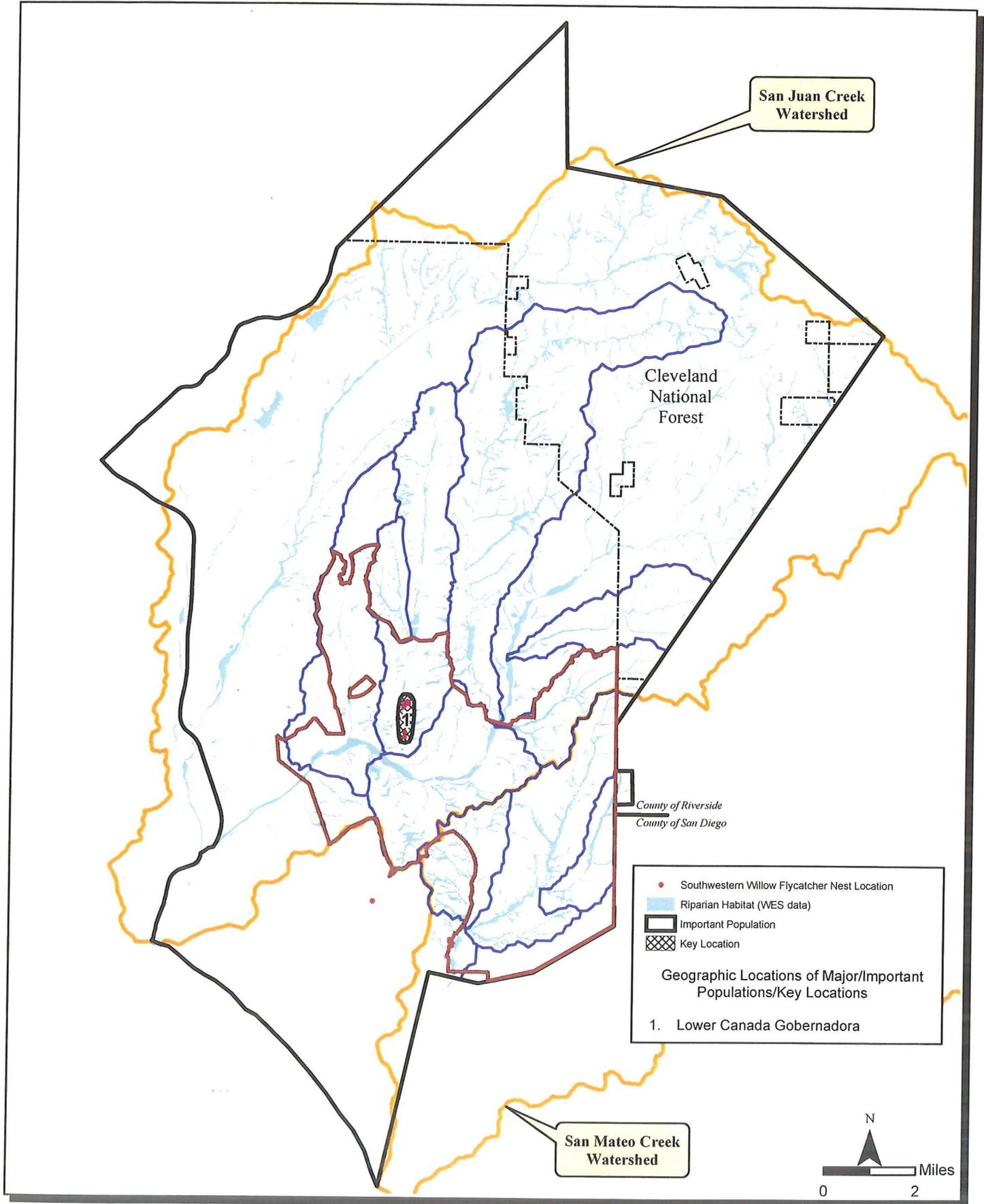


Draft NCCP/HCP Planning Guidelines  
**Least Bell's Vireo Distribution Map**

**FIGURE 4-3**



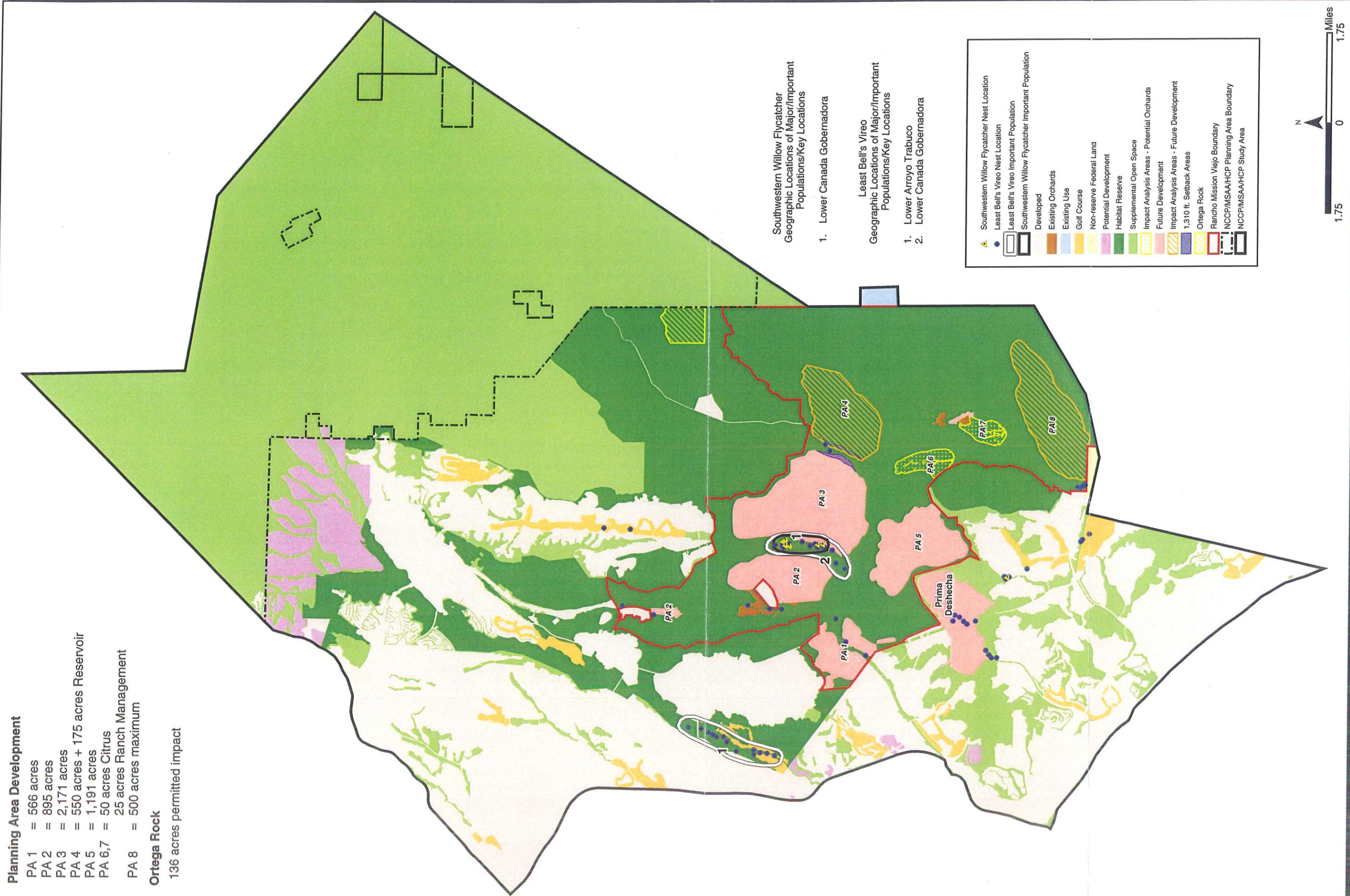


FIGURE 172-M

NCCP/MSAA/HCP  
**Habitat Reserve with Least Bell's Vireo and Southwestern Willow Flycatcher**  
**Important Populations in Key Locations**

## Gobernadora Multi-Purpose Basin Memorandum of Understanding April 2010

### Introduction

A. The purpose of this Memorandum of Understanding (MOU) is to provide a general outline of certain goals, objectives and responsibilities for administering design and construction, understanding ownership and providing long-term operation of the proposed Gobernadora Multi-Purpose Basin ("Project"). This MOU has been prepared in anticipation of the negotiation and potential execution/delivery of an Implementation Agreement that fully addresses the Project and the Stakeholders' rights, responsibilities and obligations of the Stakeholders (as defined below). Accordingly, this MOU is non-binding upon the Stakeholders and shall not be construed, interpreted or otherwise applied in any manner that creates or imposes any obligations upon the Stakeholders (or any of them).

The Project is anticipated to be approximately 35 acres, located upstream of Gobernadora Ecological Reserve Area (GERA) and just south of the Coto De Caza planned community. In part, this MOU identifies important benefits from early delivery and expanded use of the Project, including:

- Erosion control stabilization and reduction of sediment degradation
- Water quality runoff enhancement
- Water recycling and harvesting for regional water conservation (for SMWD water supplies to the Portola Reservoir)
- Potential for ground water recharge
- Regional trail connection from Thomas F. Riley Park to Caspers Wilderness Regional Park

The Project includes facilities for water quality, drainage peak flow retarding, Regional Riding and Hiking Trail, and nonpotable water extraction/recycling. A preliminary concept plan for the Project is included as **Exhibit A**.

The interested Stakeholders for the Project are Santa Margarita Water District (SMWD), County of Orange (County) and Rancho Mission Viejo, LLC (RMV) ("Stakeholders"). The San Juan Basin Authority (SJBA) may desire to participate as a stakeholder; this will be confirmed through the development of the Project, under this MOU and prior to construction. The Stakeholders have heretofore engaged in certain discussions regarding the proposed Project and key elements that will need to be addressed in relation to the administering design and construction, understanding ownership and providing long-term operation of the Project. In relevant part (and as summarized in this MOU) the Stakeholders have addressed the following key features of the Project:

1. Environmental Certification
2. Costs and Funding Plan
3. Design

*MOU for Gobernadora Basin Project  
Page 2*

4. Right-of-way
5. Construction
6. Ownership and Concurrent Use
7. Operations and Maintenance (O&M)
8. Consistency with Ranch Plan

This MOU is intended as a precursor document only that sets forth in general terms the understanding of the Stakeholders concerning the funding, design, construction, operation of the Project and establishes a process under which the Stakeholders will work cooperatively to develop a detailed description of the Project, and sets forth the responsibilities of the Stakeholders to perform the analysis of the Project required by CEQA. This MOU does not commit any of the Stakeholders to construct this Project or any other Project. If the Stakeholders decide to approve a Project, an implementation agreement (Implementation Agreement) that will specify, with particularity, the rights, responsibilities and obligations of each Stakeholder with respect to the Project will subsequently be developed and approved by the Stakeholders. The Stakeholders intend to work cooperatively and in good faith during the term of this MOU relative to the negotiation and preparation of said Implementation Agreement; notwithstanding, the Stakeholders understand and agree that the Implementation Agreement will not be executed until after the approval of all necessary environmental documents and establishment of a funded funding plan for the Project.

The term of this MOU shall be for a period of 12 months following execution by all Stakeholders, or until an Implementation Agreement is sooner established and executed by the Stakeholders. Upon mutual written agreement of the Stakeholders, the term of this MOU may be extended.

### **1. Environmental Certification**

Final Environmental Impact Report (FEIR) 589 for the Ranch Plan was certified November 8, 2004. This programmatic FEIR included the Project. Subsequent efforts include National Environmental Policy Act (NEPA) Environmental Impact Statement for Southern Subregion Habitat Conservation Plan (SSHCP EIS) issued by the U.S. Fish and Wildlife Service (USFWS) on January 10, 2007 and the Environmental Impact Statement for Special Area Management Plan (SAMP EIS) issued by the U.S. Army Corps of Engineers (ACOE) on March 16, 2007. SMWD is underway with the preparation of supplemental CEQA documentation for the Project and is considering whether subsequent NEPA review is warranted.

RMV and SMWD have obtained permits associated with the SSHCP and SAMP, (i.e., a Section 10 (a) Incidental Take Permit from USFWS and a Long Term Individual 404 Permit from the ACOE) which include the Project. RMV has also obtained a Master Streambed Alteration Agreement (MSAA) from California Department of Fish and Game (CDFG) that includes the Project. After approval of CEQA documentation, followed by concurrence by the Stakeholders of any new requirements, and substantial completion of design for the Project, sub-notifications for the Project will need to be submitted to the ACOE by SMWD and to CDFG by RMV in accordance with the these respective

*MOU for Gobernadora Basin Project*  
Page 3

Stakeholder's corresponding SAMP and MSAA requirements. Regulatory permits necessary for Operations and Maintenance activities (as summarized in Section 7 of this MOU) will be obtained by RMV (subject to appropriate review, comment, and approval by the County prior to agency issuance) for use by the County and SMWD. SMWD will also apply for a 401 Certification/WDR from the SDRWQCB. The Stakeholders acknowledge the possibility that ACOE, CDFG, and/or SDRWQCB may request design modifications to minimize impacts to Gobernadora Creek and its associated riparian habitat while retaining the 35 acre Project size during the sub-notification/permit approval process. Any proposed design changes will be submitted to the County for its review and approval so as to ensure that County will not be subject to any unreasonable operation and maintenance requirements.

Any permits and CEQA analysis (Environmental Clearance) required for the Regional Riding and Hiking Trail beyond and outside the Project will be the responsibility of OC Parks. However, Environmental Clearance for the bridge crossing of Gobernadora Creek will be included in the work efforts of SMWD pursuant to this MOU.

**2. Costs and Funding Plan**

The current cost estimate for construction of the Project is \$10.5M in 2008 costs (not including the bridge crossing of Gobernadora Creek). Design and associated administration is estimated at an additional 10% to 15%. Right of way for the 35 acre basin area is planned for donation by RMV. Presently, SMWD has procured \$2 million in State Proposition 50 funding and has set aside \$2.5 million of SMWD local funds in contribution towards design and construction. Additional funds of approximately \$7 million are needed. RMV will work with SMWD will to clarify and confirm potential funding sources in collaboration with the other Stakeholders. Potential sources for these funds include but not limited to OC Parks, SJBA, American Recovery and Reinvestment Act (ARRA), etc. A preliminary summary of the estimated costs and identified/potential funding is included in **Exhibit B**. Funding for maintenance is identified in a later section of this MOU. The Implementation Agreement will identify the Stakeholders responsible for funding the ongoing maintenance of the Project. The Implementation Agreement will also address costs and sources for remaining final design (if any), review, construction and inspection.

**3. Design**

Presently, the conceptual basin strategy for the Project has been conditionally approved by the County staff and SMWD, through the reports entitled: "Updated Rancho Mission Viejo Runoff Management Plan – Planning Level Regional Detention Basin Strategy – 100-year Urbanized Peak Flowrate Attenuation Analysis" dated June 2009 and "Watershed Hydrology Analysis, Impacts Analysis, and Planning Level Mitigation Study" dated April 2009. These approved documents, which constitute a 35% level of design level, are conditionally approved subject to refinement through detailed engineering analyses and subsequent confirmation by all Stakeholders. It is recognized that RMV has, to date, contributed funding for concept design of the Project in an amount equal to approximately \$200K; moreover, RMV has heretofore contributed plan and report

*MOU for Gobernadora Basin Project  
Page 4*

review services for the Project with a value of approximately \$100K. The conditional approval is included in **Exhibit E**.

SMWD will design the project subject to the review and approval of the other Stakeholders as set forth in this MOU. Note that conditions 2a through 2e and 3 of the conditional approval will be included in the design effort lead by SMWD. Consequentially, conditions 1, 2f, and 4 will be included in on-going Ranch Plan submittals by RMV. Overall, should the Project progress under the proposed Implementation Agreement, RMV may utilize design efforts led by SMWD for partially satisfying conditions 1 through 4, as required by the County for the eventual fulfillment of the Runoff Management Plan for the Ranch Plan.

Condition 5 has been completed at this time. SMWD will also be representative for SJBA, in the event that the facility includes design features within SJBA's purview. Each reviewing Stakeholder will provide written acknowledgement for concurrence with design. Project design elements shall be reviewed and approved by:

- OC Parks, for the future Regional Riding and Hiking Trail (Thomas F. Riley Wilderness Park Trail) across Gobernadora Creek
- County, for the drainage peak flow retarding portion of the Project
- RMV, for impacts to the open space and access roads for the Ranch Plan and existing ranch operations

All design review activities shall be performed expeditiously by each Stakeholder, and design approval will not be unreasonably withheld by Stakeholders. During the design, adequate measures should be implemented to confirm that existing scour conditions are improved, the integrity of the basin is not jeopardized, and the design is compatible with future downstream development described in the Ranch Plan. Also, prior to approval of the design, a planning level Operations and Maintenance (O&M) Manual will be prepared by the design engineer and approved by the County and SMWD. The cost of the final design for construction documents to be prepared by licensed professionals is estimated as follows:

MOU for Gobernadora Basin Project  
Page 5

<b>Design Task Feature</b>	<b>Responsible Stakeholder</b>	<b>Cost (\$1,000's)</b>
1. Peak Flow Retarding Basin	RMV	\$150
2. Regional Trail (including prefabricated bridge for pedestrians and light duty vehicles crossing over Gobernadora Creek)	OC Parks	\$200
3. Water Quality Basin, wells, and pumps	SMWD	\$450
<b>Total</b>		<b>\$800</b>

A part or all of the design may be initiated with funding by SMWD for promoting the procurement of overall grant funding for the Project. In the event that grant funding is not obtained by SMWD for reimbursement of the design costs, the responsible Stakeholders noted in the table above will reimburse SMWD within 60 days of approval of the plans for construction. The County will not be responsible for design costs of the peak flow retarding basin feature.

#### **4. Right-of-Way**

The Implementation Agreement shall include the form of an agreement by which, RMV shall irrevocably offers to dedicate the necessary Project right of way (IOD) to the relevant Stakeholders. The Implementation Agreement shall also contain the form of non-exclusive maintenance and access easements to SMWD and the County, so as to give those Stakeholders the rights necessary to perform their Operations and Maintenance responsibilities as outlined in said Implementation Agreement. The dedication of land has not been appraised, but is preliminarily estimated at \$55K per acre for a total value contributed at \$1,925K. All of the dedications will be presented to the Boards of the applicable Stakeholders for acceptance prior to the start of construction and after appropriate CEQA clearances has been approved.

#### **5. Construction**

The Implementation Agreement will designate the responsibilities of the Stakeholders concerning construction of the Project, clarify corresponding Stakeholder funding, identify construction phasing that may occur, and determine administration responsibilities for construction, operations, and maintenance, per the provisions of this MOU or as superseded by the Implementation Agreement. The County will not be responsible for construction costs of the peak flow retarding basin feature.

#### **6. Ownership and Concurrent Use**

It is anticipated that after the Project is completed and accepted by the County and SMWD, SMWD will own and operate the water quality basin portion (Upper Basin – see Exhibit C) of the Project located on the northerly side and the County of Orange will own and operate the drainage peak flow retarding portion of the Project (Lower Basin – see Exhibit C), located on the southerly side. The Project will also have easements encumbering other uses such as a future Regional Riding and Hiking Trail for OC Parks and a potential infiltration basin for SMWD or SJBA. Non-exclusive easements will be

*MOU for Gobernadora Basin Project*  
*Page 6*

provided for access roads servicing the Project. The Ownership areas are generally depicted on **Exhibit C**. Form document that may be used to effectuate the transfer of title to these properties and interests will be prepared, approved and attached to the Implementation Agreement.

**7. Operations and Maintenance**

SMWD and the County will maintain their respective portions of the Project.

The County will maintain the capital improvements related to the inlet and outlet structure and the drainage peak flow retarding basin portion of the Project.

The water quality basin portion will be maintained by SMWD at its cost. This will include all inlet and outlet features for the basin, as well as corresponding primary and emergency access roads for servicing the Project. SMWD will also perform routine maintenance such as vegetation, debris, and sediment removal, etc. that may occur in the drainage peak flow retarding basin portion of the Project that will result from dry weather flows anticipated for the Project, the water pumping well, and the potential infiltration basin overlay of the drainage peak flow retarding basin portion of the Project.

OC Parks, at its cost, will maintain the Regional Riding and Hiking Trail located along the northerly boundary of the Project, once the trail is in operation. During the interim condition, OC Parks will maintain the trail surface as an extension of the current existing trail to the north of the Project. In the event that the proposed bridge over Gobernadora Creek is constructed adjacent to the Project, OC Parks will also be responsible for the maintenance of this facility at its cost.

A Matrix of Responsibilities, summarizing those identified in this MOU, is included in **Exhibit D**. This matrix will serve as an outline for the Implementation Agreement.

Funding sources by each agency have not been identified at this time, but must be identified and agreed to prior to construction of the Project. Annual maintenance costs for the drainage peak flow retarding portion of the Project are estimated at approximately \$47,000 per year and are summarized in **Exhibit F**. As such, SMWD is intent to perform the work in **Exhibit F**, not listed under County portion.

**8. Consistency with Ranch Plan**

The design, right-of-way dedication, and construction of the Project shall be consistent with the Rancho Mission Viejo Development Agreement, dated November 8, 2004, more specifically described in Exhibit D, Public Benefits 39 and 41 ("X" trail as noted on another Ranch Plan related exhibit entitled "Master Trail and Bikeways Implementation Plan" dated July 18, 2006). The construction of the water quality basin portion of the Project shall comply with Compliance Regulation #356 and all relevant Ranch Plan conditions of approval.

*MOU for Gobernadora Basin Project*  
*Page 7***Miscellaneous**

- A. The Stakeholders understand that numerous material terms and conditions relative to the Project have not yet been discussed or agreed upon, and that additional negotiations and discussions will need to take place prior to the preparation, delivery and execution of the Implementation Agreement. The Stakeholders shall meet and negotiate in good faith relative to the preparation of a mutually-acceptable Implementation Agreement. Notwithstanding said commitment, the Stakeholders are not obligated to accept or enter into an Implementation Agreement or any other contract or agreement.
- B. It is understood that this MOU is not intended and shall not be construed to create (or as a commitment to create) a relationship of agent, partnership, joint venture or association.

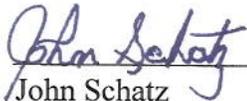
**Approved by:**

[Signatures appear on following page.]

IN WITNESS WHEREOF, Stakeholders hereby execute this Memorandum of Understanding as of the date first above written.

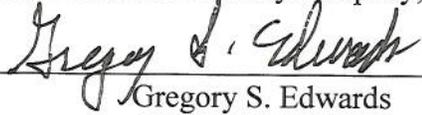
“SMWD”

Santa Margarita Water District,  
a California public corporation

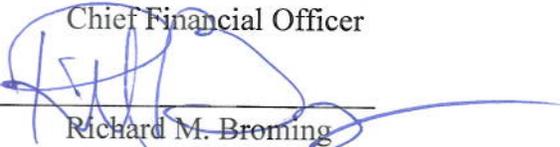
By:  \_\_\_\_\_  
John Schatz  
General Manager

By: "RMV"

Rancho Mission Viejo, LLC,  
a Delaware limited liability company,

By: 

Gregory S. Edwards  
Senior Vice President and  
Chief Financial Officer

By: 

Richard M. Broming  
Senior Vice President –  
Planning and Entitlement

By: "County"

County of Orange  
a political subdivision of the State of California

Date: 3-1-11

By Bill Campbell  
Chair of the Board of Supervisors

Signed and certified that a copy of this document has been delivered to the Chair of the Board per G.C. Sec 25103 Resolution 79-1535

Attest:

Date: 3-1-11

By Darlene J. Bloom  
Darlene J. Bloom  
Clerk of the Board of Supervisors  
County of Orange, California

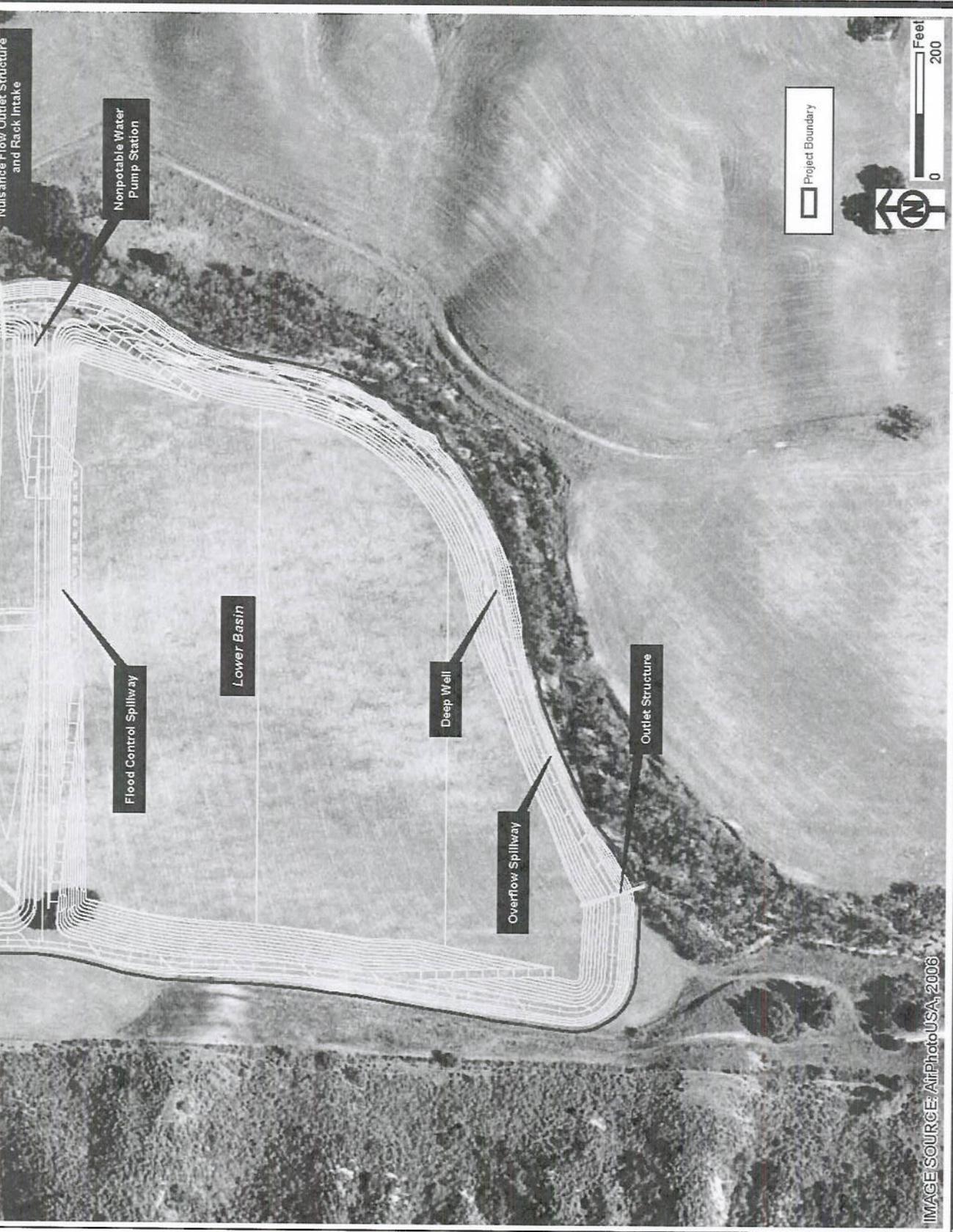


APPROVED AS TO FORM  
Office of the County Counsel  
Orange County, California

Date: 7/27/2010

By [Signature]  
Deputy

**Exhibit A**  
**Concept Plan for Gobernadora Multi-Purpose Basin**



**Exhibit A – Concept Plan for Gobernadora Basin**

**Exhibit B**  
**Summary of Costs and Funding Plan**  
**for Gobernadora Multi-Purpose Basin**

**Exhibit B - Summary of Costs and Funding Plan for Gobernadora Basin**

**ESTIMATED COST**

(\$1,000)

	CONCEPT DESIGN	ENVR. CLEAR.	FINAL DESIGN	R/W SUPPORT	R/W CAPITAL	CONST. SUPPORT	CONST. CAPITAL	TOTAL SUPPORT	TOTAL CAPITAL	TOTAL (Capital & Support)
<b>Total Project Cost (not incl. bridge crossing)</b>	\$300	\$100	\$700	\$50	\$1,975	\$300	\$10,500	\$1,450	\$12,475	\$13,925

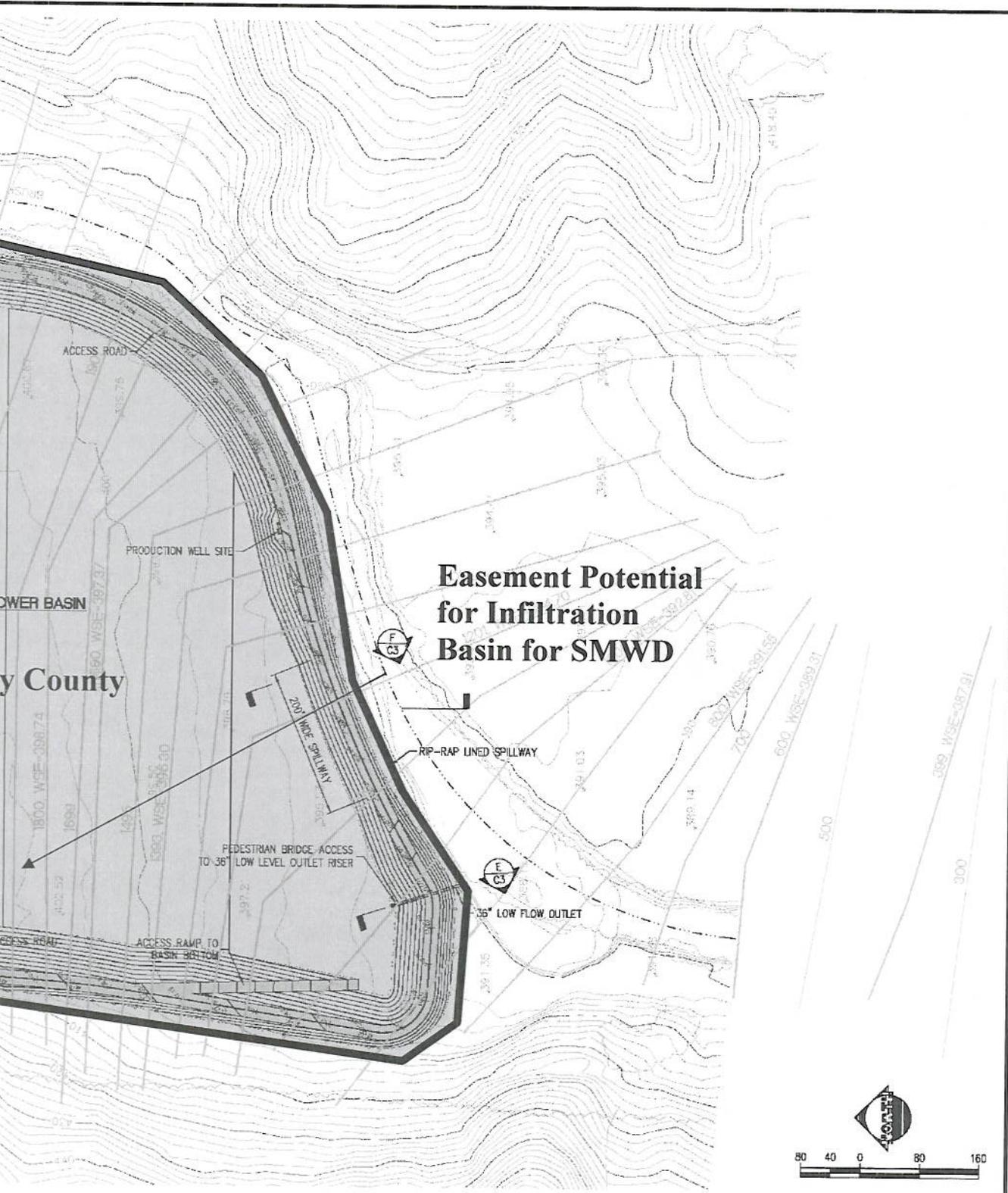
**FUNDING PLAN**

(\$1,000)

FUND	CONCEPT DESIGN	ENVR. CLEAR.	FINAL DESIGN	R/W SUPPORT	R/W CAPITAL	CONST. SUPPORT	CONST. CAPITAL	TOTAL SUPPORT	TOTAL CAPITAL	TOTAL (Capital & Support)
State - Prop. 50							\$2,000	\$0	\$2,000	\$2,000
SMWD - Gen. Fund		\$100					\$2,500	\$100	\$2,500	\$2,600
RMV - Contribution	\$300							\$300	\$0	\$300
RMV - R/W Donation				\$50	\$1,975			\$50	\$1,975	\$2,025
OC Parks - Pending								\$0	\$0	\$0
SJBA - Grant - Pending								\$0	\$0	\$0
Other - Pending								\$0	\$0	\$0
<b>Total Funding</b>	\$300	\$100	\$0	\$50	\$1,975	\$0	\$4,500	\$450	\$6,475	\$6,925
<b>TOTAL (Deficit/(Surplus))</b>	\$0	\$0	(\$700)	\$0	\$0	(\$300)	(\$6,000)	(\$1,000)	(\$6,000)	(\$7,000)

**Exhibit C**  
**Ownership Areas for Gobernadora Multi-Purpose Basin**

**Gobernadora Multi-Purpose Basin**



**Easement Potential  
for Infiltration  
Basin for SMWD**

THIS SET OF PLANS AND SPECIFICATIONS FOR THE MULTIPURPOSE BASIN PROJECT IS THE PROPERTY OF PACE CIVIL ENGINEERING, INC. NO PART OF THIS SET OF PLANS OR SPECIFICATIONS IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PACE CIVIL ENGINEERING, INC.

PACE CIVIL ENGINEERING, 17500 MIDWINTER STREET, SUITE 200, COSTA MESA, CALIFORNIA 92626-1208, PH (714) 441-7300 FAX (714) 441-7399

**PACE**  
**PACIFIC ADVANCED  
 CIVIL ENGINEERING**  
 17500 MIDWINTER STREET, SUITE 200  
 COSTA MESA, CALIF. 92626  
 PH (714) 441-7300 FAX (714) 441-7399

SCALE	AS SHOWN
DESIGNED	P.S.
DRAWN	P.A.P.
CHECKED	P.M.P.
DATE	MAY 2006
JOB NO.	8407E

TITLE

**BASIN  
 PLAN VIEW**

FIGURE

**D1**

JOB NO. 8407E

**Exhibit D**

**Matrix of Responsibilities for Gobernadora Multi-Purpose Basin**

**Exhibit D - Matrix of Responsibilities for Gobernadora Multi-Purpose Basin**

Task	Responsible Agency/Entity			
	<u>County of Orange</u>	<u>SMWD</u>	<u>OC Parks</u>	<u>RMV</u>
<b><u>1. Environmental Certification</u></b>		✓		
<b><u>2. Funding Plan</u></b>	✓	✓	✓	✓
<b><u>3. Design</u></b>				
<b><u>A. 35% Concept Development</u></b>				✓
<b><u>B. Final Design</u></b>		✓		
<b><u>4. Review and Approval</u></b>	✓	✓	✓	✓
<b><u>5. Right-of-Way Dedication</u></b>				✓
<b><u>6. Construction and Administration</u></b>		✓		
<b><u>7.. Ownership</u></b>	✓	✓		
<b><u>8. Operations &amp; Maintenance</u></b>	✓	✓	✓	

**Exhibit E**  
**Gobernadora Multi-Purpose Basin Conditional Approval**  
**by County of Orange**

**Exhibit E - Gobernadora Multi-Purpose Basin Conditional Approval by County of Orange**

*Bryan Speegle, Director*  
300 N. Flower Street  
Santa Ana, CA  
P.O. Box 4048  
Santa Ana, CA 92702-4048  
Telephone: (714) 834-2300  
Fax: (714) 834-5188

July 14, 2009

Bruce Phillips, P.E.  
Pacific Advanced Civil Engineering, Inc.  
17520 Newhope Street, Suite 200  
Fountain Valley, CA 92708

Subject: Rancho Mission Viejo (RMV) Runoff Management Plan (ROMP) -  
Planning Level Regional Detention Basin Strategy & 100-Year Urbanized Peak Flow  
Rate Attenuation Analysis dated June 2009

Dear Mr. Phillips:

We have completed our review of the subject document submitted on June 9, 2009. The submittal, which is an element of the RMV ROMP, contained PACE's response to our May 20, 2009 comments on the previous (April 2009) submittal as well as a DVD containing existing and proposed condition hydrology models and supporting calculations/spreadsheets for the San Juan Creek watershed from its headwaters down to the La Novia Bridge concentration point. This document covers (a) baseline hydrologic analysis, (b) 2-yr through 100-yr Expected Value (EV) impact analysis associated with runoff peak discharge, and (c) planning level peak discharge mitigation analysis for the 100-yr EV storm event utilizing detention basins, which PACE refers to as Planning Level Regional Detention Basin Strategy. Of these three parts, Part (a) has already been approved per our May 20, 2009 letter.

The submitted report and your response to our previous comments state that the intent of this study is to identify a conceptual, regional detention basin strategy that will mitigate the 100-year EV peak flow rate increases associated with the RMV development within the San Juan Creek Watershed. The report and response to comments further state the current submittal does not provide all the required mitigation analyses identified in the Ranch Plan EIR 589 and that additional studies addressing all EIR 589 hydrologic mitigation requirements (with related engineering analyses/calculations) will be performed in the future when more refined development plans and sufficient design details for the detention basins become available.

Given the above statements, a conditional approval is given to parts (b) and (c) with the understanding that the following conditions will be addressed in the near future. It must be understood that future analyses required for addressing these conditions may invalidate the preliminary, planning level assumptions made here necessitating revisions or a re-evaluation of the basin strategy. In addition, please be aware that although the report refers to a regional detention basin strategy, even though the strategy may be acceptable as qualified in this letter, a proposed detention basin should provide regional flood control benefits per Addendum No. 2 to the Orange County Flood Control Design Manual (OCFCDM) for the Orange County Flood Control District (OCFCD) to consider accepting the basin for ownership and maintenance. If this

Mr. Bruce Phillips, P.E.

Page 2 of 3

cannot be demonstrated, ownership by others (a homeowners' association, the County of Orange, etc.) will need to be determined on a case-by-case basis.

1. As the study progresses and further details become available, refinement of the hydrology models which are needed for parts (b) and (c) in order to quantify hydrologic impacts and develop mitigation strategies that would address EIR 589 requirements (e.g., runoff peak discharge, volume, erosion, etc.) might be warranted. If watershed conditions (e.g. land use, sub-area boundaries, proposed basin locations, etc.) within the Ranch Plan development boundary change, new analyses will need to be performed, and submitted for our review and approval.
2. In the future, when more refined development plans and sufficient basin design details (such as geometry, outlet works, sediment volume, regulatory permit requirements, etc.) become available, 2-yr through 100-yr EV hydrologic mitigation analyses addressing EIR 589 requirements need to be performed and submitted for our review and approval. The hydrologic analyses shall include, but not limited to the following:
  - a) Because mitigation basins are proposed, complex Rational Method (with basins) analysis needs to be performed similar to what was done for the existing basins within the San Juan Creek watershed (please refer to Technical Memorandum No.2 – Phase 1 of the San Juan Creek Watershed Study). The lag times in the Complex Unit Hydrograph (with basin) analysis should be based on the times of concentration (Tc's) derived from the complex Rational Method hydrology models.
  - b) In the basin routing, the volume of sediment that is expected to accumulate in the basin should be considered dead storage or a portion of the total basin volume be assumed filled at the start of routing. Calculation of sediment volume should be based on acceptable engineering methods and supporting calculations should be provided for review.
  - c) Supporting calculations for all basin rating tables/curves should be provided.
  - d) The Basin Analysis Software (BAS) or similar programs should be used for modeling flow-by basins, similar to how the Galivan Retarding Basin was modeled in the San Juan Creek Watershed Study (Phase 1).
  - e) Multi-day storm analysis should be performed for basin sizing. A sensitivity analysis that takes into account clogged outlet condition should also be performed.
  - f) The 100-yr EV mitigation analysis for Canada Chiquita (node 134t) is not included in the submittal. Per EIR 589, the ROMP shall analyze and mitigate impacts of the RMV development on all affected watersheds. PACE's response to item no. 4 of our May 20, 2009 comment letter states that *"the current study only represents a portion of the hydrologic mitigation elements for the development and the intent of the study is only to evaluate attenuation of 100-year peak flowrate on the mainstem of San Juan Creek through the use of "regional" detention basins."* PACE also indicates that the mitigation strategy for Canada Chiquita consists of a number of Flow Duration/Water Quality (FD/WQ) or hydromodification basins and the *"hydrologic analysis associated with the FD/WQ basins will be performed using SWMM."* Furthermore, PACE states that the mitigation analysis for Canada Chiquita *"will be performed at the next level of design*

Mr. Bruce Phillips, P.E.  
Page 3 of 3

*analysis for the basin/mitigation.*" [Please refer to part (c), item 1.d of PACE's response to comment].

Canada Chiquita upstream of the confluence with San Juan Creek has a tributary area of approximately 4,100 acres, which is regional in size. Appropriate hydrology analyses should be provided in the future showing that impacts of the RMV development on Canada Chiquita watershed are mitigated per EIR 589 requirements.

3. The Preliminary Engineering Design Report for the Gobernadora Multipurpose Basin (Gobernadora Report) that is included in the appendices (Volume 7 on the DVD) was only used in this ROMP report as reference and therefore was not reviewed. The hydrology analyses/models associated with the Gobernadora Report are not part of this conditional approval. The review, comment and approval of the Gobernadora Report including related hydrology and hydraulic analyses need to be accomplished independently from the ROMP. Issues regarding stable side weir rating table/curve, adjacent channel cross-section changes, etc. will need to be addressed in this independent report before data/information from this report can be used in the analyses pertaining to the ROMP.
4. As indicated in the submitted ROMP report and PACE's June 8, 2009 comment response letter, the current study does not provide all the hydrologic impact analysis and mitigation requirements of EIR 589. All EIR 589 requirements need to be addressed appropriately and carefully documented before the RMV ROMP can be approved.
5. Please affix this comment letter at the beginning of the ROMP and provide us with two (2) final copies of the signed and stamped report and including two (2) updated DVD's.

Please note that our review, any approval or conditional approval is from a regional and sub-regional hydrologic standpoint. Local hydrology issues within the RMV development area will be subject to review by the County's Subdivision and Infrastructure Section.

If you have any questions regarding the above, please call Mehdi Sobhani at (714) 834-5657 or Aram Eftekhari at (714) 834-3754.

Sincerely,



Kevin Onuma, P. E., Manager  
OC Public Works/Flood Control Division

S:\Flood Program\Hydrology\Editha Llanes\Hydrology Reviews\2009\RMV ROMP\Comments on PACE's 9th Submittal v2.0

cc: Jeff Thompson  
Harry Persaud, Manager, OCPW/Planned Communities Public Works Division  
Francisco Alonso, Assistant Director, OCPW/OC Planning/Building & Safety

**Exhibit F**  
**Cost Estimate for Annual Maintenance**  
**for Gobernadora Multi-Purpose Basin**

**Exhibit F - Cost Estimate for Annual Maintenance for Gobernadora Multi-Purpose Basin**

**Gobernadora Multi-Purpose Basin  
O & M Cost Summary Estimate\*  
Drainage Peak Flow Retarding Portion of Basin**

Maintenance Activity	Unit			Subtotal	County Portion
	Cost	Unit	Quantity		
1. Weed Abatement (mechanical removal) - basin floor	\$0.025 sf		800,000	\$20,000	
2. Weed Abatement (mechanical removal) - side slopes	\$0.050 sf		70,000	\$3,500	
3. Maintain Access Road (3-man crew with equipment)	\$3,500 day		4	\$14,000	
4. Rip-rap misc. replacement (3-man crew & skip loader)	\$1,700 day		2	\$3,400	\$3,400
5. Outlet Maintenance (3-man crew & skip loader)	\$1,700 day		1	\$1,700	\$1,700
<b>Subtotal</b>				<b>\$42,600</b>	<b>\$5,100</b>
Contingency	10%			\$4,260	\$510
<b>Total</b>				<b>\$46,860</b>	<b>\$5,610</b>

Notes:

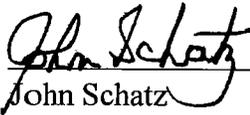
\* Estimate is based on "Basin Plan View - Sheet D1", prepared by PACE, dated May 2006

*MOU for Gobernadora Basin Project  
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IN WITNESS WHEREOF, Stakeholders hereby execute this Memorandum of Understanding as of the date first above written.

“SMWD”

Santa Margarita Water District,  
a California public corporation

By:   
\_\_\_\_\_  
John Schatz  
General Manager