

**FOX CANYON  
GROUNDWATER MANAGEMENT AGENCY**  
A STATE OF CALIFORNIA WATER AGENCY



**BOARD OF DIRECTORS**

**Lynn E. Maulhardt, Chair**, *Director, United Water Conservation District*  
**David Borchard**, *Farmer, Agricultural Representative*  
**Charlotte Craven, Vice Chair**, *Councilperson, City of Camarillo*  
**John Zaragoza**, *Supervisor, County of Ventura*  
**Dr. Michael Kelley**, *Director, Zone Mutual Water Company*

**EXECUTIVE OFFICER**  
**Jeff Pratt, P.E.**

**NOTICE OF MEETING**

**NOTICE IS HEREBY GIVEN** that the Fox Canyon Groundwater Management Agency (FCGMA) will hold an **Executive Committee Meeting** from **3:30 p.m. to 5:00 p.m.** on **Monday, November 12, 2012** in the **Public Works Agency Conference Room 346**, on the 3<sup>rd</sup> floor of the Ventura County Government Center, Hall of Administration Building, at **800 South Victoria Avenue, Ventura, California.**

**FCGMA EXECUTIVE COMMITTEE MEETING AGENDA**

**November 12, 2012**

**Members:** Chair Lynn Maulhardt  
Co-Chair Charlotte Craven

- A. Call to Order**
- B. Introductions**
- C. Public Comment** - Audience members may speak about FCGMA-related matters not on today's Agenda.
- D. Minutes** – Approve the minutes from the September 21, 2012 Executive Committee meeting.
- E. Las Posas Basin-Specific Groundwater Management Plan (LPBSGMP) Comment Letter** – Discuss the FCGMA's comment letter to the Las Posas User's Group regarding the LPBSGMP.
- F. Adjourn the Executive Committee Meeting** – Adjourn until the next Executive Committee meeting, to be scheduled at a later date.

**NOTICES**

*The FCGMA Board strives to conduct accessible, orderly, and fair meetings where everyone can be heard on the issues. The Board Chair will conduct the meeting and establish appropriate rules and time limitations for each item. The Board can only act on items designated as Action Items. Action items on the agenda are staff proposals and may be modified by the Board as a result of public comment or Board member input. Additional information about Board meeting procedures is included after the last agenda item.*

**Administrative Record:** *Material presented as part of testimony will be made part of the Agency's record, and 10 copies should be left with the Board Clerk. This includes any photographs, slides, charts, diagrams, etc.*

**ADA Accommodations:** *Persons who require accommodation for any audio, visual, or other disability in order to review an agenda or to participate in the Board of Directors meeting per the Americans with Disabilities Act (ADA),*

may request such accommodation in writing addressed to the Clerk of the FCGMA Board, 800 So. Victoria Avenue, Location #1610, Ventura, CA 93009-1610, or via telephone by calling (805) 654-2014. Any such request should be made at least 48 hours prior to the meeting so staff can make the necessary arrangements.

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**Availability of Complete Agenda Package:** A copy of the complete agenda package is available for examination at the FCGMA office during regular working hours (8:00 a.m. to 5:00 p.m. Monday through Friday) beginning five days before the Board meeting. Agenda packet contents are also posted on the FCGMA website as soon as possible, and left there for archival retrieval in case reference is needed on previously considered matters. Questions about specific items on the agenda should be directed to the Agency's Executive Officer.

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**Continuance of Items:** The Board will endeavor to consider all matters listed on this agenda. However, time may not allow the Board to hear all matters listed. Matters not heard at this meeting may be carried over to the next Board meeting or to a future Board meeting. Participating individuals or parties will be notified of the rescheduling of their item prior to the meeting. Please contact the FCGMA staff to find out about rescheduled items.

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**Electronic Information and Updates:** Our web site addresses are [www.foxcanyongma.org](http://www.foxcanyongma.org) (for weather station data) or <http://www.fcgma.org> (for home page information). Information available online includes the Board's meeting schedule, a list of the Board members and staff, weather station data, general information, and various Agency forms. If you would like to speak to a staff member, please contact Miranda Nobriga, the FCGMA Clerk of the Board at (805) 654-2014, or Sheila Lopez, the FCGMA Engineering Technician at (805) 645-1372.

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**MINUTES**

Minutes of the Fox Canyon Groundwater Management Agency's (FCGMA) Executive Committee meeting held **Friday, September 21, 2012** in the Atlantic Conference Room at the Ventura County Government Center, Hall of Administration, 800 South Victoria Avenue, Ventura California.

**A. Call to Order** – The meeting commenced at 3:35 p.m.

**B. Introductions** – In attendance were: (1) Lynn Maulhardt, FCGMA Executive Committee Chair; (2) Charlotte Craven, FCGMA Executive Committee Co-Chair; (3) Neal Andrews, FCGMA Executive Committee Alternate member; (4) Jeff Pratt, PWA, Executive Officer; (5) Gerhardt Hubner, WPD, Deputy Director; (6) Jessica Rivera, FCGMA Clerk of the Board; (7) Henry Graumlich, Calleguas Municipal Water District (CMWD); (8) Bryan Bondy, CMWD; (9) Carol Schoen, Zone Mutual Water Company; and (10) Steve Nash, Oxnard resident.

**C. Public Comments**

None. The Committee was informed of the request, during the Fiscal Committee meeting, to limit public comments to those items on the agenda and to remove the "Attending Board Member Comments" item from future agendas. The Committee was also informed of the response received from Mr. Alberto Boada, Agency Counsel, in regards to the public comments request.

**D. Attending Board Member Comments**

None. The Committee was informed that future Committee meeting agendas would not include this item.

**E. Executive Committee**

The Committee agreed that Executive Committee meetings would be conducted informally and held in a conference room setting.

The Committee discussed if the Executive Committee should hear closed session items. After some consideration, it was agreed to keep the Committee opened to hearing closed session items.

Mr. Gerhardt Hubner presented a potential list of topics to review. After discussion and feedback, the Committee recommended Agency staff update the topic list as discussed, noting to include the Executive Committee mission statement to read as:

*The mission of the Fox Canyon Groundwater Management Agency (FCGMA) Executive Committee is to follow the mission of the GMA in a cost effective manner.*


**F. Executive Committee Meeting Schedule**

The Committee agreed that there would be no standing Executive Committee meetings; however, the Committee stated its intent to try and meet at least once every other month.

**G. Adjourn the Fiscal Committee Meeting**

The meeting was adjourned at 4:46 p.m.

Submitted by:



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Jessica Rivera  
Clerk of the Board



**FCGMA Executive Committee  
Potential List of Topics  
September 2012**

The mission of the Fox Canyon Groundwater Management Agency (FCGMA) Executive Committee is to follow the mission of the GMA in a cost effective manner.

A. Work Plan Development/Administration

- Personnel
- Staffing levels
- Level of expertise (contracts)
- Grant applications/administration

B. Board Administration

- Board meetings
- Meeting procedures
- Business practices
- Public outreach

C. Policy & Ordinance Development

- Legislative
- Regulatory tracking
- Groundwater management plan (GMP) current/amendments
- Regional Groundwater Issues and Stakeholder interactions

1st level theme	2nd level theme	3rd level theme	Staff Review It'r Page and Paragraph	Review Letter Comment	LPBSGMP page and paragraph	From LPBSGMP	Comments
plan	framework		1_3	presents a first step in a comprehensive approach to the development of a sustainable basin plan	vii		
sufficient water	brackish GW	water rights	1_4	not a water quantity problem //a water quality problem /unlapped shallow brackish groundwater exists within the basin in sufficient quantity	iii, v_4, xii	Page iii, 1st paragraph. "Sufficient Water Supply -...there is currently enough water available in the LPB to maintain stable groundwater levels and meet demand." // Page v, 4th paragraph. "There is sufficient water available to meet demands and maintain stable water levels, provided management strategies recommended in the Plan are implemented and successfully address several key groundwater management issues." ... Including: unsustainable localized pumping in the WMSA; managing water quality in the southern half of EMSA; and developing new sources of supplemental water. //Page vi, 2nd paragraph. "There is a water surplus today, strategies are needed to ensure that the basin operational yield keeps pace with groundwater demand and that water can be moved from areas of surplus to areas of deficiency."	Incoming water is key, but not locked in.
sufficient water	brackish GW	distribution	1_4.1	right to the shallow brackish groundwater	viii_4 to ix_1		
sufficient water	brackish GW	cost/funding	1_4.2	infrastructure needed to develop and distribute	x		
sufficient water	brackish GW	distribution/ Government oversight	1_4.3	cost of needed infrastructure	ix_3		
sufficient water	brackish GW	water rights	1_4.4	agency or agencies will provide oversight and administration of the development and distribution of this new source			
sufficient water	brackish GW		1_4.5	recharge supply could be diverted or eliminated by upstream dischargers and/or regulatory agencies			
plan	contingency plan		2_1.1	does not present a viable contingency plan in the event of failure to develop and/or distribute the new source while delaying the development of other potentially viable alternatives for ten or more years.			
sufficient water	shortcoming	future	2_1.2	ignores current and future increases in water demand /avoids confronting the tough issues /new development, the amount of historical allocations within the basin, the development of unirrigated land, the increase in intensity of agricultural development, use of credits, and the irrigation efficiency allowance	iii_1; v_4; 48_1; 56_2; 62_4	Page v, 4th paragraph. "There is sufficient water available to meet demands and maintain stable water levels, provided management strategies recommended in the Plan are implemented and successfully address several key groundwater management issues." ... Including: unsustainable localized pumping in the WMSA; managing water quality in the southern half of EMSA; and developing new sources of supplemental water. //Page 56, 2nd paragraph. "An additional limitation of the current FCGMA management approach is that it does not provide a framework for keeping the basin operational yield in balance with pumping. Although large portions of the LPB have experienced overall stable or rising groundwater levels for two or more decades and there appears to be enough water to meet current demands, there is significant potential for increased groundwater demand moving forward that could upset the balance. Potential future changes in land use that could increase the demand for groundwater include urban growth, change to more water-intensive crops (if increase water demand outpaces increases in irrigation efficiency), and planting of unirrigated areas. Increasing imported water costs are also driving M&I pumpers to look at ways to increase the use of local supplies, including groundwater." // Page 62, 4th paragraph. "...if groundwater demand becomes out-of-balance with the operational yield (for example, if inflow from Simi Valley is lost in the future), then the current allocation and credits programs could potentially allow pumping to exceed the operational yield and problems could develop."	Relies on existing and future brackish water, and building facilities to treat and distribute water. // How are these items addressed specifically?
plan	contingency plan		2_1.3	alternative management option discussed at the same time in the event that desalting does not prove to be a viable option			
Legal	strategies		2_3	poses legal questions without explanation as to how they pertain to the issues and strategies discussed in the document			



Plan	framework	2.5.1	"the focus of the Plan is to create an overall framework to guide the orderly development of the resource and sharing".	vii			
Plan	framework	2.5.2	"This Plan simply lays out a framework for filling in necessary details in a coordinated fashion".	ix_3	"As is made clear in the Plan, many of the details are unknown at this point. This Plan simply lays out a framework for filling in necessary details in a coordinated fashion. There is insufficient information available today for the pumps what suite of shallow groundwater desalination projects will be implemented, much less how to share the associated costs."		
Plan	framework	2.5.3	The document presents a framework for local cooperation and coordination, and documents current groundwater basin conditions. It should be titled "Framework for a Plan."		Page xii, 1 <sup>st</sup> paragraph. ".the Plan is designed to provide a framework for facilitating cooperation of interested parties to work together toward a comprehensive solution as the requisite information becomes available."		
Plan	purpose	2.6	proposed as an extension to FCGMA's existing GMP				
BMOs	purpose	2.7	describes numeric Basin Management Objectives (BMO's) as quantitative groundwater level elevation and water quality metrics for measuring progress toward meeting the goals and objectives	iv, 53_1			
BMOs	drought level	3.1	BMO's were derived at drought groundwater levels and considered only to be guides.	iv, 53_2	53.2 ". end of drought."	The primary focus of the water level BMOs is to set minimum water levels (end of drought, pumping depression lows). The BMOs are considered to be only guides and are not triggers for further action.	
Criticism	GMA policies	3.2	The Summary contains a statement that there is no mechanism to keep the LPB in safe yield in part because FCGMA policies allow for "unmanaged" pumping increases		Page viii, 4 <sup>th</sup> paragraph. Interim: ". LPUG review of existing FCGMA pumping management rules to determine what changes might need to be made to ensure the Plan goals are met". Urgent - "will be recommendation for pumping management rules governing the use of shallow groundwater." //xii	This is not accurate.	
Criticism	Resolution No. 2003-03	3.3	inadequacies of Resolution No. 2003-03	viii_4 to ix_1	Page viii, 4 <sup>th</sup> paragraph. Interim: ". LPUG review of existing FCGMA pumping management rules to determine what changes might need to be made to ensure the Plan goals are met". Urgent - "will be recommendation for pumping management rules governing the use of shallow groundwater."		
Criticism	strategies	3.4.1	the desalter as being a highly ranked strategy because it was in a mature stage of design and addresses a problem that needs a rapid solution/The document appears to abandon that strategy				
water rights	brackish groundwater	3.4.2	talks about the urgent need to "prioritize" rights to shallow groundwater to allow for project planning.				
Criticism	Resolution No. 2003-03	3.4.3	Furthermore, the Summary states Resolution No. 2003-03 "prioritizes" shallow groundwater on a "first come first served" basis.			It is not clear that the Resolution states that.	
water rights	brackish groundwater	3.4.4	Priority is a water rights concept; and this is an area that FCGMA does not regulate or adjudicate.				
Plan	framework	3.6.1	"The Plan recognizes that many critical details are forthcoming as the pumps work with the FCGMA to determine an appropriate approach for allocating and prioritizing the use of the shallow groundwater resource and as the pumps complete engineering studies to determine the most feasible suite of shallow groundwater desalination projects	xii_1.1	Page xii, 1 <sup>st</sup> paragraph. ". The Plan recognizes that many critical details are forthcoming as the pumps work with the FCGMA to determine an appropriate approach for allocating and prioritizing the use of the shallow groundwater resource and as the pumps complete engineering studies to determine the most feasible suite of shallow groundwater desalination projects and how much those projects will cost."		
Funding	cost estimates	3.6.2	how much those projects will cost."				
timeline	projects depend on other projects	3.7	"shallow groundwater desalination cannot proceed until the SMP is available for use..."	xii_1 // 52_6	Page 52, 6th paragraph. "Supplemental water is needed to offset pumping and stabilize water levels in the pumping depression, however, affordable supplemental water will not be available until approximately 2016 when the CMWD Salinity Management Pipeline (SMP) is available and the Shallow aquifer in the EMSA can be developed."	Please identify how many of the tasks are dependent on other tasks being performed, and how many are stand alone. //What is being done/proposed in the mean time? What happens if these projects aren't constructed? Is there a plan? The above is one possible solution. What are the other solutions?	
outcrop area		3.8	recharge in the outcrop areas are not significant/ GMA Ordinance and 2007 GMP designate these outlying areas as significant			Discussion of this is needed since it is important in the overall water balance and basin yield.	



Plan	incomplete	financing	3_9	"a comprehensive approach for financing the solutions cannot be included in this initial version of the Plan".	xii_1	xii_1 2" a comprehensive approach for financing the solutions cannot be included in this initial version of the Plan".	
Model	margin of error		4_10	We agree that more work needs to be done to reduce the wide range of values.			
authority	BSGMP		4_2	"The BSGMP uses the authority of the FCGMA, a special act district created by Assembly Bill 2995 (AB 2995) in 1982."	ii_1_1	p.ii "The BSGMP uses the authority of the FCGMA, a special act district..." // Page 1, 1st paragraph. "The BSGMP uses the authority of the FCGMA..."	
authority	LPUG		4_3	document's logic regarding authorities can be somewhat circular in that it states the FCGMA lacks authority, but LPUG relies on the FCGMA's authority in order to accomplish things that the FCGMA does not have the authority to do.	ii	p.ii "The BSGMP uses the authority of the FCGMA, a special act district..."	Discussions about LPUG's authority are not entirely clear and should be reviewed and clarified.
inaccurate statement			4_8.1	section describes that the FCGMA approved the East Las Posas Basin Management Plan, attached as Appendix C in the 2007 FCGMA Groundwater Management Plan.			FCGMA did not specifically approve that plan.
ASR	replace Appendix C		4_8.2	replace the plan in Appendix C of the 2007 GMP, with the "Interim Criteria for Operation of CMWD's Aquifer Storage and Recovery Project" without an explanation of how the criteria differ or any significance of those differences		x_#12	
terminology			5_1.1	section deletes the reference to "overdraft" and replaces it with language that (essentially says the same thing), but fails to acknowledge that "safe yield" and "overdraft" are defined concepts in both the FCGMA Act and the Ordinance Code.			LPUG really should identify what it considers overdraft.
missing citation			5_1.2	quotes from a Supreme Court case without giving a citation			
model	margin of error		5_2	potential development of the shallow aquifer may yield 4,000-8,000 acre-feet/year, assuming that inflows stay the same. We agree that more work needs to be done to reduce the wide range of values.	31-33	39_1 " It should be noted that the FCA native yield estimates is based on limited data,including a 2-month Arroyo simi/ Las Posas surface water flow and percolation study in 2011, and should be used with caution. CMWD is funding a second phase of the Arroyo Simi/ Las Posas surface water flow and percolation study in 2012 that will hopefully better constrain the FCA native yield estimate.	
model	margin of error		5_3	Operational yield of the FCA in the WLP sub basin is estimated at 9,300 AF/yr. Operational yield of the FCA in the SLP+ELP is 14,000 AF/yr. We agree that more work needs to be done to reduce the wide range of values.	37-39		
sufficient water			5_5.1	It is repeatedly stated in the document that "Sufficient water is expected to be available to meet current demands for the foreseeable future...."	v_4, vi_2, 60_1, xii_1	Page v. 4th paragraph. "There is sufficient water available to meet demands and maintain stable water levels, provided management strategies recommended in the Plan are implemented and successfully address several key groundwater management issues." ... Including: unsustainable localized pumping in the WMSA; managing water quality in the southern half of EMSA; and developing new sources of supplemental water. //Page vi, 2nd paragraph. "There is a water surplus today, strategies are needed to ensure that the basin operational yield keeps pace with groundwater demand and that water can be moved from areas of surplus to areas of deficiency." //Page 60, 1st paragraph. Item 3. "Increasing Operational Yield to Meet Growing Groundwater Demand. Although there is a water surplus today, strategies are needed to ensure that the basin operational yield keeps pace with groundwater demand." // Page xii, 1st paragraph. ... "in light of the fact that there is currently enough water to meet demand and maintain groundwater levels."	How are these items addressed specifically? If the water is sufficient, then why is pumping and new supply a concern? Idea is reiterated on Page 48 Paragraph 1. // Construction of a distribution system is proposed? //Surplus appears to be used because drought BMOs are used.
assumptions	existing conditions will continue		5_5.2	Aquifer safe yield and sustainability, as presented in the document, appear to be contingent upon the assumption that existing conditions will continue.	vi_5	Page vii, 5th paragraph. "This assumes wastewater discharges to Arroyo Simi/Las Posas continues at historical rates. However, if Simi Valley expands its recycled water system and /or ceases to discharge from its dewatering wells, the inflows may not be enough to meet current pumping."	It is not clear what the proposed management strategies will be, should existing conditions change. The proposed strategies should be clearly identified and described. In addition, the management strategy appears to have at its foundation the assumption that certain facilities will be built and be operational by certain dates.
strategies	contingency plan		5_5.3	The management strategies that will be implemented in case the facilities are not built or operational by key dates should be clearly identified and discussed			



BMO			5_6.1	Per the September 2011 and August 2012 versions the primary focus of the water level BMOs is to set minimum water level elevations.			Are these protective of aquifer? How does LPUG define overdraft? This is important for GMA policy.
BMO	minimum water level		5_6.2	The water elevation BMOs are set at the minimum water level elevation at each location, end-of-drought water levels, or current stabilized pumping depression water level elevations.	53_2; 54_3	Page 53, 2nd paragraph. " Because the monitoring history at this location has spanned an overall wet period, these BMOs are set at the water levels observed at the beginning of the record, which also coincides with the end of the drought in the 1980's- early 1990s. Should another dry periods like this occur, a water level decline below the BMO would possibly be an indicator that the sub-basin is not operating within its operational yield." // Page 53, 5th paragraph. "As long as these inflows are sufficient to replace pumped water, water levels should remain stabilized. If not we should expect water levels to decline. For this reason, the FCA water level elevation BMOs are set at the stabilized elevation achieved at each well." // Page 54, 3rd paragraph. " The BMO is set at the water level elevation corresponding to the end of the drought."	It is unclear that the management strategy of setting the BMOs thresholds this low is sustainable in future basin drought conditions. // Does this stabilized level reflect a drought or wet period?
BMO	annual adjustment		5_6.3	Per the document, BMOs in the vicinity of the ASR pumping may need to be shifted downward due to the lack of recovery. As proposed, BMOs will be reset annually. It is unclear that evaluating and adjusting the BMOs annually is a beneficial management strategy.	53_5	Page 53, 5th paragraph. "This increased pumping caused FCA water levels to decline notably in the central part of the ELP sub-basin. Now that CMWD has completed its long-term drought pumping cycle, water levels in the area are expected to recover to a degree, but perhaps not fully to pre-2006 levels. It may be necessary to adjust the metric for the BMO monitoring points in this area downward to reflect a new stabilized level after the first annual review of this Plan."	Why won't groundwater levels recover if there is adequate groundwater?
BMO			6_1	The BMOs are not hard targets and not enforceable under the proposed approach.	52_6 to 53_1	Page 52 bottom(6 <sup>th</sup> paragraph) to page 53 top (1 <sup>st</sup> paragraph). "These values will be revised based on actual measured water level elevations in 2017." // Page 53, 1st paragraph. " BMO location 12H01 is located near the edge of the pumping depression area and water levels have not started declining again to date. As such, the 12H01 BMO is set at this well's current water level elevation and will be re-evaluated based on trends between now and 2017." Refers to BMOs ever changing.	The function of the BMOs should be clarified. // Refers to BMOs ever changing.
issues/concerns			6_2	The document states that the current FCGMA management approach does not provide a framework for keeping the basin operational yield in balance with pumping. Concerns expressed in the document include: Increased groundwater demand; Potential future changes in land use that could increase groundwater demand (urban growth, change to more water-intensive crops, and planting of unirrigated areas; and increasing imported water costs driving M&I pumps to increase the use of local groundwater.	60_2.2	Page 60, 2 <sup>nd</sup> paragraph, item 2. "The current FCGMA management does not provide a framework for keeping the basin operational yield in balance with pumping moving forward. Current policies would allow pumping to increase in an unmanaged fashion with or without increases to the operational yield. Furthermore the FCGMA does not have the statutory authority to increase the operational yield."	It is not clear that LPUG is correct. Does LPUG have specific suggestions? So how will this change as LPUG has the same or less authority?
Pumpers (who?)			6_3	"Ideally, the pumpers should develop measures that ensure the basin is kept in balance."			
Plan	framework		6_4.1	a framework has been lacking			Helpful if a table or chart be provided to illustrate the key components of that framework
authority			6_4.2	It is also stated that the FCGMA does not have the authority to meet the desired goal of increased operational yield.			The document should clearly identify the proposed route that will be taken to reach the goals set forth within the framework.
strategies	implementation		6_5	what is being proposed for each of the identified challenges, or who is to develop the measures that will ensure the basin is kept in balance.			The document should clearly identify who, or what agencies or organizations are performing each task introduced.
brackish groundwater strategies	legal (inaction)		6_6.1	migation of an existing saline groundwater plume Shallow aquifer groundwater extraction combined with desalting of the shallow groundwater is identified as medium-term strategy (expected in 2017). It is not clear what interim measures are proposed.			The document should clearly identify and describe the interim management strategies that will be implemented to halt the saline plume and protect the aquifer from further degradation both horizontally and vertically



brackish groundwater strategies	legal (inaction)	6_6.2	allow the poor quality water to continue to migrate at least until 2017; it is not clear from a legal perspective what the ramifications are of moving forward with such an approach. Such a proposal should discuss associated potential liabilities to all stakeholders including the FCGMA.	Page v end of 3 <sup>rd</sup> paragraph. "Over time, a plume of poor quality water has migrated approximately 1.5 to 2 miles northward into the EMSA. The plume will likely migrate another mile or so into the management sub-area, creating water quality problems for an increasing number of pumpers."	Furthermore an alternative to the medium-term strategy, pumping and treating, should be provided in case the shallow groundwater extraction facilities or desalter fail to be operational or do not provide all the benefits that are currently assumed.
buy in by all	Pumpers (who?)	6_7.1	"pumpers" desire flexibility to implement the basin management approach through development of any combination of user-specific, local, or regional projects.	Page viii, 3 <sup>rd</sup> paragraph. "The pumpers recognize that if regional project(s) are preferred, a cooperative financial model will be needed to move the projects forward." // Page 62, 3 <sup>rd</sup> paragraph. "In accordance with the Plan objectives, the pumpers desire flexibility to implement the basin management approach through development of any combination of user-specific, local, or regional projects. The engineering study will help determine how individual projects might work together or if one or more regional projects is the best approach. The pumpers recognize that if regional project(s) are preferred, a cooperative finance model will be needed to move the projects forward."	The "pumpers" should be identified (individuals, organizations, agencies). It is not clear what the consensus is among all owners and operators in the Las Posas Basin, nor any agreements by operators included. // It is unclear who will perform and underwrite the engineering study, but who will prepare the finance model and (under what authority) // Which pumpers? Who? What % buy-in? Who performs engineering study? Finance model – what authority? How is this being put together?
financial model	Pumpers (who?)	6_7.2	Per the Document, the "pumpers" recognize that if regional project(s) are preferred, a cooperative finance model will be needed to move the projects forward. It is not clear in the document who "pumpers" refers to. The "pumpers" should be identified (individuals, organizations, agencies). It is not clear what the consensus is among all owners and operators in the Las Posas Basin, nor any agreements by operators included.		
"other aquifers"		7_1.1	Interim Period Planning Tasks includes "Review pumping allocations for other aquifers."		
"other aquifers"		7_1.2	"other aquifers" in reference to permitting wells and extractions.	Page 66 Item 3. "Review Pumping Allocations for other Aquifers"	All groundwater resources in the agency are equal and protected per AB2995. Agency well permits are not aquifer specific. Careful research/study may be needed to determine exactly where wells are screened. Who funds this?
"other aquifers"		7_1.3	It appears that in the document, all water resources in the FCGMA are not considered equal and equally protected. Furthermore, the FCGMA does not possess sufficient detailed data on vertical and lateral extent of water bearing zones, continuity, and communication to be able to permit by water bearing zone.		With the lack of information, it is not clear how the LPUG proposed permitting change will be implemented.
authority		7_3	LPUG will administer and implement the plan and advise the FCGMA on issues of concern	Page 83, 3 <sup>rd</sup> Paragraph. "LPUG is responsible for reviewing CMWD's proposal and negotiating revisions in good faith. LPUG is responsible for recommending a Plan update that incorporates the updated criteria to the FCGMA Board. The FCGMA Board is responsible for adopting the plan revision of directing LPUG to modify the operational criteria."	The Board has never given LPUG an official administrative or advisory role. LPUG should work specifically with the FCGMA to better define its role.
geologic mapping	Recharge area	7_4	The document discusses mapping the aquifer outcrop and expansion area.	"Recharge to the FCA is derived from a variety of sources. A relatively small amount of recharge is derived from precipitation and surface water that percolates directly into the aquifer where it's folded up and exposed along the northern and southern flanks of the basin."	While these technical parcel-level details can be addressed (many with additional funding), it's not entirely clear why LPUG is focusing on these areas as part of a groundwater management plan, given LPUG's description on Page V that recharge is not great from these areas.
GMA Boundary	aquifer outcrop	7_6.1	there are questions about the accuracy of the aquifer outcrop boundary as adopted by the FCGMA		The boundary is an official recorded FCGMA boundary (so it is definitive in that respect). The boundary is based on geologic data reviewed at that time.
geologic mapping	aquifer outcrop	7_6.2	mapping seems to be used as if it is a definitive boundary		The boundary is an official recorded FCGMA boundary (so it is definitive in that respect). The boundary is based on geologic data reviewed at that time.
geologic mapping	aquifer outcrop	7_6.3	recommends existing outcrop mapping be reviewed and further recommends the FCGMA develop procedures for confirming the presence/absence of the aquifer outcrop on a site-specific basis during the permitting process, if necessary.		Conducting field mapping at individual parcels can be done, may require use of mechanized equipment for exploration and would be staff time extensive and costly. The document should describe specifically how this information, if collected, would be used by the Agency to guide decision making.
Criticism	Expansion area boundary	7_8	Delineation of the Expansion Area – The document indicates that some of the expansion area map contains errors, for example extending into the Santa Clara River Watershed.		It's not clear that there are errors. Ordinance 8.0 describes that the boundary may extend beyond the watershed boundary.



strategies	contingency plan	8_10	timeline with interim measures. Many management strategies and goals in this document depend on successful completion of previous goals but the document doesn't seem to detail any contingency plans if certain interconnected steps, or end goals (operation of the desalter) are not completed.			It is very important to have contingency plans now, in the event certain plan elements cannot be completed.
well application evaluations	staff review incomplete	8_2.1	Incomplete/Absent Recharge Water Quality Evaluation – The document mentions that during its review of a proposed well permit that the FCGMA indicated, "they are unable to arrive at a conclusion regarding whether unacceptable water quality impacts would result from proposed irrigation on the outcrop."			Section mischaracterizes LPUG's role in the well permitting process and should be revised or deleted. As part of the LPUG consideration of a well permit request, the FCGMA informed LPUG that: "Agricultural practices can introduce salts into the subsurface. It is not clear what impacts, if any, irrigating avocados will have on the water quality in the Las Posas Outcrop area." Staff added that: "Agency staff seeks input from the Las Posas Users Group regarding potential impacts from the proposed water use, possible monitoring, and proposed permit conditions."
inaccurate statement		8_2.2	recommends that the FCGMA develop standard procedures for evaluating potential impacts to the quantity and quality of recharge to the aquifer outcrop for use in future permitting decisions. Alternatively the FCGMA could coordinate with other agencies to ensure this issue is adequately addressed through other programs.			
legal	regulate land development through well permit conditions	8_5	The document states that the Ordinance Code provides FCGMA with the authority to regulate land use through the application of conditions to well permits. The legal defensibility of the approach is questionable. The document recommends that FCGMA review the legality of its approach and, if necessary, work with other agencies, as needed, to create a more defensible approach for protecting the quantity and quality of recharge to the outcrop			This section states that the "legal defensibility of [FCGMA regulation of land use in the outcrop and beyond] is questionable." The document should clarify what is meant by this statement and provide supporting legal analysis for it.
budget/financing	pump fee	8_7	"During the first year after adoption, LPUG will develop a budget and financing options to begin addressing these items. The most likely financing options would be to somehow utilize the FCGMA pump fee mechanism."	77_3	Page 77, 3 <sup>rd</sup> paragraph. "During the first year after Plan adoption, LPUG will develop a budget and financing options to begin addressing these items. The most likely financing options would be to somehow utilize the FCGMA pump fee mechanism."	It is not clear what the Plan's budget or finance options are.
funding		8_9	Many of the actions proposed are 10-15 years out, without a clear consensus and commitment by interested parties to fund.	xii_1	Page xii, 1 <sup>st</sup> paragraph. "The Plan recognizes that many critical details are forthcoming as the pumpers work with the FCGMA to determine an appropriate approach for allocating and prioritizing the use of the shallow groundwater resource and as the pumpers complete engineering studies to determine the most feasible suite of shallow groundwater desalination projects and how much those projects will cost." //Page 66, 1 <sup>st</sup> paragraph. "Once the projects are identified, LPUG will need to determine how those projects will work together to achieve the goals of the plan and how to equitably share the associated costs and benefits."	We suggest LPUG clearly identify all the necessary consensus and commitment it needs to move forward // Agency-wide? Authorized?
identify elements		9_2	Without those important elements identified, it's difficult to demonstrate to the stakeholders and the Agency that the work will be done, and pursuing alternative strategies is not necessary.			
misinformation	terminology	9_3	Figure 27 - "Interim Strategy #1: Temporary/Interim Cap on Pumping" is a reference to Section 4.6 of the Ordinance Code regarding surcharges for applying more than 4 acre-feet/acre of water in the Las Posas Basin Management Area.			This "cap" is better described as a "penalty threshold" as the FCGMA does not have the intent or authority to "shut off" wells if the water application rate exceeds 4 acre-feet/acre.
BMO	monitoring point locations	9_4.1	No Shallow Aquifer water quality and water level monitoring points in the Arroyo Las Posas alluvial plain (such monitoring points could provide additional data to evaluate leakage between aquifers);			
ASR		9_4.2	Whether adequate injection rates have been realized to support the proposed Aquifer Storage and Recovery Operation (ASR) pumping rates			
shallow aquifer	development	9_4.3	hydraulic characteristics of the Shallow Aquifer (increasing knowledge and understanding would be benefit planning for the Shallow Aquifer			



<p>sufficient water</p>	<p>water rights</p>	<p>shallow aquifer extractions</p>	<p>9_4.4</p>	<p>Impact of Shallow Aquifer extractions on surface water users and the loss of recharge to the Pleasant Valley Basin.</p>			
<p>sufficient water</p>	<p>Model</p>	<p>margin of error</p>	<p>9_5</p>	<p>The calculations and estimates for surface flow, groundwater storage and yield contain very large estimate ranges, raising issues of uncertainty and confidence in the underlying assumptions and conclusions.</p>			<p>A complete water balance is critical. Also we suggest further data collection, analysis and groundwater modeling be completed before final conclusions are made in this regard, and the assumptions and conclusions underlying the document to be reevaluated and incorporated into the document. Modeling may not work well if water balance is not good.</p>
<p>sufficient water</p>	<p>sustainable</p>		<p>9_6.1</p>	<p>We suggest the document answer whether the underlying groundwater resource is truly sustainable (and obtains aquifer safe yield/water balance) for the following questions: shallow groundwater quality being described as poor, short and long term availability and reliability of surface (upstream treatment plant discharges), undetermined storm water flows and unidentified storm water retention projects, effect of climate change, and future demand for groundwater both from current and future operators</p>	<p>viii_4 to ix_1, iii_3, vii_5</p>	<p>Page viii, 4th paragraph to Page ix 1st paragraph. "There are concerns about the future – if groundwater demand becomes out-of-balance with the operational yield (for example, if inflow from Simi Valley is lost in the future), then the current allocation and credits programs could allow pumping to exceed the operational yield and problems could develop." // Page iii, 3rd paragraph. "Recharge of Perennial Base Flow" //Page vii, 5th paragraph. This assumes wastewater discharges to Arroyo Simi/Las Posas continues at historical rates. However, if Simi Valley expands its recycled water system and/or ceases to discharge from its dewatering wells, the inflows may not be enough to meet current pumping."</p>	<p>// Assumption that the discharges for the Moorpark and Simi Valley Wastewater Treatment plants will continue.</p>
<p>sufficient water</p>	<p>WWD No. 19 Desalter</p>		<p>9_6.2</p>	<p>the document should analyze, and include data, information and any potential impacts from the proposed County Waterworks District No. 19 Desalter.</p>			
<p>Strategies</p>	<p>finances</p>	<p>resource allocation</p>	<p>10_1</p>	<p>Management Measures and Strategies must be both equitable and fair financially for both big and small operators, along with any resource allocation redistribution. Currently, the document is unclear on how this goal will be achieved or will be undertaken</p>			
<p>Strategies and planning</p>	<p>scheduling</p>	<p>costs</p>	<p>10_2</p>	<p>Management Strategies, and Planning Tasks// includes work already completed. The document would benefit by including a listing of each task, an associated date and costs</p>			
<p>funding</p>	<p>plan administration</p>		<p>10_3</p>	<p>no commitment by any party, agency or LPUG to fund short, medium or long term plan administration and coordination, studies, monitoring, field studies/inspection program, and design and construction of desalter projects.</p>	<p>viii_3; ix_3; x_#12; 66_1</p>	<p>Page viii, 3rd paragraph. "The pumpers recognize that if regional project(s) are preferred, a cooperative financial model will be needed to move the projects forward." // Page ix, 3rd paragraph. There is insufficient information available today for the pumpers what suite of shallow groundwater desalination projects will be implemented, much less how to share the associated costs. // Page x, Item 12. "Plan Administration and Financing – Develop a budget and financing options to pay for Plan administration activities, such as annual reports, Plan updates, data management, special studies, and modeling." //Page 66, 1st paragraph. "Once the projects are identified, LPUG will need to determine how those projects will work together to achieve the goals of the plan and how to equitable share the associated costs and benefits."</p>	<p>Budget and financing options should be a priority, and the timeline for this task accelerated if possible // Is there consensus with this approach. What percent buy-in exists?</p>
<p>Plan</p>	<p>framework</p>	<p>laws and regulations</p>	<p>10_4.1</p>	<p>The framework, in order to withstand legal scrutiny, should cite how it's proposed plan development timelines and management measures would meet applicable federal, state and local laws and regulations.</p>			
<p>sufficient water</p>	<p>water rights</p>		<p>10_4.2</p>	<p>Given the new framework strategy of assuming sufficient water supply, an analysis of surface water rights, specifically the water rights from upstream discharges in relationship and obligations to downstream users should be evaluated and considered</p>			
<p>Plan</p>	<p>framework</p>	<p>roles and responsibilities</p>	<p>10_5</p>	<p>framework should examine and define roles and responsibilities. This document sometimes mischaracterizes the various agencies roles and responsibilities.</p>			



authority			10_6	LPUG is discussed within the document as having oversight and authority to decide allocations, well permits, etc.			GMA Board has designated LPUG as an advisory group tasked with providing information and recommendations to the GMA Board.
planning	regulatory requirements	legal	10_7	describe how applicable regulatory requirements will be met in the Short Term, Medium and Long-Term. For example, implicit approval of a contamination plume as suggested by the document, likely presents a regulatory challenge as well as a legal liability	v_3		
BMO	utility		10_8	numeric BMOs that are to provide quantitative groundwater level elevation and water quality metrics for measuring progress toward meeting the goals and objectives			To be effective, the BMO's be established and linked to trigger for actions.
sufficient water	shallow brackish GW	legal rights	11_2.1	Rights to the shallow brackish groundwater			
sufficient water	shallow brackish GW	infrastructure (fund, design, construct)	11_2.2	Infrastructure needs to develop and distribute this new source of water	Page vi, 2 <sup>nd</sup> paragraph: "There is a water surplus today, strategies are needed to ensure that the basin operational yield keeps pace with groundwater demand and that water can be moved from areas of surplus to areas of deficiency."		Specifically, what are those strategies?
sufficient water	shallow brackish GW	development costs (resource)	11_2.3	Costs for the development and distribution of this new source			
sufficient water	shallow brackish GW	agency (ies) approval development and distribution	11_2.4	Agency or agencies providing oversight and administration of the development and distribution of this new source			
sufficient water	shallow brackish GW	sustainability	11_2.5	Resource sustainability with the competing demands by regulatory agencies and upstream dischargers.			Sustainable contingent on the assumption that existing conditions will continue.

# Las Posas Basin–Specific Groundwater Management Plan (LPBSGMP) Comment Letter

Jeff Pratt, P.E.

Agency Executive Officer

County of Ventura, Public Works Department

And

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Groundwater Specialist

Watershed Protection District



# Final Draft V.1 LPBSGMP

Overall:

- Is well written;
- Describes the current state of the Basin;
- Presents the initial steps toward a sustainable basin plan;
- Provides an outline of strategies being implemented and proposed.

# Final Draft V.1 LPBSGMP

Presents a departure in philosophy: presumes that the problem is related to water quality and not quantity.

A number of questions need definitive answers:

- Who has the right to the shallow brackish groundwater?
- What is needed and how much will it cost to develop and distribute this new water source?



# Executive Summary

The document:

- Simply lays out a framework to guide orderly development of the resource and sharing;
- Is proposed as an extension to FCGMA's existing GMP;
- BMOs are for measuring progress towards meeting goals and objectives

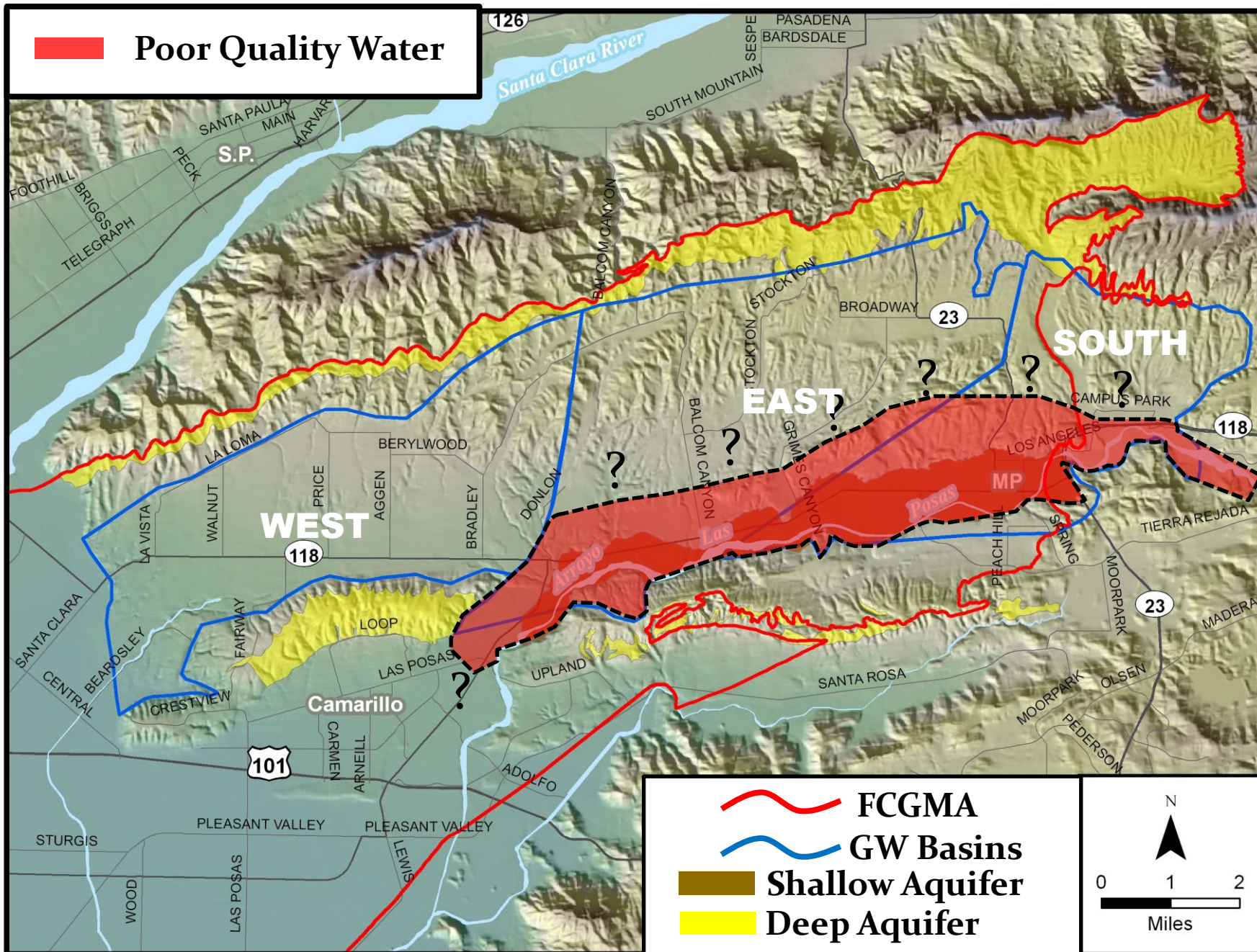
## p.ii Authority

- “The BSGMP uses the authority of the FCGMA, a special act district...”
- Yet “..FCGMA lacks authority.”
- Seems to suggest that the limited FCGMA authority may be a failure of the FCGMA, however the limited authority is by design.

## p.iii Sufficient Water

**“Sufficient water is expected to be available to meet current demands for the foreseeable future,....”**

- Based in part on drought level BMOs, and continued inflow of shallow brackish water.
- Aquifer safe yield and sustainability appear to be contingent upon the assumption that existing conditions will continue.
- Management strategies assume that certain facilities will be built and operational by certain dates.





## p.iv. Basin Management Objectives

- Described as quantitative and qualitative metrics for measuring progress toward meeting goals and objectives.
- Water level BMOs set at minimum water levels.
- The BMOs are considered guides and not triggers for further action.

# Basin Management Objectives (BMOs)

- Evaluated annually and reset as necessary.
- Unclear how end-of-drought groundwater levels work as a strategy for a sustainable groundwater supply (i.e. during future drought conditions).

## p.vi Current Strategies

Per document, the current approach does not provide a framework for keeping the basin operational yield in balance.

Concerns expressed include:

- Increased groundwater demand;
- Changes in land use; and
- Increasing imported water costs.

# p.v Basin Conditions

The calculations and estimates for surface flow, groundwater storage and yield contain very large estimate ranges, raising issues of uncertainty.

We suggest further data collection, analysis and groundwater modeling be completed before final conclusions are made, and the assumptions and conclusions underlying the document be reevaluated and incorporated into the document.



# Alternatives to Current Strategies

With regard to each of the identified challenges to keeping the basin in balance, it is unclear:

- What is being proposed; and
- Who, or what agencies or organizations is to perform each task introduced.

# Future Strategies

- The main thrust appears to be development and control of the existing shallow brackish groundwater.
- p.iv Migration of the existing brackish groundwater plume is a concern.
- Shallow aquifer groundwater extraction combined with desalting is identified as medium-term strategy (expected in 2017).

# Future Strategies

- The document should identify and describe the interim management strategies to halt the brackish groundwater plume and protect the aquifer from further degradation both horizontally and vertically.
- It appears that the proposed approach is to allow the poor quality water to continue to migrate at least until 2017.

# Implementation Plan

Strategy Implementation: Sections 5.2 Short-Term; Section 5.3 Medium-Term; Section 5.4 Long-Term

- Many of the actions proposed are 10-15 years out with no clear consensus and commitment to fund.



# Implementation Plan

Provides a timeline with interim measures.

Many management strategies and goals depend on successful completion of previous goals. Doesn't include contingency plans if certain interconnected steps, or end goals are not completed.

## p. xii Costs and financing

There is no commitment by any party, agency or LPUG to fund plan administration and coordination, studies, monitoring, field studies/inspection program, and design and construction of desalter projects.

Nevertheless, the document's recommendation that by the first year LPUG will develop a budget and financing options should be a priority, and the timeline for this task accelerated if possible.

# Executive Summary

Per the document:

- p.vi There is no mechanism to keep the LPB in safe yield in part because FCGMA policies allow for "unmanaged" pumping increases;
- p.xii Resolution No. 2003-03 "prioritizes" shallow groundwater on a "first come first served" basis.
- p.xii Recognizes that many critical details are forthcoming.



# Summary

This plan has focused on areas where there has been consensus with in LPUG, however

The practical result of this framework is that it avoids confronting the tough issues of existing policies that aggravate overdraft such as new development, the amount of historical allocations within the basin, the development of unirrigated land, the increase in intensity of agricultural development, use of credits, and the irrigation efficiency allowance.

# Summary

A number of outstanding questions must be addressed in future versions of the document, including:

1. Rights to the shallow brackish groundwater;
2. Infrastructure needs to develop and distribute this new source of water;
3. Costs for the development and distribution of the new source;
4. Agency or agencies providing oversight and administration of the development and distribution for this new source; and
5. Resource sustainability with competing demands by regulatory agencies and upstream dischargers.

# Conclusion

- The Agency acknowledges and thanks all stakeholders for their participation in drafting this document.
- The document represents a milestone in its consensus description of the basins current state.
- We look forward to working with LPUG, through the User Group meeting process, in transitioning this framework into a sustainable Basin-Specific Groundwater Management Plan.





# GMP (2007)

Current groundwater management strategies (2007 GMP) associated with the Las Posas Basins include:

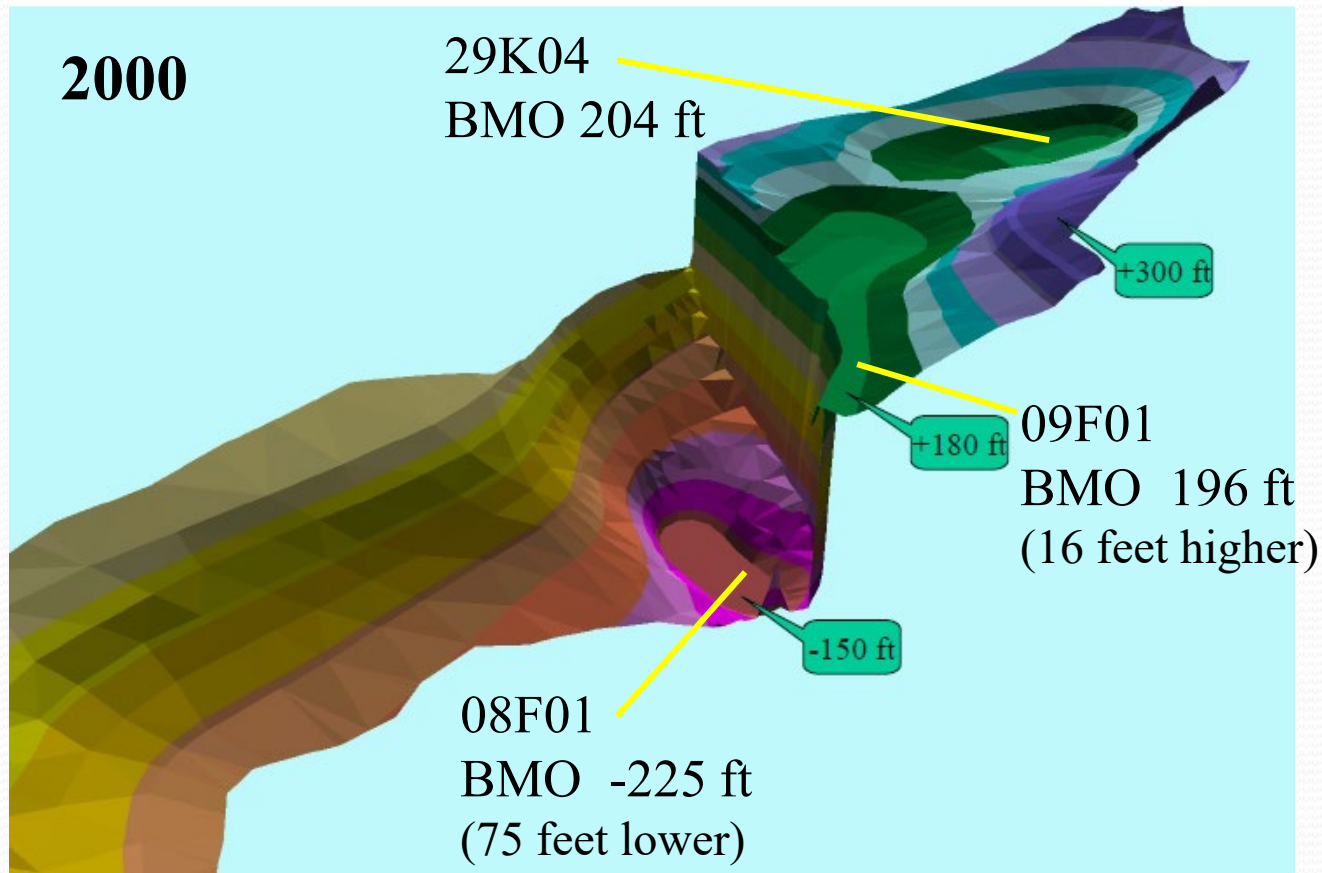
- Limitation of Groundwater Extractions,
- Encourage both Wastewater Reclamation and Water Conservation
- North (now called East and West Las Posas Basin Pumping Restrictions
- Monitor FCGMA Extractions to Ensure That they Do Not Exceed Adopted Projections for that Basin,

# GMP (2007)

- Implementation of Drilling and Pumping Restrictions,
- Fox Canyon Outcrop Expansion Area
- Las Posas Basin ASR project
- Metering of Groundwater Extractions
- Calibration of Groundwater Extraction Meters.



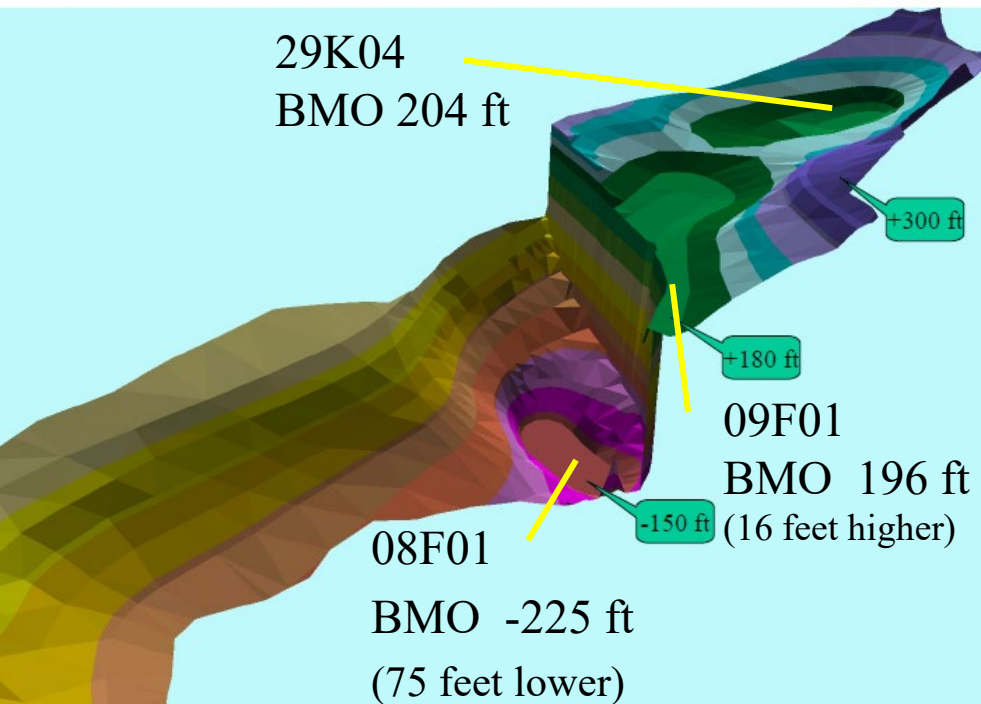
# Proposed BMO water levels compared to water levels in 2000



*Illustration of the Potentiometric Surface taken from LPUG 2/8/12 meeting Agenda Packet*

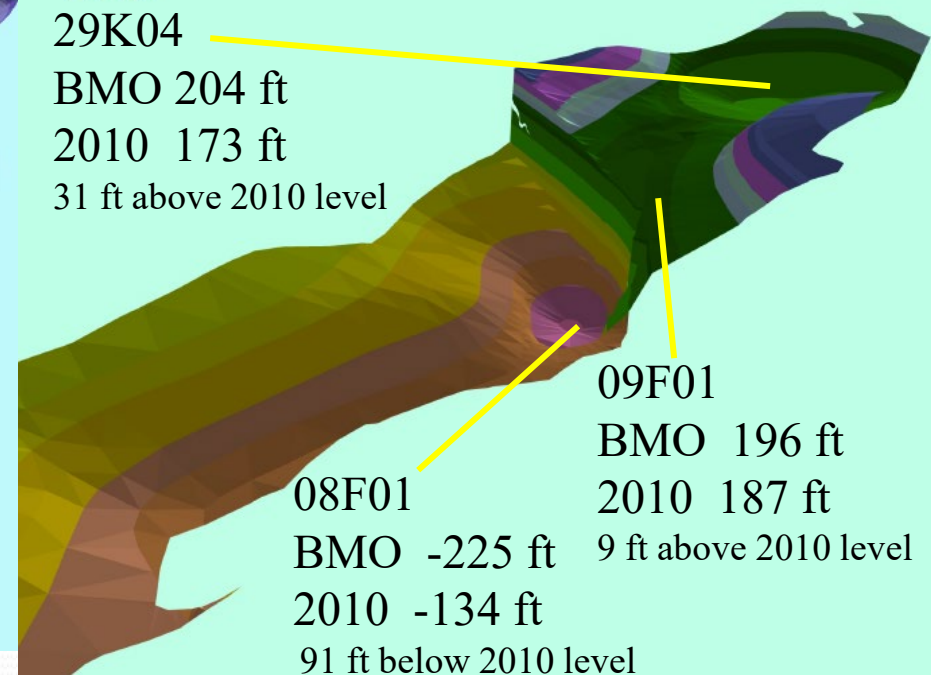
# Proposed Water Level BMOs

2000



Proposed BMO water levels compared to water levels in 2000

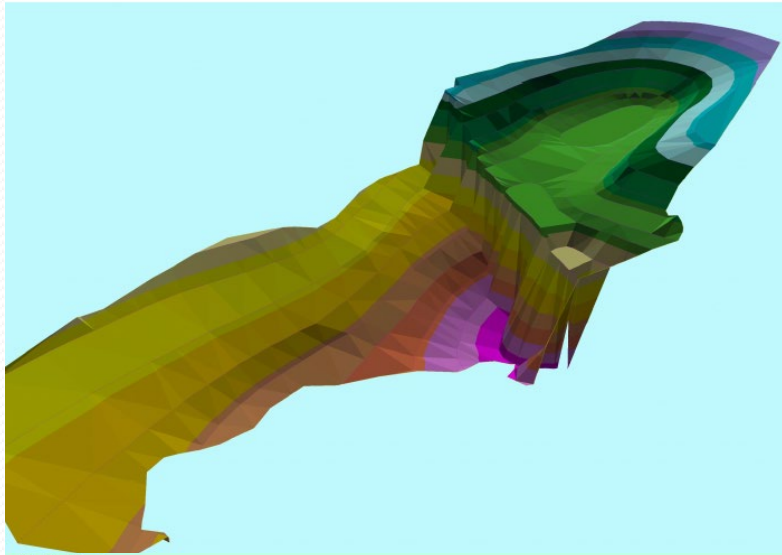
2011



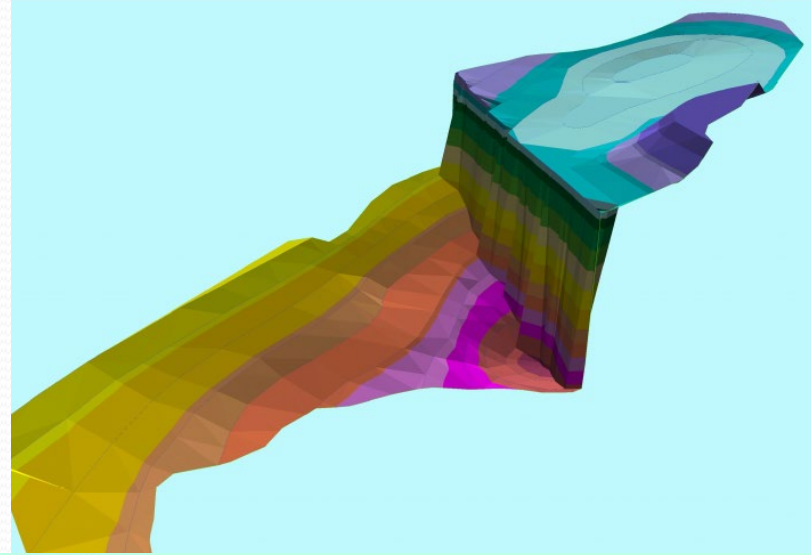
Proposed BMO water levels compared to water levels in 2010

# Potentiometric Surface Illustrated

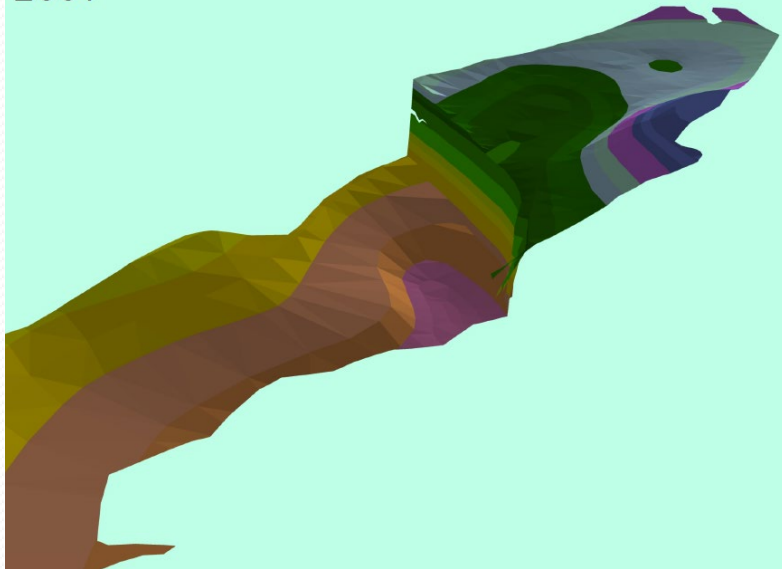
1985



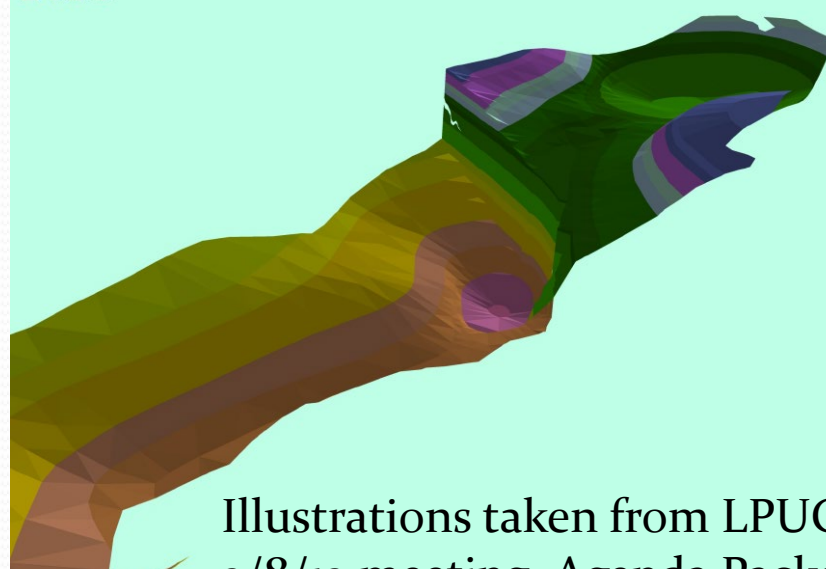
1998



2007



2011



Illustrations taken from LPUG  
2/8/12 meeting Agenda Packet