry, fire frequency, plant community composition, and native wildlife diversity. Salt cedar is known to trap and stabilizing alluvial sediments, which can result in the narrowing of stream channels and increased flooding frequency. An increase in soil salinity level may result from large populations of this invasive plant. Soil salinities increase as a result of inputs of salt from glands on saltcedar leaves, resulting in the inhibition of growth and germination of native riparian species. Saltcedar can reproduce both vegetatively and by seed, and can regenerate from branches, which fall on moist soil. Prolific seed production and its rapid germination and growth can result in a rapid colonization.

Once established, saltcedar is difficult to eradicate. Resprouting following cutting or burning makes this species difficult to kill with mechanical methods. Individual seedling can be physically removed (entire plant). For heavily infested areas root plowing and cutting are initially effective but must be combined with follow-up treatment with herbicide. Several herbicides are commonly used to combat saltcedar, including imazapyr, triclopyr, and glyphosate. An effective method is to foliar apply imazapyr (Arsenal®) combined with glyphosate (Rodeo® or equivalent). The cut stump method is also effective when triclopyr, (Garlon 4® or Garlon 3A®) is applied. Triclopyr (as Pathfinder II®) can be applied directly to the basal bark of stems less than about four inches in diameter without cutting the stem (the bark must be wetted completely around the base of each stem). Garlon 3A® should be applied during the growing season. Resprouts can be treated with foliar applications of herbicide. Foliar applications of glyphosate or imazapyr achieve are best applied in late spring to early fall during good growing conditions. Triclopyr can be diluted with diesel or natural oils, a dilution of 3 parts water to 1 part of Garlon 4® has proven effective.

Shortpod Mustard (*Hirschfeldia incana*)

A foliar spray of 2 percent glyphosate (as Roundup® or equivalent) is effective on bolting plants. The best time to treat with glyphosate is in early spring when plants are emerging, and prior to seed production (May-June). Follow-up and minimum twice-yearly monitoring are needed.

4.3 - GENERAL MAINTENANCE

During each maintenance visit, the habitat mitigation areas shall be inspected for trash, vandalism, erosion or slope failure, disease and pest infestation that may threaten the long-term health of the revegetated community. Trash will be removed, vandalism and erosion will be repaired, and appropriate pest control techniques will be employed as necessary. In addition, any signs of distress or mortality will be noted and rectified if the cause is apparent. If there are reoccurring or persistent indicators of distress or mortality and/or the cause of these problems is not apparent, the appropriate regulatory agencies will be notified.

Section 5 - MONITORING PLAN

A monitoring program is necessary to document performance of the mitigation areas relative to the identified success criteria, as well as to identify any shortcomings or problems in the mitigation areas. Early detection of problems or other unforeseen issues allows for adaptive management and mid-course adjustments to the mitigation program that will maximize the likelihood of success.

5.1 - HABITAT MONITORING PROTOCOLS

It is important to monitor both the physical and the biological aspects of the habitat within the mitigation areas, as both are indicative of the functional condition of an area. The routine monitoring will include evaluation of plant species richness, plant cover, percentage of exotic vegetation, and percent survival.

Biological Monitoring

Plant monitoring shall be performed along transects using the point or line intercept method (Bonham, 1989). A minimum of one transect shall be run the entire length of each enhancement planting area. Data on the biological composition of the planted area will be collected at one-foot intervals along each transect. The following plant data will be collected and calculated for mitigation areas. These data will be used to assess the success of the mitigation areas and to identify any necessary remedial actions:

1. Relative cover of both native and exotic species - percent of the ground surface covered by the crown area of a species. Because plant crowns overlap relative cover can exceed 100 percent
2. Plant density - number of individual per unit area
3. Species richness - number of species in the sample area
4. Species diversity - a combination of species diversity and relative abundance. This will be expressed using a Shannon Index (Magurran, 1988)
5. Structural diversity - number of vegetative strata present
6. Percent Survival- measuring the percent survival among native plants installed

In addition, the general health, growth rate, and mortality of plant species will be noted along each transect, to include newly planted species.

Photo Documentation

Photograph stations will be established along the perimeter of each enhancement planting area. Site photographs will be taken from the photograph stations during the last scheduled monitoring visit per year and the photographs and a map showing the locations of each station will be included in every monitoring report. These locations are approximate and every effort should be taken to maintain the location of the stations throughout the duration of the monitoring period.

5.2 - MONITORING REPORTS

Annual reports summarizing the habitat monitoring results shall be submitted to USACE and other regulatory agencies, as required, beginning the year after commencement of the mitigation program, and continuing throughout the monitoring period. Monitoring reports will discuss maintenance activities performed; the results of the monitoring; an assessment of the progress made towards achievement of the success criteria; and recommendations of any remedial or adaptive management measures that may be necessary or prudent. Also included in the report will be: planting locations/quantities, date and time of invasive plants removal events, number of hours worked, frequency and timing of removal and treatment, description/list of invasive plants removed, amount of invasive plants removed, description of techniques and tools used to remove invasive plants, description of method of disposal of invasive plants that were removed. The specific content of the monitoring reports will follow the Corps Regulatory Guidance Letter for Mitigation Guidelines and Monitoring Report Requirements (2004) and shall, at a minimum include:

1. Names of persons conducting field data, analysis, and report preparation
2. Results of field data collection and analysis of quantitative and qualitative data
3. Comparison of current site conditions with previous conditions (i.e., results of baseline and earlier monitoring)
4. Performance of site relative to success criteria
5. Problems and remedial actions taken
6. Log of maintenance activities performed previous year and
7. Site photographs from reference stations.

5.3 - HABITAT MONITORING SCHEDULE

Habitat mitigation monitoring typically is conducted for five years. Planting, non-native plant removal, and monitoring may cease prior to the 5 years if the success criteria have been met. The mitigation sites shall be monitored quarterly during the first year, semi-annually during the second and third years, and annually thereafter for at least two more years. Required maintenance will be performed within three weeks of identification of any damage or needs. Monitoring will begin one month after the first major eradication treatment is conducted and will continue until either:

- 1) The mitigation areas have met the final success criteria,
- 2) The USACE determines that monitoring is no longer required; or
- 3) Alternative mitigation sites or strategies are adopted (and approved by the USACE and RWQCB).

Section 6 – PERFORMANCE STANDARDS AND CONTINGENCY MEASURES

This section provides success criteria based on the biologic conditions of the habitat mitigation areas. The ultimate success criteria will be used as the basis for certification of mitigation success and/or the need for contingency measures.

6.1 - SUCCESS CRITERIA BASED ON GENERAL SITE CHARACTERISTICS

To be considered successful, the onsite habitat mitigation area must achieve the following standards:

- The Enhancement Planting Area: (1) shall have a minimum of 65% survival for all plantings, and (2) shall attain 80% cover after 5 years.
- The enhancement area shall not contain more than 5 percent nonnative plant species.

6.2 - ADAPTIVE MANAGEMENT AND CONTINGENCY MEASURES

An integral part of a successful mitigation program is the ability to detect problems with the mitigation early in the process, determine the cause of the problem, and attempt to modify the mitigation program to accommodate emerging issues or situations. Problems, such as trash, vandalism, isolated instances of plant mortality, or small-scale weed or pest infestations will be rectified as they are discovered during routine site monitoring.

6.3 - CERTIFICATION OF SUCCESS AND AGENCY NOTIFICATION

The 2.14 acres of onsite habitat mitigation areas will be considered a success when all criteria identified in Sections 6.1 of this document are met. When the 5-year monitoring period is complete, and/or if the permittee believes all performance standards have been met, the permittee shall notify applicable regulatory agencies. The notification will be accompanied by the most recent annual monitoring report and any supplemental information necessary to document attainment of the success criteria.

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Photo Exhibit 1

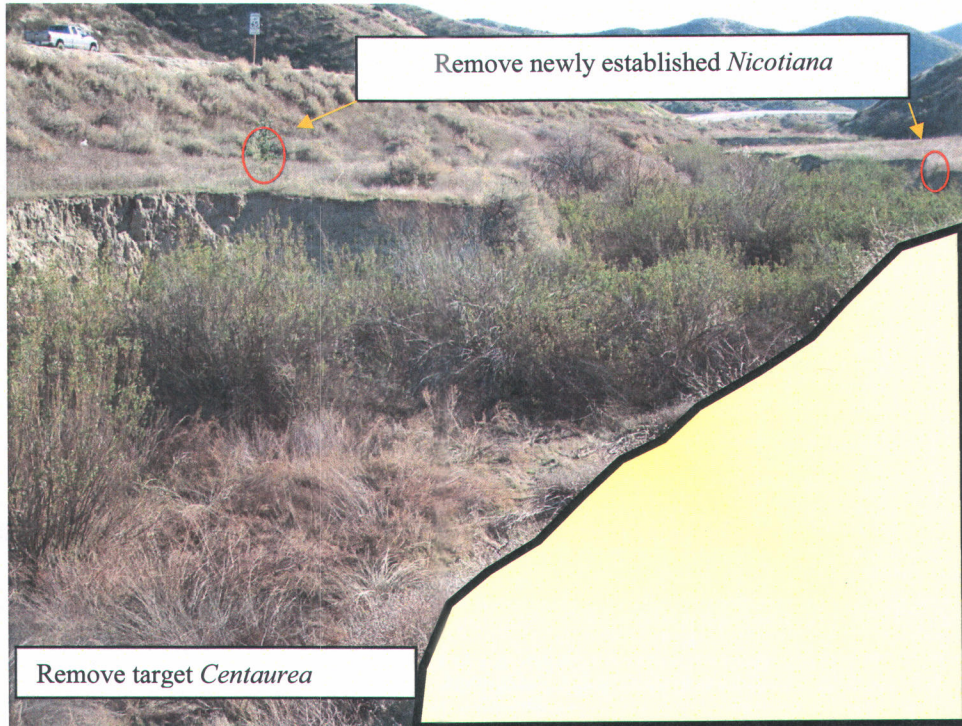


Photo Location A: South of access road looking south along LCCA

Photo Exhibit 2



**Photo Location C: Looking west along northern most portion of LCCA –
No enhancement activities proposed**



Photo Location D: Looking east along northern most portion of LCCA

Photo Exhibit 3

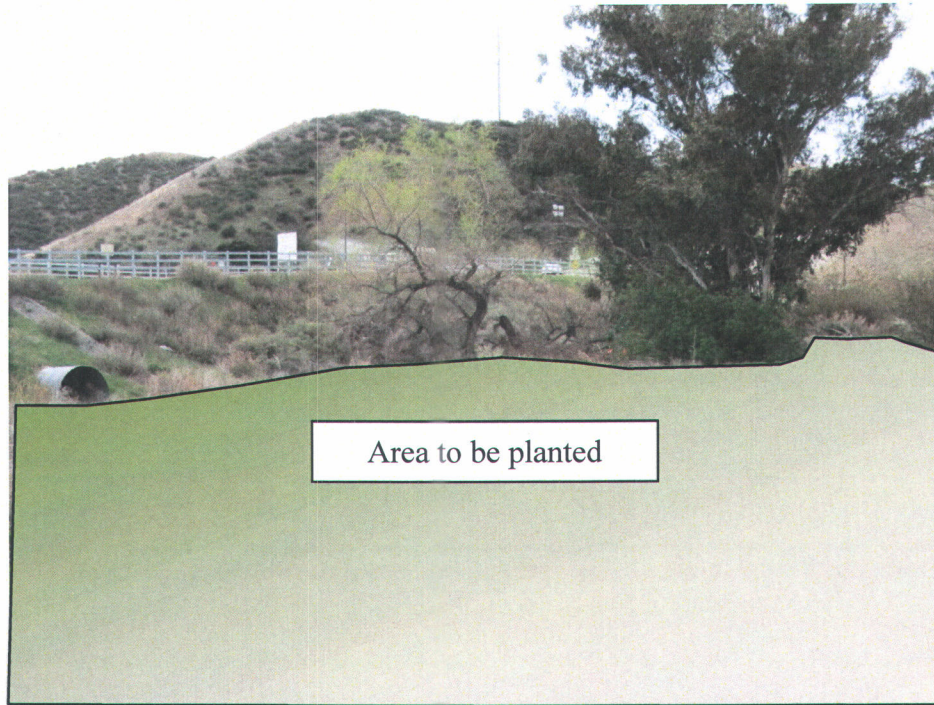


Photo Location E: Looking west along northern section enhancement planting area to be planted



Photo Location F: Looking west along northern section enhancement planting area to be planted

Original Negative Declaration/Notice of Determination was routed to County Clerks for posting on.

COUNTY OF RIVERSIDE
DEPARTMENT WASTE RESOURCES
NOTICE OF DETERMINATION

Date via Waste Initial

TO:

X County Clerk
County of Riverside

For County Clerk's Use Only:

FROM:

Riverside County
Department of Waste Resources
14310 Frederick Street
Moreno Valley, CA 92553

Subject: Filing of Notice of Determination in Compliance with Section 21152 of the Public Resources Code

Project Title: Restrictive Covenant/Deed Restriction over the Lamb Canyon Conservation Area (LCCA)

State Clearinghouse (SCH) No.: 2003061074/2008121005 **Contact:** Ryan Ross **Phone:** 951-486-3200

Project Applicant/Property Owner & Address: Riverside County Department of Waste Resources
14310 Frederick Street, Moreno Valley, CA 92553

Project Location: The Lamb Canyon Landfill (LCL) is located at 16411 Lamb Canyon Road, Beaumont, CA, 92223, just off of Highway 79, between the cities of Beaumont and San Jacinto, in unincorporated Riverside County.

Project Description: This Project involves the authorization to establish a Restrictive Covenant, consisting of approximately 207.1 acres at the LCL within portions of Assessor's Parcel Numbers 424-120-009, 424-170-001, 424-170-002, 424-170-004, 424-170-005, 424-180-001, and 424-180-002, commonly known as the LCCA.

This is to advise that the Riverside County Board of Supervisors has approved the above-referenced Project on May 22, 2018 and has made the following determinations regarding that project:

1. Nothing further is required pursuant to the California Environmental Quality Act (CEQA), whereas all potentially significant effects of the Project have been adequately analyzed in previously adopted Environmental Assessments/Mitigated Negative Declarations (EAs/MNDs) No. 39813 and No. 39652, prepared for the Lamb Canyon Landfill (LCL) Expansion Project (SCH No. 2003061074) and the Solid Waste Facility Permit (SWFP) Revision Project (SCH No. 2008121005) respectively.
2. Mitigation measures were not made a condition of approval for this Project.
3. A mitigation monitoring program was not adopted for this Project.
4. A statement of overriding considerations was not adopted for this Project.
5. Findings were made pursuant to the provisions of CEQA.

This is to certify that the adopted environmental documents and record of project approval is available to the general public at:

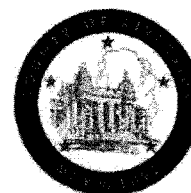
Riverside County Department of Waste Resources
14310 Frederick Street, Moreno Valley, CA 92553

Signature: 

Title: Principal Planner

Date: 5-22-18

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM
12.1
(ID # 6739)**

**MEETING DATE:
Tuesday, May 8, 2018**

FROM : DEPARTMENT OF WASTE RESOURCES:

SUBJECT: DEPARTMENT OF WASTE RESOURCES: Resolution No. 2018-073, Notice of Intention to Establish a Restrictive Covenant Affecting County Owned Fee Interest In Real Property, Commonly Known As The Lamb Canyon Conservation Area (LCCA), in the Unincorporated Area of the County of Riverside, State of California, Identified within portions of Assessor's Parcel Numbers 424-120-009, 424-170-001, 424-170-002, 424-170-004, 424-170-005, 424-180-001, 424-180-002, District 5. [\$0 - Department of Waste Resources Enterprise Funds] (CEQA Finding of Nothing Further Required)

RECOMMENDED MOTION: That the Board of Supervisors:

1. Find that nothing further is required pursuant to the California Environmental Quality Act (CEQA) as all potentially significant effects of the Project have been adequately analyzed in adopted Environmental Assessments/Mitigated Negative Declarations (EAs/MNDs) No. 38691 and No. 39652, prepared for the Lamb Canyon Landfill (LCL) Expansion Project (SCH No. 2003061074) and the Solid Waste Facility Permit (SWFP) Revision Project (SCH No. 2008121005) respectively; and

Continued on page 2

ACTION: Policy

Hans Kemkamp, General Manager - Chief Engineer 4/10/2018

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Ashley, seconded by Supervisor Perez and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended and is set for Public Meeting on or after May 22, 2018 at 9:00 a.m. or as soon as possible thereafter.

Ayes: Jeffries, Tavaglione, Washington, Perez and Ashley
Nays: None
Absent: None
Date: May 8, 2018
xc: Waste, COBcg

Kecia Harper-Ihem
Clerk of the Board

Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

RECOMMENDED MOTION: That the Board of Supervisors:

2. Adopt Resolution No. 2018-073, Notice of Intention to Establish a Restrictive Covenant affecting County owned fee interest in real property, commonly known as the Lamb Canyon Conservation Area (LCCA), in the County of Riverside, State of California, Identified within portions of Assessor's Parcel Numbers 424-120-009, 424-170-001, 424-170-002, 424-170-004, 424-170-005, 424-180-001, and 424-180-002; and
3. Direct the Clerk of the Board to give notice pursuant to Government Code Section 6061.

Prev. Agn. Ref.: M.O. 12.5 of 07/29/03
M.O. 12.4 of 03/17/09

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$0	\$0	\$0	\$0
NET COUNTY COST	\$0	\$0	\$0	\$0
SOURCE OF FUNDS: Waste Resources Enterprise Fund			Budget Adjustment:	No
			For Fiscal Year:	17/18

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

On July 29, 2003 (M.O. 12.5) and March 17, 2009 (M.O. 12.4), the Board of Supervisors (Board) adopted Mitigated Negative Declaration's (MNDs) for two separate Projects at the LCL. These Projects revised the daily tonnage and vehicle limits, as well as increased the landfill disposal footprint and permitted disturbance areas, among other improvements and operational changes at the LCL.

As mitigation for Project impacts to jurisdictional waters, the Riverside County Department of Waste Resources (RCDWR) obtained permits from the United States Army Corps of Engineers' (USACE) and the California Department of Fish and Wildlife (CDFW), specifically USACE Section 404 Permits- SPL-2004-01928/SPL-2010-00535-SME, and Streambed Alteration Agreements (SAA) – SAA No. 1600-2004-0100-R6/SAA No. 1600-2010-0177-R6, collectively referred to as the "Permits."

The Permits require that the RCDWR establish a Conservation Easement (CE) over 207.1 acres adjacent to the LCL, commonly known as the LCCA. Since 2004, the RCDWR has actively managed the LCCA's biological resources in compliance with the Permits and has been working with USACE to develop the CE; however, due to staffing issues at USACE, the CE has not yet been processed.

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

Because of the undetermined schedule for processing the CE, the USACE and CDFW have agreed to allow the RCDWR to record a Declaration of Restrictive Covenants ("Restrictive Covenant") over the LCCA as an interim measure until such time that a CE addressing the LCCA is fully executed. This will allow the RCDWR to begin necessary site development and drainage improvements at the LCL within USACE and CDFW jurisdictional areas.

Resolution No. 2018-073 has been approved as to form by County Counsel.

CEQA Findings

Regarding the proposed notification to establish a Restrictive Covenant affecting County-owned fee simple interests in real property at the LCL (Project), it was determined that nothing further is required because all potentially significant environmental effects have been fully analyzed in previously adopted EAs/MNDs, specifically EA No. 38691 and EA No. 39652, prepared for the LCL Expansion Project (SCH No. 2003061074) and the SWFP Revision Project (SCH No. 2008121005), respectively. The Project will not result in any new significant environmental effects not identified in the adopted EAs/MNDs; the actions will not substantially increase the severity of the environmental effects identified in the EAs/MNDs; and no additional mitigation measures have been identified. As a result, no further environmental documentation is required pursuant to the provisions of CEQA (Public Resources Code, § 21000 et seq.).

Impact on Residents and Businesses

There will be no impact on residents or businesses.

ATTACHMENTS:

ATTACHMENT A. Resolution 2018-073



Jason Farin, Senior Management Analyst

4/30/2018



Gregory T. Priamos, Director County Counsel

4/17/2018