SUBMITTAL TO THE BOARD OF DIRECTORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

417

FROM: Regional Park & Open-Space District

SUBMITTAL DATE: March 29, 2012

SUBJECT: Memorandum Of Understanding between the Riverside-Corona Resources Conservation District and Regional Park and Open-Space District; Resolution No. 2012-2 Notice of Intention to Convey Easement Interests in Real Property – City of Riverside, Riverside County - portions of each Assessor's Parcel Numbers 181-220-010 and 181-220-015 – District II/II

RECOMMENDED MOTION: That the Board approves and:

1. Authorizes the Memorandum Of Understanding (MOU) between the Riverside-Corona Resources Conservation District (RCRCD) and the Regional Park and Open-Space District (District), which provides the rights and responsibilities of the parties for the conveyance of the conservation easement; and
2. Authorizes the General Manager to take all actions necessary to administer the MOU; and
3. Instructs the Clerk of the Board to execute four (4) copies of the MOU and return them to the District for further transmittal; and

BACKGROUND: (continued on page 2)

Scott Bangle, General Manager

2012-019D CQ

FINANCIAL DATA N/A			
	Current F.Y. Total Cost:	$ 0	In Current Year Budget:
	Current F.Y. Net County Cost:	$ 0	Budget Adjustment:
	Annual Net County Cost:	$ 0	For Fiscal Year:

SOURCE OF FUNDS:

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: APPROVE

BY: Alex Gann

Alex Gann

County Executive Office Signature

FORM APPROVED COUNTY COUNSEL
BY: Synthia M. Gunzel DATE 5-7-12
SYNTHIA M. GUNZEL

Departmental Concurrence

☒ Policy ☐ Consent

☒ Policy ☐ Consent

Per Exec. Ofc.:

ATTACHMENTS FILED WITH THE CLERK OF THE BOARD

MINUTES OF THE REGIONAL PARK AND OPEN SPACE DISTRICT

On motion of Commissioner Tavaglione, seconded by Commissioner Ashley and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:	Buster, Tavaglione, Stone, Benoit and Ashley
Nays:	None
Absent:	None
Date:	May 15, 2012
xc:	Parks, COB

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

Prev. Agn. Ref.:	District: II/II	Agenda Number:

13.2

SUBJECT: Memorandum Of Understanding between the Riverside-Corona Resources Conservation District and Regional Park and Open-Space District; Resolution No. 2012-2 Notice of Intention to Convey Easement Interests in Real Property – City of Riverside, Riverside County - portions of each Assessor's Parcel Numbers 181-220-010 and 181-220-015 – District II/II

MOTION: (continued)

4. Adopts Resolution No. 2012-2, Notice of Intention to Convey Conservation Easement Interests in Real Property – City of Riverside, Riverside County, portions of each APNs 181-220-010 and 181-220-015, to RCRCD; and
5. Directs the Clerk of the Board to give notice pursuant to Government Code Section 6061.

BACKGROUND:

The proposed conservation easement consists of approximately 4.3 acres and is a portion of District owned real property with Assessor's Parcel Number 181-220-010 and 181-220-015. In accordance with California Public Resources Code Section 5540, a district may grant or dispose of real property, or any interest thereof, within or without the district, necessary to the full exercise of its powers. This real property interest has not been dedicated for park or open-space purposes; therefore, the District may convey the real property interest without voter approval or legislative concurrence. In November 2010, the District was contacted by RCRCD regarding the possible conveyance of a conservation easement along a small portion of the Lower Tequesquite Creek for the purpose of implementing RCRCD's Lower Tequesquite Creek Aquatic Habitat Restoration Project (Project). RCRCD anticipates receiving funds from the California Department of Fish and Game (Department) or the Department's permittees for the preservation of the Santa Ana Sucker (Catostomus santaanae) and other species in order to restore native habitat and remove exotic non-native plants in furtherance of its Project. RCRCD's Project serves an important public purpose by restoring the aquatic habitat to improve the hydrologic functions and habitat values within the Project area.

The District and RCRCD desire to enter into the MOU to provide the rights and responsibilities for each party for negotiating, processing and finalizing the conveyance of the conservation easement provided funding has be obtained by the Department and nothing is discovered in RCRCD's due diligence activities that would bar the parties moving forward with the conveyance.

The District intends to convey a Conservation Easement Interest in Real Property (Easement) located in the City of Riverside, Riverside County, in portions of Assessor's Parcel Numbers 181-220-010 and 181-220-015 to the RCRCD by Conservation Easement Deed, Easement depicted in Exhibit "A", attached hereto, provided: 1) An authorization resolution has been subsequently adopted by this Board to grant this interest; 2) RCRCD has secured the funding; and 3) RCRCD still desires to acquire the conservation easement after its due diligence activities are completed. All costs for this transaction will be paid by RCRCD.

Resolution 2012-2 has been reviewed and approved as to form by County Counsel.

BOARD OF DIRECTORS

RIVERSIDE COUNTY REGIONAL PARK & OPEN-SPACE DISTRICT

RESOLUTION NO. 2012-2
NOTICE OF INTENTION TO CONVEY A CONSERVATION EASEMENT INTEREST IN A PORTION OF REAL PROPERTY
TO THE RIVERSIDE-CORONA RESOURCE CONSERVATION DISTRICT
IN THE CITY OF RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA
ASSESSOR'S PARCEL NUMBERS 181-220-010 AND 181-220-015
BY CONSERVATION EASEMENT DEED

BE IT RESOLVED, DETERMINED AND ORDERED and NOTICE IS HEREBY GIVEN by the Board of Directors of the Riverside County Regional Park & Open-Space District, in regular session assembled on May 15, 2012, that it intends to convey, on or after May 22, 2012 to the Riverside-Corona Resource Conservation District (RCRCD), conservation easement interests in portions of certain real property consisting of approximately 4.3 acres in the City of Riverside, Riverside County, State of California, with Assessor's Parcel Numbers 181-220-010 and 181-220-015, more commonly known as the Santa Ana River Wildlife Area and the Lower Tequesquite Creek, as shown on Exhibit "A", attached hereto and made a part hereof. The terms and conditions of the proposed conveyance are as follows: The Riverside County Regional Park and Open-Space District, pursuant to a Memorandum of Understanding entered into with RCRCD, would convey the conservation easement interest in real property as described above subject to the conditions that the RCRCD shall use the interests in the real property for its aquatic habitat restoration and removal of exotic non-native plants and provided that RCRCD has not discovered information during its due diligence activities that would bar proceeding with the acquisition of the conservation easement interest.

BE IT FURTHER RESOLVED AND DETERMINED that the Clerk of the Board of is directed to give notice hereof as provided in Section 6061 of the California Government Code.

FORM APPROVED COUNTY COUNSEL
BY: Synthia M Gunzel 5-7-12
SYNTHIA M. GUNZEL DATE

BOARD OF DIRECTORS

RIVERSIDE COUNTY REGIONAL PARK & OPEN-SPACE DISTRICT

RESOLUTION NO. 2012 – 2

NOTICE OF INTENTION TO CONVEY A CONSERVATION EASEMENT INTEREST IN A PORTION OF REAL PROPERTY TO THE RIVERSIDE-CORONA RESOURCE CONSERVATION DISTRICT IN THE CITY OF RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA ASSESSOR'S PARCEL NUMBERS 181-220-010 AND 181-220-015 BY CONSERVATION EASEMENT DEED

ADOPTED by Riverside County Board of Supervisors on May 15, 2012.

ROLL CALL:

Ayes:	Buster, Tavaglione, Stone, Benoit and Ashley
Nays:	None
Absent:	None

The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.

KECIA HARPER-IHEM, Clerk of said Board

By: _____
Deputy

MEMORANDUM OF UNDERSTANDING
BY AND BETWEEN
RIVERSIDE-CORONA RESOURCE CONSERVATION DISTRICT
AND THE RIVERSIDE COUNTY REGIONAL PARK & OPEN-SPACE DISTRICT

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is made and effective April ___, 2012 ("Effective Date") by and between the RIVERSIDE-CORONA RESOURCE CONSERVATION DISTRICT, a special district created pursuant to the California Public Resources Code Division 9, Chapter 3 ("RCRCD") and the RIVERSIDE COUNTY REGIONAL PARK AND OPEN-SPACE DISTRICT, a special district created pursuant to the California Public Resources Code Division 5, Chapter 3, Article 3, (the "Park District"). RCRCD and the Park District are sometimes collectively referred to herein as the "Parties."

RECITALS

A. RCRCD is a Resource Conservation District formed for the control of runoff, the prevention or control of soil erosion, and the improvement of land capabilities pursuant to California Public Resources Code sections 9151 et seq.; and

B. RCRCD is authorized pursuant to Public Resource Code section 9403 to accept money from any source whatsoever to carry out its purposes; sections 9404 and 9408 to enter into contracts with the Park District to further its purposes, and section 9409 to conduct operations on public land with the cooperation of the agency administering and having jurisdiction over that land to, among other things, enhance wildlife habitat and for water conservation purposes; and

C. RCRCD is authorized to hold conservation easements pursuant to Public Resources Code sections 9401, 9405 and 9406 and Civil Code Section 815.3. Specifically, Grantee is an entity identified in Civil Code Section 815.3 and otherwise authorized to acquire and hold title to real property.

D. The Park District's mission is to acquire, protect, develop, manage, and interpret for the inspiration, use, and enjoyment of all people, a well-balanced system of areas of outstanding scenic, recreational, and historic importance; and its focus encompasses providing high-quality recreational opportunities and preserving important features of the County's natural, cultural and historical heritage.

E. RCRCD anticipates receiving funds from the California Department of Fish and Game (the "Department") or the Department's permittees for the preservation of the Santa Ana sucker (*Catostomus santaanae*) and other species; and

F. RCRCD plans to use such funds for the purpose of implementing the Lower Tequesquite Creek Aquatic Habitat Restoration Project (collective, the "Project") as substantially described in Exhibit "A", attached hereto and by this reference incorporated herein; and

G. The Department requires that in order to implement the Project successfully, RCRCD must preserve the restored habitat in perpetuity with a conservation easement; and

H. The Park District owns, administers and has jurisdiction over the property in the area where RCRCD will be implementing the Project and has agreed to grant a conservation easement to RCRCD over a portion of Park District owned property in the Lower Tequesquite Creek area; and

I. Pursuant to the California Public Resources Code Section 5540, the Park District may dispose of real property of every kind and rights in real property necessary to the full exercise of its powers; and

J. The Parties desire to enter into this MOU to provide for the rights and responsibilities of the Parties for the conveyance of the conservation easement.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Parties hereby agree as follows:

I. RCRCD'S DUTIES.

A. Subject to Section I.E. herein, RCRCD desires to accept a conservation easement interest in the Property from Park District, including all the responsibilities associated therewith for the purpose of implementing its Project. The Parties shall work cooperatively to negotiate and draft a conservation easement deed that shall fulfill the purposes of the Project.

B. RCRCD will provide the Park District with copies of all final documents related to the Project, and any other relevant documentation, including but not limited to the documents referenced in Sections D. and E. herein, required to implement this MOU.

C. During the course of negotiating and processing the proposed conservation easement until the recordation of the conservation easement contemplated by this MOU ("Transaction"), RCRCD will reimburse the Park District for all costs that it incurs as a result of this Transaction. The Park District has estimated that it expects to incur a cost of approximately ELEVEN THOUSAND DOLLARS ($11,000) to process and finalize the conservation easement approvals and conveyance. Should the Park District's costs exceed such amount, the Park District agrees to notify RCRCD as soon as reasonably possible so that the Parties may address such issue. RCRCD agrees to pay the invoices associated with reimbursement for costs to the Park District in a timely and reasonable manner.

D. In the event that the Parties determine during this Transaction, that monitoring and review obligations are created for the Park District and to be included within the conservation easement deed, the Parties will negotiate and determine the terms for reimbursement to the Park District by RCRCD.

E. RCRCD will conduct and fund the due diligence of the properties to be subject to the conservation easement including, but not limited to, providing the legal description and plat maps, ordering and reviewing a preliminary title report ("Due Diligence").

F. Provided that (i) RCRCD still desires to acquire the conservation easement after completing its Due Diligence and (ii) funding is still available, RCRCD will accept the conservation easement from the Park District and implement the Project. In the event that this Transaction is not finalized or terminated by the Parties, including but not limited to, execution and recordation of the conservation easement, RCRCD shall reimburse Park District for costs expended by it up to the time the Transaction ended or terminated.

G. As part of RCRCD's duties pursuant to the conservation easement deed, RCRCD will, at least annually, report on the management and monitoring activities performed in the conservation easement area. Reports shall contain the source and amount of funds received, the type of activities performed, the amount of funds expended on the conservation easement area. The Report will be sent to the Park District no later that 90 days following the end of RCRCD's fiscal year (currently, June 30th).

II. PARK DISTRICT'S DUTIES.

A. Provided the due diligence review proves satisfactory, the Parties have come to an agreement pertaining to the terms of conveyance, the Park District will grant and convey a conservation easement to RCRCD in a form agreed upon by the Parties consistent with the Project.

B. The Park District will conduct its own environmental review to execute this MOU and to grant the conservation easement to RCRCD.

C. The Park District will submit invoices to RCRCD to obtain reimbursement of the costs associated with this MOU and this Transaction.

III. COOPERATION.

The Parties agree to cooperate with each other in the implementation of this MOU and perform any and all acts necessary to carry out the intent of the MOU. Without limiting the foregoing, the Parties agree to provide necessary approvals, and execute, acknowledge, and deliver any and all additional papers, documents and other assurances as may be necessary to carry out the intent of the MOU. The Parties intend that execution and delivery of the conservation easement deed by the Park District to RCRCD will occur within a reasonable time after the Parties have performed all the necessary activities to proceed with the conveyance and have obtained authorization from its respective governing bodies.

IV. TERM; TERMINATION.

This MOU shall commence on the Effective Date and shall continue until the conservation easement is executed and recorded or terminated by the Parties. During the term, this MOU may be terminated by either Party upon giving the other Party six (6) months prior written notice. If this MOU is terminated prior to the execution and recordation of the

conservation easement, RCRCD will reimburse the Park District for any outstanding expenses that have not yet been reimbursed that are directly related to this Transaction.

V. CHANGES OR MODIFICATIONS.

No part of this MOU may be modified, altered, amended, waived, or changed without the express written consent of the Parties hereto. The Parties recognize that the potential for similar projects may arise in the future and will negotiate in good faith to amend this MOU to include those projects at the appropriate time.

VI. NOTICE.

As used in this MOU, notice includes but is not limited to, the communication of any notice, request, demand, approval, statement, report, acceptance, consent, waiver and appointment. All notices must be in writing. Notice is given either (i) when delivered in person to the person or company intended named below, (ii) when delivered via facsimile with confirmation from the receiving party via return fax; or (iii) when sent via reputable overnight courier (such as Federal Express), addressed by name and addressed to the party or persons intended, as follows, until such time as a party gives notice of a change of address in accordance with the terms of this section:

PARK DISTRICT
Attn: General Manager
4600 Crestmore Road
Jurupa Valley, CA 92509-6858
Phone: (951) 955-4310
Fax: (951) 955-4305

With a copy to:

COUNTY COUNSEL
Attn: Synthia M. Gunzel
Office of the County Counsel
3960 Orange Street, Suite 500
Riverside, CA 92501

RCRCD
Attn: District Manager
4500 Glenwood Drive, Building A
Riverside, CA 92501
Phone: (951) 683-7691
Fax: (951) 683-3814

With a copy to:

RCRCD GENERAL COUNSEL
Attn: Steven M. Anderson
Best Best & Krieger LLP
3390 University Avenue, Suite 500
Riverside CA 92501

VII. CONFLICT OF INTEREST.

No member, official or employee of the Park District or RCRCD shall have any personal interest, direct or indirect, in this MOU nor shall any such member, official or employee participate in any decision relating to this MOU which affects his or her personal interests or the interest of any corporation, partnership or association in which he or she is directly or indirectly interested.

VIII. NO THIRD PARTY BENEFICIARIES.

This MOU is made and entered into for the sole protection and benefit of the Parties hereto. No other person or entity shall have any right of action based upon the provisions of this MOU.

IX. ASSIGNMENT.

This MOU shall not be assigned by either Party, either in whole or in part, without the prior written consent of the non-assigning Party. Any assignment or purported assignment of this MOU without the prior written consent of the non-assigning Party will be deemed void and of no force or effect.

X. GOVERNING LAW AND JURISDICTION.

The Parties agree that in the exercise of this MOU, the Parties shall comply with all applicable federal, state, county and local laws, and regulations in connection with the conservation easement. The existence, validity, construction, operation and effect of this MOU and all of its terms and provisions shall be determined in accordance with the laws of the State of California. Any action at law or in equity brought by either of the Parties hereto for the purpose of enforcing a right or rights provided for by this MOU shall be tried in a court of competent jurisdiction in the County of Riverside, State of California, and the Parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county.

XI. PARAGRAPH TITLES.

The paragraph titles of this MOU are (i) inserted only for the convenience of the Parties, (ii) are not intended to describe, define, limit, or otherwise affect the provisions in the portions of the MOU to which they pertain, and (iii) in no way describe, define, limit, or otherwise affect the scope or intent of this MOU or in any way affect the agreement of the Parties set out in this MOU.

XII. ENTIRE AGREEMENT.

This MOU embodies the entire agreement between the Parties hereto in relation to the subject matter hereof, and no other agreement or understanding, verbal or otherwise, relative to this subject matter exists between the Parties at the time of execution of this MOU. This MOU may only be modified or amended by the mutual consent of the Parties in writing.

XIII. AUTHORITY TO EXECUTE.

The individuals executing this MOU and the instruments referenced herein each represent and warrant that they have the legal power, right and actual authority to bind their respective Parties to the terms and conditions hereof and thereof.

XIV. COUNTERPARTS.

1. The Parties may execute duplicate originals (counterparts) of the MOU or any other documents that they are required to sign or furnish pursuant to the MOU.

IN WITNESS WHEREOF, the Parties have caused this MOU to be signed as of the date first above written.

RIVERSIDE COUNTY REGIONAL PARK & OPEN-SPACE DISTRICT

By: _____
Chairman
Board of Directors

RIVERSIDE CORONA RESOURCE CONSERVATION DISTRICT

By: _____
Alfred "Bud" Bonnett
President of the Board

ATTEST:
Kecia Harper-Ihem
Clerk of the Board

By: _____
Deputy

APPROVED AS TO FORM:
Pamela J. Walls, County Counsel

By: _____
Synthia M. Gunzel
Deputy County Counsel

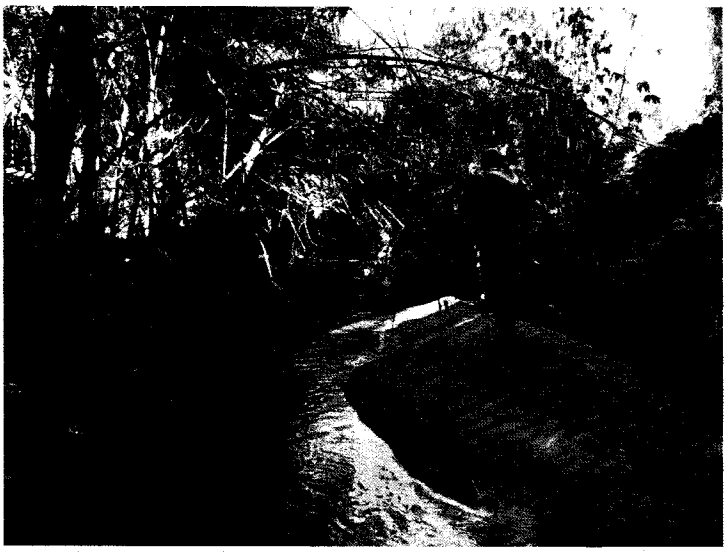
APPROVED AS TO FORM:

By: _____
RCRCD General Counsel
Best Best & Krieger LLP

13.2 MAY 15 2012

Exhibit A

Lower Tequesquite Creek Aquatic Habitat Restoration Project



A proposal by the
Riverside-Corona Resource Conservation District

4500 Glenwood Dr., Bldg. A
Riverside, CA. 92501

For use under DFG water rights requirements and reporting, CA. Dept. of Fish and Game, Region 6

Introduction

The Tequesquite Arroyo is one of the main arroyos within the City of Riverside, with upper portions of the watershed originating in the Box Springs Mountains and Sycamore Canyon Wilderness Park. This drainage is a tributary to the Santa Ana River watershed, sub-unit 1.B, and DWR hydrologic unit 1.27. The project area encompasses approximately 6.80 acres of both city and county managed lands, with the proposed easement area consisting mainly of mixed riparian woodland that has been highly degraded due to homeless activities, exotic plant establishment and impaired hydrologic functions from the combination of flood control activities, trash and sedimentation.

The Riverside-Corona Resource Conservation District (RCRCD) has a district-wide aquatic augmentation and restoration program. As a part of this program, the District restores aquatic habitat for the purposes of improving both the hydrologic functions and habitat values associated with these aquatic resources. The program also provides native fish, amphibian and benthic macroinvertibrate habitat.

Work Plan

The Riverside-Corona Resource Conservation District proposes to remove trash, improve both spawning habitat and streamside vegetation for listed fish species. The Santa Ana Sucker (*Catostomus santaanae*), the Arroyo Chub (*Gila orcutti*) and the Speckled Dace (*Rhinichthys osculus*) have been known to occupy this tributary during certain times of the year, but have been extirpated from most of the lower drainage due to fish passage issues and variable flows. The project will focus primarily along the stream edge and within the waterway through the removal of debris dams, trash, exotic vegetation and human impacts due to clearing activities and dumping (figure 2).

The proposed timeline for the project is provided in figure 1 below.

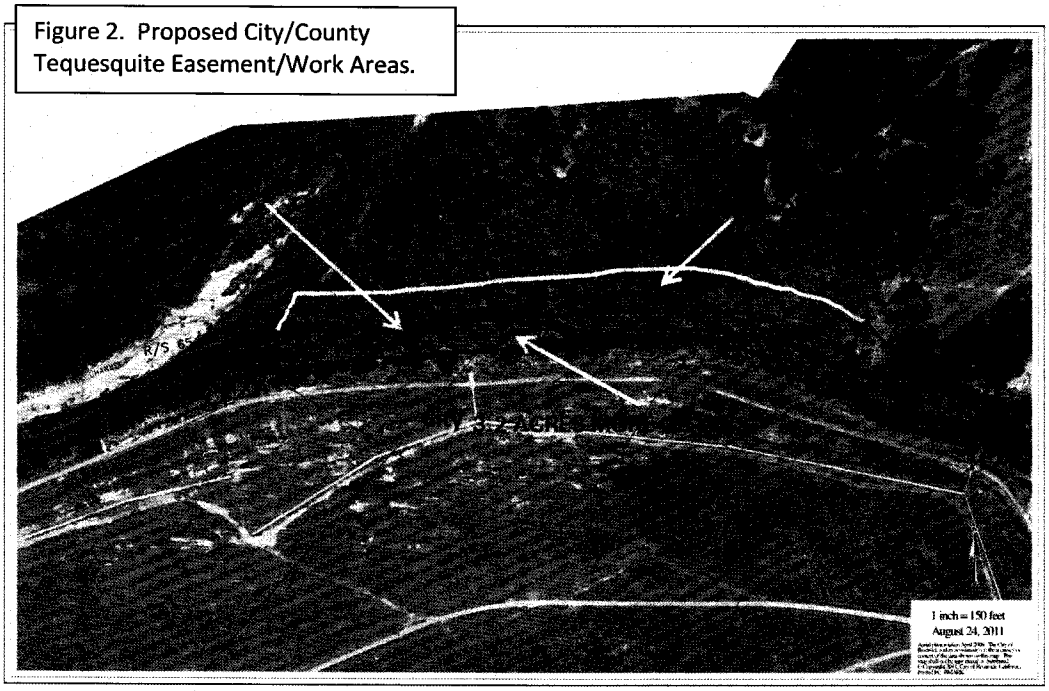
Figure 1.

Activity	Location	Proposed Completion Date
Survey and Photo Points	Easement area	Dec 2011
Establish Easements	City/County lands	Dec 2011
Begin Debris Removal	Within creek bed	Upon approval of project*
Begin Exotic Removal	Along creek banks	Upon approval of project*
Plant Native Vegetation	Creek banks	Dec 2012
Weed Control	Creek banks	Dec 2016
Trash Removal	Creek bed	Dec 2016
Monitoring/Reporting	Easement/work area	Jan 2016**

*Subject to release of project approval and release of funds.
**Future endowment will provide monitoring/reporting past Jan 2016.

The proposed easement area is outlined in figure 2 below. The yellow line shows the county portion of this work area of approximately 4.3 acres of proposed for the restoration and the black area is the city-owned portion of the easement. The blue line is the projected activity area, or water course.

Figure 2. Proposed City/County Tequesquite Easement/Work Areas.



The average width of the waterway is 20', with less at the top of the project, and more at the confluence

Field activities will include, but not be limited to: trash removal, posting of signs about restoration work and fish habitat, control of exotic vegetation, removal of debris dams, planting of native vegetation, development of a planting plan, associated monitoring, annual surveys and tracking of occupation by native fish after completion of restoration activities and adaptive management associated with site conditions. Progress of activities will depend partly on weather conditions, discussion and completion of agreements and transfer of funds for proposed work. Details of field work and photo documentation will be provided in annual reports and developed under an HMMP if necessary.

Proposed Performance Standards

The performance standards that will be used to assess whether the project is achieving its objectives will relate to the goals of the project of restoring fish habitat, primarily that of the Santa Ana sucker (sucker) for this proposal. Standards for this project will be based on those activities that can be measured or assessed in a practicable manner. The use of aquatic reference standards that is reasonably achievable, by reflecting the range of variability of the site and any anthropogenic disturbances that may occur. The use of hydrologic models used in other projects will be considered and the proposed standards of success will take into account the different stages of aquatic resource development/restoration in order to allow for identification of potential problems and the use of adaptive management in the proposed field activities.

Since the single most important factor in restoring or establishing a wetland or riparian area is hydrology, water source, quality and quantity will be the main factors in achieving occupation of suckers at this site. The soils, water, vegetation, hydrology and species will all be monitored during and after the restoration process, and during regular monitoring periods. The following performance objectives will be provided during the project period.

Primary Performance Objectives: Tier 1

The success standards listed under this tier are stated in terms of acreage, hydrology, vegetation and species that will be evident after restoration and planting. These relate to form, more than function. Approximately .70 acres of waterway will be rehabilitated with a minimum streamside buffer of 10 feet around the entire waterway once restoration is completed at the end of five years.

Secondary Performance Objectives: Tier 2

The selection of performance standards related to wetland or riparian functioning is not straightforward. Once the primary objectives related to the area (acreage), and form (vegetation) is achieved, it is clear that the project has succeeded at some level. In many cases in the Inland Empire, if the site was of low quality, this may be all that is needed to make the project successful. But at the Tequesquite site, one or more functions are needed in order for the project to compensate for losses. These are project specific and functional, rather than structural as in tier 1. Some of these may relate to structural components of the site, but are important nonetheless. These may include:

Adequate spawning and rearing habitat for Santa Ana suckers
Vegetation diversity/quality
Sediment/substrate quality
Water quality and quantity
Bank stabilization
Debris/trash removal and control
Control of human impacts for trespass and vandalism

Goals and Objectives for the Project

Goal: The project will restore/rehabilitate .70 acres of degraded waterway and associated streamside habitat along lower Tequesquite Creek and it's confluence with the Santa Ana River. The site will be similar to historic arroyos in the area and will provide flood flow, sediment transport/deposition, food chain support and breeding habitat for Santa Ana suckers. The site will also provide water quality improvements for surface waters, and will be used to help gauge the success in achieving the overall goals of the project.

Objective 1: Restore/rehabilitate .70 acres of waterway.
Objective 2: Provide spawning habitat for Santa Ana sucker
Objective 3: Remove exotic vegetation and debris dams

Success Standard: Waterway will be a minimum of .70 acres after 5 years and provide improved hydraulic functions.

Monitoring Methods: Wetland/riparian delineation and annual surveys.

Adaptive Management: Evaluate potential causes of the absence of either hydrology or vegetation over some or all of the project area and conduct corrective actions that may include revision of water testing, replanting and substrate alteration.

Tier 1 Success Standards

Hydrology: The waterway will contain surface water year-round with a minimum flow of at least .50ccf.

Size: The waterway will be at least .70 acres in size at the end of 5 years.

Herbaceous Cover: By year 3, the waterway will have a minimum of 50% vegetative cover along the banks of the creek in the herbaceous layer (<6'), excluding areas designated as non-vegetated (open water).

Benchmark values will be:

Year	%cover
3	50
4	70
5	90

Survival of Plants: There will be a minimum of 80% survival of planted material by year 3.

Woody Plants: By year 3, the waterway buffer will have a minimum of 50% areal cover by native plants in areas not designated as wetland (waters), herbaceous plant area on the stream banks.

Benchmark values:

Year	%cover
3	30
4	50
5	80

Control of Invasive: Arundo, castor bean, tamarisk and exotic trees will comprise no more than 5% of the relative cover of the site at the end of five years.

Tier 2 Success Standards

Since most wetland and riparian functions cannot be measured easily and in a manner that allows them to be monitored directly, indicators are used to support the supposition that a particular function will be provided by the restoration activities if certain functions and values are present. For this project, we will use the following standards:

Spawning and Rearing Habitat:	The stream banks will comprise no less than 50% of the wetland area after 5 years, and the substrate will contain at least 20% gravels and cobbles for reproduction. (aquatic habitat)
Vegetation Diversity:	After 5 years, the waterway will have at least 20 native streamside plant species present. (plant biodiversity)
Water Quality and Quantity:	Stream flow will be at least .50ccf during the year with areas of deep water of at least .50 meters over 20% of the waterway, along with mid-day temperatures of no more than 80 degrees. (fish habitat and refugia)
Bank Stabilization:	Reduction of streambank erosion through banks stabilization by planting streamside vegetation.
Human Impacts:	Reduction in dumping, vandalism and trespass through regular site inspections, monitoring and inter-agency cooperation.

Monitoring Methods

The methods used to monitor the success of this site will include, water testing for fish habitat and occupation, CRAM assessments for overall site conditions, Releve for vegetation and adaptive management based upon site conditions. Some of the other methods to use may also include line transects for woody vegetation, stem counts, areal cover using quad sampling, or area plot sampling. Species inventory may also be used in areas where the need for species density and quality is required. The RCRCD will use EPA approved collection methods under the rapid bio-assessment protocol and standard reporting methods.

Adaptive Management

The science and art of wetland restoration is continually evolving. Standards and measures are constantly being refined and some may even change over the time the project is started and the time the standard is supposed to be met. Some of the adaptive management measures that may be needed at this site, but are not included in the budget are:

Substrate amendment. If invertebrate and fish populations are not responding to the changes in hydrology and planting, it may be necessary to add structural components to the substrate of the stream to help increase species occupation.

Access control. Use of fences, blocking public use and other measures may be needed in order to maintain the integrity of the restoration site. The use of signs and other control methods may be needed over the life of the project in insure success. Planting of thorny shrubs in certain areas may be one control method.

Supplemental surface water. The addition of surface water may be needed if natural flows are not sufficient year-round for both fish and aquatic vegetation. Seasonal variations in flow are to be expected, but not be great in either amount, or duration.

Qualifications

The RCRCD currently holds a district-wide 1600 permit with DFG, a scientific collection permit with DFG for fish and amphibians and a USF&WS Recovery Permit for Santa Ana sucker since 2000. The RCRCD is currently working with USF&WS on a sucker toxicology study that requires reproduction and maintenance of populations of sucker in five raceways, along with a large 300' re-created native fish stream on-site. The RCRCD is also holding a population of Indian Creek dace and chub from the 2007 Esperanza fire, which will eventually be re-released to the wild. The RCRCD also works cooperatively with ACOE, Riverside County Flood Control and San Bernardino County Flood control on sucker assessments in the Santa Ana river mainstem when projects require field surveys and relocation efforts.

Summary

The final goal of this project is to address the habitat degradation that occurs as a result of the hydrological modifications to the stream, and the alteration of the systems biotic associations. Improving and maintaining the diverse and functional aquatic community of surface waters is a measurement of quality, and most aquatic fauna have a very specific habitat requirement independent of water quality.

Since the relationship between habitat quality and biological condition can be tracked, this helps to provide data under the monitoring phase of the project. We will use both benthic macroinvertibrate sampling and fish sampling field data sheets when conducting monthly and annual monitoring. The data collection sheets for monitoring purposes can be found on pages 9 –11 of this proposal.

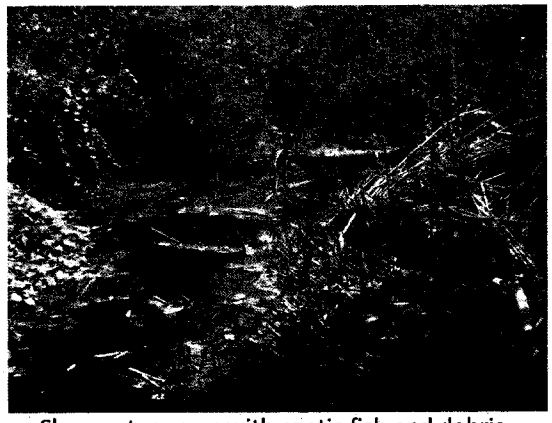
If you have any questions about the project, or would like to inspect the site, do not hesitate to contact Kerwin Russell – Natural Resources Manager, or Shelli Lamb – District Manager at 951-683-7691, ext 203 or 202. Or email us with a request at: russell@rcrcd.com, lamb@rcrcd.com

Current Site Condition Photos

Vegetation debris dams and exotics

Debris dam and associated trash

Trash in streamside habitat



Slow water areas with exotic fish and debris

FISH SAMPLING FIELD DATA SHEET (FRONT)

page _____ of _____

STREAM NAME	LOCATION
STATION #________ RIVERMILE________	STREAM CLASS
LAT ____________ LONG ____________	RIVER BASIN
STORET #	AGENCY
GEAR	INVESTIGATORS
FORM COMPLETED BY	DATE ______ TIME ______ AM PM; REASON FOR SURVEY

SAMPLE COLLECTION	**How were the fish captured?** ❑ back pack ❑ tote barge ❑ other _______________ **Block nets used?** ❑ YES ❑ NO **Sampling Duration** Start time _________ End time _________ Duration _________ **Stream width (in meters)** Max_________ Mean_________
HABITAT TYPES	**Indicate the percentage of each habitat type present** ❑ Riffles_____% ❑ Pools_____% ❑ Runs_____% ❑ Snags_____% ❑ Submerged Macrophytes_____% ❑ Other ( )_____%
GENERAL COMMENTS	

SPECIES	TOTAL (COUNT)	OPTIONAL: LENGTH (mm)/WEIGHT (g) (25 SPECIMEN MAX SUBSAMPLE)					ANOMALIES*							
							D	E	F	L	M	S	T	Z

BENTHIC MACROINVERTEBRATE FIELD DATA SHEET

STREAM NAME	LOCATION	
STATION #_____ RIVERMILE_____	STREAM CLASS	
LAT _____ LONG _____	RIVER BASIN	
STORET #	AGENCY	
INVESTIGATORS		LOT NUMBER
FORM COMPLETED BY	DATE _____ TIME _____ AM PM	REASON FOR SURVEY

HABITAT TYPES	**Indicate the percentage of each habitat type present** ❑ Cobble_____% ❑ Snags_____% ❑ Vegetated Banks_____% ❑ Sand_____% ❑ Submerged Macrophytes_____% ❑ Other ( )_____%
SAMPLE COLLECTION	**Gear used** ❑ D-frame ❑ kick-net ❑ Other _____ **How were the samples collected?** ❑ wading ❑ from bank ❑ from boat **Indicate the number of jabs/kicks taken in each habitat type.** ❑ Cobble_____ ❑ Snags_____ ❑ Vegetated Banks_____ ❑ Sand_____ ❑ Submerged Macrophytes_____ ❑ Other ( )_____
GENERAL COMMENTS	

QUALITATIVE LISTING OF AQUATIC BIOTA

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare, 2 = Common, 3= Abundant, 4 = Dominant

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4

FIELD OBSERVATIONS OF MACROBENTHOS

Indicate estimated abundance: 0 = Absent/Not Observed, 1 = Rare (1-3 organisms), 2 = Common (3-9 organisms), 3= Abundant (>10 organisms), 4 = Dominant (>50 organisms)

Porifera	0	1	2	3	4	Anisoptera	0	1	2	3	4	Chironomidae	0	1	2	3	4
Hydrozoa	0	1	2	3	4	Zygoptera	0	1	2	3	4	Ephemeroptera	0	1	2	3	4
Platyhelminthes	0	1	2	3	4	Hemiptera	0	1	2	3	4	Trichoptera	0	1	2	3	4
Turbellaria	0	1	2	3	4	Coleoptera	0	1	2	3	4	Other	0	1	2	3	4
Hirudinea	0	1	2	3	4	Lepidoptera	0	1	2	3	4						
Oligochaeta	0	1	2	3	4	Sialidae	0	1	2	3	4						
Isopoda	0	1	2	3	4	Corydalidae	0	1	2	3	4						
Amphipoda	0	1	2	3	4	Tipulidae	0	1	2	3	4						
Decapoda	0	1	2	3	4	Empididae	0	1	2	3	4						
Gastropoda	0	1	2	3	4	Simuliidae	0	1	2	3	4						
Bivalvia	0	1	2	3	4	Tabinidae	0	1	2	3	4						
						Culcidae	0	1	2	3	4						

PERIPHYTON FIELD DATA SHEET

STREAM NAME	LOCATION	
STATION #_____ RIVERMILE_____	STREAM CLASS	
LAT_____ LONG_____	RIVER BASIN	
STORET #	AGENCY	
INVESTIGATORS		LOT NUMBER
FORM COMPLETED BY	DATE _____ TIME _____ AM PM	REASON FOR SURVEY

HABITAT TYPES	**Indicate the percentage of each habitat type present** ❑ Sand-Silt-Mud-Muck_____% ❑ Gravel-Cobble_____% ❑ Bedrock_____% ❑ Small Woody Debris_____% ❑ Large Woody Debris_____% ❑ Plants, Roots_____% ❑ Riffle_____% ❑Run_____% ❑ Pool_____% ❑ Canopy_____%
SAMPLE COLLECTION	**Gear used** ❑ suction device ❑ bar clamp sample ❑ scraping ❑ Other _____ **How were the samples collected?** ❑ wading ❑ from bank ❑ from boat **If natural habitat collections, indicate the number of samples taken in each habitat type.** ❑ Sand-Silt-Mud-Muck_____% ❑ Gravel-Cobble_____% ❑ Bedrock_____% ❑ Small Woody Debris_____% ❑ Large Woody Debris_____% ❑ Plants, Roots_____%
GENERAL COMMENTS	

QUALITATIVE LISTING OF AQUATIC BIOTA

Indicate estimated abundance: **0 = Absent/Not Observed, 1 = Rare (<5%), 2 = Common (5% - 30%), 3= Abundant (30% - 70%), 4 = Dominant (>70%)**

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4