



Re: Stakeholder input - Proposed Urgency Ordinance Paso Robles Groundwater Basin  
Lowel Zelinski

to:  
choward@co.slo.ca.us, kgriffin@co.slo.ca.us  
08/12/2013 08:38 PM  
Hide Details  
From: Lowel Zelinski <lowell@precisionaginc.com>

To: "choward@co.slo.ca.us" <choward@co.slo.ca.us>, "kgriffin@co.slo.ca.us"  
<kgriffin@co.slo.ca.us>

I have many comments but there is a lack of time to properly reflect on them and compose appropriate responses. be that as it may - here are my ideas:

1. Water availability and ordinances that address these issues are complex to say the least. To develop long term solutions should not be developed in a few days. They should be developed through careful and thoughtful deliberations. Therefore - whatever urgency ordinances that are developed in less than a week are - at best - less than perfect.
2. There real urgency here is for wells that have run dry due to falling groundwater levels. Any ordinances that do not address this issue in the very near term (weeks to months) are not urgent and have no place in this round of ordinances.
3. I agree with supervisor Arnold - in that all ordinances need to be evaluated as to effectiveness over short and long term in address relief to the current situation. We are not in a situation where ordinances which have minor if any impact need to be adopted. Ag is recovering slowly from the recent recession and the added burden of ordinances that are of dubious effectiveness are not needed. We need to have some evaluation as to the impacts of any and all proposed ordinances.
4. A ban on overhead water applications is completely unacceptable. It will destroy many north county ag operations and save small amount of water as a results.
5. A ban on ag ponds is also unacceptable. They are a necessary tool in balancing water availability and flow rates with crop needs. Keep in mind that PG&E has time of use restrictions on pumping and the banning of ponds would increase pumping during times of increased electrical demands. This would lead to reduced energy supplies and greatly increased costs on ag pumpers. Also keep in mind that many ag ponds are used only during the frost season, and water use when temperature that cold is minimal.
6. Meters on wells are a method of estimating water extraction during a period of time. Reporting intervals should not exceed the agencies which will monitor this - ability to process the information. Quarterly is more than sufficient. Also keep in mind that a flow meter is not the only way of determining water pumped. There is a very strong relationship between energy used, electrical, propane and/or diesel fuel that can accurately be converted to ac-ft pumped. Meters are not required in all instances - just a report of estimated water pump which can be derived at a number of different ways.
7. If encouraging water application methods such as "drip" - do not overlook other methods of irrigation that have similar water application efficiencies much as micro-sprinklers. Would be better to indicated micro-irrigation rather than drip.

Attachment 2G  
Stakeholder Comments

8. Ag water use is at best 2/3rds of all pumping. the amount of ag pumping has actually declined since 1980. If ordinances do not address non-ag pumping - and it increases there will be no real solution.

9. In the "red-zone" about 50% exists in incorporated areas. New ordinances will need to address how only addressing 1/2 of the problem will be effective.

10. As i mentioned before there are at least four areas that need to be address by ordinance if ag water is to be delivered on an emergency basis to non-ag needs.

- a. County policy prohibiting use of ag water for non-ag uses
- b. County health potability regulations
- c. County easements issues if temporary pipes or hoses need to cross county roads
- d. State law prohibiting giving or selling groundwater to a parcel you do not own.

I do not evny your task - and thank you for this oppportunity to comment

From Dr. Lowell Zelinski



**FW: Fwd: Stakeholder Input - Proposed Urgency Ordinance Paso Robles  
Groundwater Basin**

Courtney Howard to: Kami Griffin

08/12/2013 02:04 PM

Sent with Good (www.good.com)

----- Forwarded by Courtney Howard/PubWorks/COSLO on 08/12/2013 02:04:39 PM-----

----- Original Message -----

From : salmonfix4@aol.com

To : choward@co.slo.ca.us

Cc :

Sent on : 08/12 01:58:56 PM PDT

Subject : Fwd: Stakeholder input - Proposed Urgency Ordinance Paso Robles Groundwater Basin

Please forward comments below to Ms. Griffen. Thanks.

Stephnie Wald

**Watershed Projects Manager  
Central Coast Salmon Enhancement  
(805) 473-8221 office  
(805) 471-3789 cell  
229 Stanley Ave.  
Arroyo Grande, CA 93420**

Hello:

**Comments on Urgency Ordinance PR GW Basin**

**Metering is only as good as subsequent action taken when thresholds are reached.  
Thresholds need to be established and action delineated, example provided below.**

**Detail on required reporting needed:**

- 1. well depth at start of new well**
- 2. frequency of reporting such as monthly in order to detect 3-5' drop in water level**
- 3. once 3-5' drop is detected, all pumping to cease**

**In addition, enforcement action for non-compliance will be needed.**

Thank you.

Stephnie Wald

**Watershed Projects Manager  
Central Coast Salmon Enhancement  
(805) 473-8221 office  
(805) 471-3789 cell  
229 Stanley Ave.  
Arroyo Grande, CA 93420**



**Fw: Stakeholder input - Proposed Urgency Ordinance Paso Robles  
Groundwater Basin**

Courtney Howard to: Kami Griffin

08/12/2013 01:15 PM

----- Forwarded by Courtney Howard/PubWorks/COSLO on 08/12/2013 01:15 PM -----

From: John Neil <jneil@amwc.us>  
To: "choward@co.slo.ca.us" <choward@co.slo.ca.us>  
Date: 08/12/2013 01:13 PM  
Subject: RE: Stakeholder input - Proposed Urgency Ordinance Paso Robles Groundwater Basin

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Courtney,

Please forward my comments below to Ms. Griffin.

John

Dear Ms. Griffin,

I am a member of the WRAC and the Paso Robles Basin Blue Ribbon Steering Committee. I am also a member of a sub-committee of the Blue Ribbon Committee that has spent many hours screening nearly 100 short, mid, and long term solutions to address issues in the basin. The full committee will review these possible solutions on August 15. It is important that this input be thoroughly considered by the Board of Supervisors (BOS) before it makes any decision or takes any action taken that could potentially alienate any stakeholders that overly the basin.

If the BOS chooses to pursue the adoption of an urgency ordinance, its primary focus should be to provide near-term relief to those rural residential property owners who are experiencing water supply disruptions, and it should apply only to those areas where there is an immediate threat to the health, safety, and welfare of county residents and not the basin as a whole.

In addition, we feel that the Atascadero sub-basin should not to be included under the urgency ordinance, since there are no significant water supply issues in the sub-basin that are posing an immediate threat to health, safety, and welfare of county residents who overly the sub-basin.

An ordinance that establishes a moratorium on new or expanded irrigated crop production, conversion of dry farm or grazing land to new or expanded irrigated crop production, and new development dependent upon a well in the Paso Robles Groundwater Basin could deprive a landowner from exercising his/her rights and may be a taking. This real or perceived taking could alienate stakeholders or worse yet result in a lawsuit. It is important not to alienate any stakeholders that may be part of a long-term solution.

An ordinance that requires metering of all new wells (agricultural and rural residential) will

allow the County to collect important water use data that can be used to verify the assumptions used in the groundwater model. Measuring water use is an essential first step in improving efficiency.

Respectfully yours,

John B. Neil, PE  
General Manager  
Atascadero Mutual Water Co.  
805.464-5351, telephone  
805.466.2596, fax  
[jneil@amwc.us](mailto:jneil@amwc.us)

## **PRO Water Equity, Inc.**

*Paso Robles Groundwater Basin Overliers for Water Equity*

www.prowaterequity.org  
info.prowaterequity@gmail.com  
www.facebook.com/ProWaterEquity  
P.O. Box 255, Templeton, CA 93465

August 12, 2013

Kami Griffin  
Acting Director  
SLO County Planning & Building Department  
976 Osos Street, Room 300  
San Luis Obispo, CA 93408

Ms. Griffin,

PRO Water Equity, Inc. is a diverse all-volunteer coalition of Paso Robles Groundwater Basin users who believe in finding a fair way of sharing the groundwater that belongs to all of us. We are supported by winery and vineyard owners, olive growers, other agriculturalists and many rural residents who overlie the basin.

As stakeholders, we appreciate the opportunity to provide input into the development of the proposed interim ordinance for the Paso Robles Groundwater Basin. We understand that, in order to meet agenda deadlines for the August 27, 2013 Board of Supervisors' meeting, a staff report and the proposed ordinances must be completed by August 16, 2013. We hope that our comments will help staff in their development of the proposed ordinance.

### **General Comments**

Section 65858 of the California Government Code sets forth the circumstances under which a County may adopt an interim ordinance as an urgency measure. This section states in part:

"Without following the procedures otherwise required prior to the adoption of a zoning ordinance, the legislative body of a county, city, including a charter city, or city and county, to protect the public safety, health, and welfare, may adopt as an urgency measure an interim ordinance prohibiting any uses that may be in conflict with a contemplated general plan, specific plan, or zoning proposal that the legislative body, planning commission or the planning department is considering or studying or intends to study within a reasonable time. That urgency measure shall require a four-fifths vote of the legislative body for adoption."

Based on information that we have collected from well owners and from the testimony presented to the Board of Supervisors, numerous wells throughout the Paso Robles Groundwater Basin are failing due to the declining basin. This situation is affecting residents' ability to obtain potable water for their daily needs, to ensure water for fire protection, and to enjoy a reasonable quality of life.

Dry wells are a symptom of our ailing basin. An interim urgency ordinance is like putting the basin on life support while the Board can devise a long term treatment plan. Bringing the basin back to good health will eventually stop the dry well symptom.

In order to protect the public safety, health and welfare of the residents of the Paso Robles Groundwater Basin, an interim ordinance must be adopted as an urgency measure (i.e., through a streamlined process). The intent of adopting an interim ordinance as an urgency measure is to slow the spread of the threat to public safety, health, and welfare while the long term supply-demand issues are addressed.

**Properties covered by interim ordinance**

Staff was directed to provide two ordinances:

One that would apply to all properties within the unincorporated areas of the Paso Robles Groundwater Basin except those properties within the Atascadero Sub-Basin.

One that would apply to all properties within the unincorporated areas of the Paso Robles Groundwater Basin generally within portions of the Estrella, Shandon and Creston Sub-Areas (the area shown as having the greatest change in groundwater elevation).

We understand that an updated map of the basin which will show the well level declines from 1997 through 2013 is currently being developed. Based on the well level hydrographs through April of this year, we anticipate that this map will show a greatly expanded area of increased well level declines.

One of the purposes of the Paso Robles Groundwater Basin Management Plan that was adopted by the County was to develop a common understanding of the groundwater issues in the basin. This Plan (<http://www.slocountywater.org/site/Water%20Resources/Water%20Forum/pdf/201103%20-%20Paso%20Basin%20Final%20GMP.pdf>) provides a brief summary of the numerous studies that have been performed regarding the Paso Robles Groundwater Basin.

Beginning with the Paso Robles Groundwater Basin Study (Fugro West, 2002), the Basin has been described as a hydraulically connected groundwater basin, excluding the hydrologically distinct Atascadero Subbasin. The subareas identified in the Plan are not hydrologically distinct<sup>1</sup>. The other studies which are cited in the Plan also support the statement that the Basin is a single interconnected groundwater basin.

If the interim ordinance were to only apply to portions of the Estrella, Shandon and Creston Sub-Areas (the area shown as having the greatest change in groundwater elevation), the

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<sup>1</sup> Page 19, Paso Robles Basin Groundwater Management Plan, February 2011

portions of the groundwater basin outside of these areas would certainly see increased development pressure. These areas would soon also become affected by declining well levels.

We believe that the interim ordinance must apply to all properties within the unincorporated areas of the Paso Robles Groundwater Basin except those properties within the Atascadero Sub-Basin.

**Specific provisions of the ordinance – moratorium unless uses are offset**

The Board of Supervisors directed that the ordinances contain several provisions, including the following.

The ordinances will establish a moratorium on new or expanded irrigated crop production, conversion of dry farm or grazing land to new or expanded irrigated crop production and new development dependent upon a well in the Paso Robles Groundwater Basin unless such uses offset their total projected water use by a ratio of 2 to 1.

The intent of the interim ordinance is to stop the increasing demand and impacts on the basin until a solution for stabilizing the basin is put into place. By establishing a moratorium on new or expanded irrigated crop production, conversion of dry farm or grazing land to new or expanded irrigated crop production and new development dependent upon a well in the Paso Robles Groundwater Basin, there will be “time out” to allow for solutions to be set in place.

Not establishing such a moratorium would mean that a large amount of irrigated crop production and new wells would be installed in the next two years (the potential life of the interim ordinance), with increased draws on the groundwater basin. The Agricultural Commissioner’s Office and the consultant performing the model update for Public Works have estimates of the amount of vineyard planting that is projected during this timeframe. Based on this information and field observations, an immediate moratorium would put a halt to several hundred (and possibly several thousand) acres of new winegrapes unless their water use was offset.

According to the SLO Tribune<sup>2</sup>, between July 29, 2013 and August 8, 2013, approximately 100 new well permit applications were received by the County. These well permits, if issued, would potentially result in considerable new water uses. The interim ordinance could result in significant water savings by establishing this moratorium.

Establishing this moratorium would not have a negative effect on any existing irrigated agricultural operation or any other planned development dependent on a well in the basin. This moratorium would only affect new or expanded uses.

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<sup>2</sup> <http://www.sanluisobispo.com/2013/08/08/2623068/paso-robles-groundwater-wells.html>

Offsets must be real, verifiable, quantifiable, enforceable and contemporaneous. Precedent for successful offset programs can be found in the air pollution control arena. Since the 1980's, real reductions in air pollution emissions have been achieved through use of an offsetting program. The emissions (or in this case, water use) must be offset by real reductions. In the case of the groundwater basin, the water uses which will provide the offsets must be removed prior to the new water uses being allowed.

Offset ratios have historically been established at higher ratios to account for various factors and to allow for further reductions to reach health and safety targets. In this case, an offset ratio of 2:1 would result in reductions in existing water uses to help lead towards stabilization of the groundwater basin.

By using offsets, new and expanded crop production can utilize whatever amount of water is needed for their crop requirements. Their planting decisions would not be impacted by the interim ordinance.

We support an offset ratio of 2:1 or higher.

#### **Specific provisions of the ordinance – certain exemptions**

Since the proposed moratorium will allow the specified uses to go forward with offsetting, very few exemptions would be necessary. The only exemptions which appear to be justified are “minor modifications”, “efficiency improvements”, a public use, and replacement dwellings, as defined in the August 6, 2013 staff report.

One change that we request to the “efficiency improvement” wording is that the existing well should not have to be destroyed when a replacement well is permitted, as long as flow from both wells is metered, the new well is the same or smaller diameter as the existing well, and the total consumption of groundwater is documented to not increase. In some locations in the basin, new rural residential wells are being drilled into fractures that yield so little water that both wells may be needed to obtain an acceptable flow to service the residence.

Projects in progress (“pipeline” projects) should be exempt only if the project was deemed complete by the Planning Department prior to August 6, 2013. Well permits need to have been issued prior to August 6, 2013 to be exempt. In the case of new irrigated crop production, the crop must have been planted prior to August 6, 2013 to be exempt. The large number of well permit applications and the extensive vineyard planting that is currently taking place is documentation that these limits are needed.

#### **Specific provisions of the ordinance – installation of meters**

The proposed interim ordinance will require the installation of a meter on all new wells. We support this proposal.

Metering on existing wells above a specified discharge line size (e.g. greater than 2 inch) or above a specified casing size (e.g. greater than 5 inch) is also prudent. However, we understand that only new wells will be addressed by the proposed interim ordinance.

**Specific provisions of the ordinance – moratorium on approval of new ponds, reservoirs**

The proposed interim ordinance would establish a moratorium on approval of new ponds, reservoirs and dams other than those allowed by Section 22.52.070.C.2.b of Title 22 of the County Code.

Section 22.52.070.C.2.b states:

**Small reservoir.** A reservoir constructed to regulate or store a supply of water for frost protection, seasonal irrigation, or livestock purposes. Ponds, reservoirs, and dams are subject to the standards in Section 22.52.150F. To qualify for exemption as a small reservoir the following criteria must be met:

- (1) The reservoir shall be designed to contain no more than one acre-foot of water.
- (2) All water storage shall be located entirely below natural grade.
- (3) The reservoir shall not be located on a stream, lake, or marsh, as identified on any U.S. Geological Survey map.

Storage reservoirs that do not meet the criteria under this standard may qualify for alternative review pursuant to Section 22.52.080B.4.

We support this proposal.

**Summary**

PRO Water Equity, Inc. is a coalition of landowners within the Paso Robles Groundwater Basin. We are stakeholders in this process and appreciate the opportunity to provide our comments on the proposed interim ordinance.

We are acutely aware of the declining groundwater levels in the basin. Our directors and our supporters are directly affected by the declining well levels and are experiencing impacts on their health, safety and quality of life.

We recognize that both short term and long term solutions are needed to stabilize the groundwater basin. We understand basic mass balance, that supply must be increased and/or demand must be decreased in order to stabilize the basin. A management structure is needed to establish this framework. A time out is necessary until such a structure can be put in place.

We hope that you will take our comments into account and request that we be involved in every step of this process.

Attachment 2G  
Stakeholder Comments

Thank you for your consideration of our comments. Please direct questions to Sue Luft ([asluft@wildblue.net](mailto:asluft@wildblue.net)), phone 805-227-4785.

**PRO Water Equity, Inc. Directors**

**Sue Luft, President**  
**Nat Sherrill, Vice President**  
**Jan Seals, Treasurer**  
**CC Coats, Secretary**  
**Dianne Jackson, Director**  
**Lindsay Pera, Director**  
**Maria Lorca, Director**



Stakeholder input - Proposed Urgency Ordinance Paso Robles Groundwater Basin

Robert Hartzell

to:

planning, kgriffin, darnold, fmecham, bgibson, ahill

08/10/2013 09:43 PM

Cc:

choward, roberthartzell

Hide Details

From: Robert Hartzell <bobhartzell01@gmail.com> Sort List...

To: planning@co.slo.ca.us, kgriffin@co.slo.ca.us, darnold@co.slo.ca.us,  
fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us

Cc: choward@co.slo.ca.us, roberthartzell@aol.com

Dear Kami Griffin (Planning /COSLO),

re: Stakeholder input - Proposed Urgency Ordinance Paso Robles Groundwater Basin

I attended the Aug 6 meeting, spoke during the public comment section, and listened to the Supervisors discussion. I am also aware that county planning asked for input prior to Aug 14 on the following:

1. The ordinances will establish a moratorium on new or expanded irrigated crop production, conversion of dry farm or grazing land to new or expanded irrigated crop production and new development dependent upon a well in the Paso Robles Groundwater Basin unless such uses offset their total projected water use by a ratio of 2 to 1
2. The ordinances will include certain exemptions (for example to drill a replacement well)
3. The ordinances will require the installation of a meter on new wells
4. The ordinances will establish a moratorium on approval of new ponds, reservoirs and dams other than those allowed by Section 22.52.070.C.2.b of Title 22 of the County Code

I strongly disagree with an 'urgency ordinance' with the restrictions as outlined. The restrictions read as if they are aimed at the agriculture element in the Paso Robles Groundwater Basin. Any ordinance must be equitable and assign restriction to all water users.

That said some research does show that other counties with overdraft problems have proposed 'urgency ordinances'. An example is :

**SAN MATEO COUNTY BOARD OF SUPERVISORS**

**NOTICE OF PUBLIC HEARING**

NOTICE IS HEREBY GIVEN, pursuant to sections 65090 and 65858 of the California Government Code, that the San Mateo County Board of Supervisors will hold a public hearing to consider the adoption of an interim urgency ordinance that would, during the period in which the urgency ordinance is in effect, prohibit the issuance of permits for water wells in certain areas of the San Mateo County Midcoast. Specifically, the urgency ordinance to be considered would amend Chapter 4.68 of the San Mateo County Ordinance Code, on an interim basis not to exceed 45 days, to provide that no permits shall be issued to authorize the digging, boring, deepening, re-perforation, excavation, construction, reconstruction, or conversion of any water wells in the following subareas and subbasins of aquifers located on the San Mateo County Midcoast, as identified in Plate 6 of the *Kleinfelder San Mateo County Midcoast Groundwater Study, Phase II*, dated January 8, 2007 (revised October 2008): the Lower Moss Beach Subarea, the Dean Creek subarea, the Upper Moss Beach Subarea, the Lighthouse Subarea, the Portola Subarea, the Lower Montara Creek Subarea, and the Montara Terrace Subbasin. After public notice and upon a four-fifths vote of the Board, the interim ordinance may be extended at the end of the 45 day period for another period of up to twenty-two and a half months. The urgency ordinance would exempt the issuance of permits for the drilling of water wells to replace permitted wells existing as of December 1, 2009 on existing parcels to serve existing residences.

An 'urgency ordinance' with this specific restriction (no well permits) would apply equally.

Regards

Robert Hartzell

[roberthartzell@aol.com](mailto:roberthartzell@aol.com)

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(805) 458-7268

August 5, 2013

San Luis Obispo County Board of Supervisors

San Luis Obispo County  
1055 Monterey Street, 4<sup>th</sup> Floor  
San Luis Obispo, CA 93408  
[sent via e-mail: BGibson@co.slo.ca.us, DArnold@co.slo.ca.us,  
FMecham@co.slo.ca.us, AHill@co.slo.ca.us, CCampa@co.slo.ca.us]

SUBJECT: Agenda Item #27 – BOS Meeting of August 6, 2013

Dear Honorable Board:

I am writing to you as a stakeholder (I live within the service area of the Atascadero Mutual Water Company), as a professional civil engineer with 27 years experience, as past County employee formerly serving your Board as the Nacimiento Project Manager, as a member of your Water Resources Advisory Committee (District 5 representative), and an active volunteer participant in the Solutions Subcommittee of your Blue Ribbon Committee on the Basin to discuss the subject agenda item scheduled for your next Board meeting regarding the Paso Robles Groundwater Basin (Basin). My input to this matter will cover the following points:

- Current Hydrologic Condition
- Hydrology of the Basin
- Threat Findings Should Focus on Area Impacted
- Stakeholder Involvement
- Ideas for Urgency Ordinance Action that Can Have Real Impact Now
- Final Remarks

**Current Hydrologic Condition**

The 2012/13 hydrologic year is the driest year we have experienced in this most recent drought of our area. The discussion on the hydrology of the basin that follows will point to why the **severe drought is the cause of our water levels dropping** within the Basin.

**Hydrology of the Basin**

First, my engineering experience and my expertise in hydrology are what I rely upon in making the comments herein. The water in storage in any reservoir (lake, pond, or groundwater basin) is affected by the relationship:

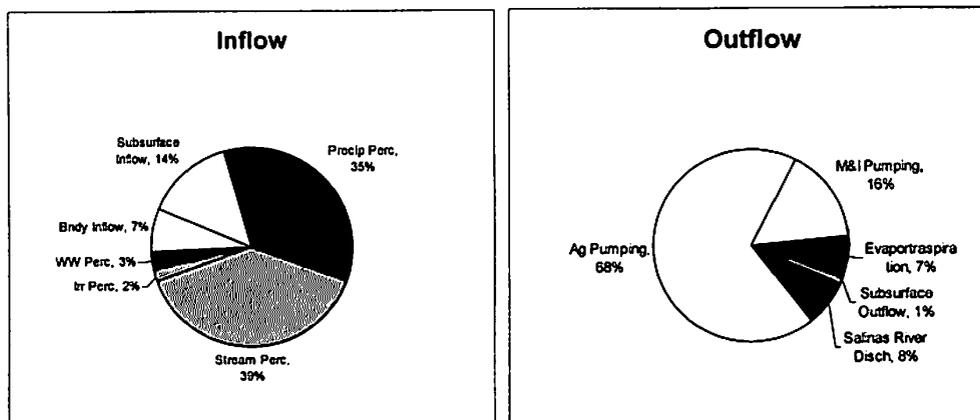
**Inflow minus Outflow equals Change in Storage**

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*HOLLENBECK CONSULTING ~ FOUNDED ON THE PRINCIPALS OF THE 4-WAY TEST OF ROTARY INTERNATIONAL:  
IS IT THE TRUTH? IS IT FAIR TO ALL CONCERNED? WILL IT BUILD GOODWILL AND BETTER FRIENDSHIPS?  
WILL IT BE BENEFICIAL TO ALL CONCERNED?*

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The Inflow and Outflow components are illustrated in the following pie charts. The balance of Inflow and Outflow to achieve no change in storage is called the Perennial Yield, and Fugro identified the long-term average of Perennial Yield to be 97,700 acre-feet per year for the entire Basin. The “annual perennial yield” in any one-year is a function of the actual rainfall and runoff that occurs within a basin, and is either greater than or less than the Perennial Yield that is the stated long-term average.



(Source: Fugro, PR Groundwater Basin Phase II Study, 2005)

On the “Inflow” side, the vast majority of the water entering the Basin’s storage is via precipitation percolation (35%) and streamflow percolation (39%) when looking at the long term average (17 years in this case). The sum of these two is 74%. Now, looking at the “outflow” side, the largest outflow is via pumping by agricultural (68%), and the second largest is via cities, industry (non-ag) and rural residential (16%). The total of these two is 84%. Remember, these values are the long-term average. Each year, however, we have a 50-50 chance that the annual hydrology will be above average (wet period) or below average (drought). The following summarizes what happens during these periods of time:

**The Dynamics of the Basin’s Hydrology**

	<b>Wet Year (heavy rains and full streamflow)</b>	<b>Dry Year (light rains and little streamflow)</b>
<b>Inflow</b>	<ul style="list-style-type: none"> <li>▪ Precipitation percolation into the Basin is greater than the 35% average.</li> <li>▪ Streamflow percolation into the Basin is greater than the 39% average.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Precipitation percolation into the Basin is less than the 35% average.</li> <li>▪ Streamflow percolation into the Basin is less than the 39% average.</li> </ul>
<b>Outflow</b>	<ul style="list-style-type: none"> <li>▪ Agricultural pumping out of the basin is less than the 68% average.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Agricultural pumping out of the basin is greater than the 68% average.</li> </ul>



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compared to the local depth of the Basin.

Your staff's report also has a provision that requests a stop to surface reservoirs. My engineering experience on the beneficial uses of surface reservoirs requires that I comment on this specific proposal. Agricultural ponds are unfairly being targeted in my opinion. In the Midwest where I was born and raised (northeast Kansas), these ponds are designed with many beneficial uses to the overall watershed. They retain water within the Basin during times of flooding so that it can re-enter the groundwater and not be washed out of the watershed (in our case, out to sea). Runoff into these ponds, if there were installed on watercourses that have flowing streams during times of heavy rain, could be used to irrigate crops or used to fight frost in the early spring period. In my opinion these ponds should not be lined, but should be available for percolation into the groundwater. If the time comes where an imported supply of water is piped out into the region, these ponds could be a series of "terminal reservoir" and help recharge the basin. Finally, any long range capital project involving off-stream storage of opportunity water (water that could come from Nacimiento, flood flows on the Salinas or other streams, or State Water Project Water) will require reservoirs to make the solutions function most cost effectively. This section of the ordinance is restrictive and not based on good science.

Finally, I want to express that I dislike the use of groundwater being pumped into these ponds, but on the other hand, let us review the hydrology of the situation when this practice occurs. Water pumped from the ground and into the ponds typically occurs in the winter. The water is often then withdrawn from the ponds during the winter and applied to the irrigated lands as frost protection. The water falls onto the soil and is percolated back into the ground. The plants are nearly dominant and are using little water from the root zone at this time of year, thus a large portion of the water that percolates into the ground is migrating downward and back into the groundwater supply. So an acre-foot of water that is withdrawn and put in a pond results in a significant amount of water that is returned to the Basin. I do not have the numbers to say what the percentage is, but my common sense tells me it is greater than half the withdrawal returns to the Basin. Having more time to get an accurate understanding of this would benefit your Board and therefore I feel your Board should not unilaterally eliminate any and all ponds.

#### **Stakeholder Involvement**

As a past trusted employee of your Board I hope you will value my comments on how vitally important stakeholder involvement is to a successful process. Let me first start off by saying that the water levels in the basin are not going to change up or down in the next 90-days, yet rock-solid decisions and guidance certainly can be an outcome of stakeholder interactions within that timeframe.

There are many stakeholders that have vast amounts of needed information to help your Board understand the drought situation we are in including but not limited to: the hydrology balance between inflow and outflow, the practices of users of the basin

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(agricultural, cities, industrial, and rural residents), the large menu of short-term and long-term solutions that has been developed by the Blue Ribbon Committee, and the trusted works of your Water Resources Advisory Committee. Your own Public Works Staff has experts within who can and should be a part of the solutions and recommendations to your Board. Stakeholder groups have always been demanded and implemented within all parts of this County and advisory to all forms of governments within the County, and to-date the evidence of not engaging stakeholders is all to clear, and I recommend you reconsider and give time for stakeholders to help craft an ordinance.

And finally, I offer three additional reasons to take an approach that allows for thorough solutions and crafting of an ordinance:

- Your Public Works Department is collecting all data relating to actual wells that have gone dry. Best sources of information to-date indicate that as few as 8 to as many as 20 wells have had impacts by water level dropping below the well screens. There are many other antidotal reports of problems. Well owners must submit factual data to Public Works, and your Board should include budget within the urgency ordinance to give Public Works the authority to go truth any and all reports of well problems.
- Your Public Works Department is charged to give your Board a full report on several aspects of the Basin issue at the August 27, 2013, meeting. Your Board charged them with several action items at your May 7<sup>th</sup> meeting, and Public Works should be afforded to be heard so that their input can guide development of good policy.
- Your Blue Ribbon Committee will present the findings of solutions to your Board on August 27, 2013. The full Blue Ribbon Committee will review the final list and provide comments before it is packaged for your Board's review.

#### **Ideas for Urgency Ordinance Action that Can Have Real Impact Now**

Your Public Works Staff has many good studies that have not been acted upon. The groundwater banking study by GEI/Fugro is an example. Several times Fugro and others have made projections as to the demand on the Basin, so the condition we have today should be no surprise to anyone. What Fugro, Public Works, or anyone for that matter cannot predict is when a drought occurs, and how long it will last. Statistically, I have heard that there is a 60-percent probability that we will experience another drought year next year. Demand management (i.e., pumping restrictions) will not solve anything by itself (frankly, my opinion is that it will send the Basin into adjudication which is perhaps the worst possible outcome). Demand management through best management improvements coupled with an imported water source to bring improved reliability to the "inflow" side of the hydrology equation is the solution that is beneficial to all concerned.

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I offer the following for your Board's consideration as you consider what should be in a urgency ordinance.

1. Water Delivery Truck

Bow Valley Agri-Land Services is licensed to make potable water deliveries. Rural residents have Liquid Propane hauled to their homes, and right now some residents who are having well problems could have water delivered just like they have propane. This is a solution "now" and addresses the urgency of the drought we are in. More permanent solutions will occur during this urgency ordinance period.

2. Four Homes per Well

It has come to my attention that rural residents can work together, develop an agreement between themselves, and use one well to provide water to four homes. So if a resident has drilled a new good well, then his neighbors could all participate and use water from that well. Your Board could ask County Counsel to draft up a standard agreement to help the rural residents develop this agreement between them.

3. County Service Area (CSA) Formation.

I have worked over the last couple weeks with the general manager of a local mutual water company to determine if a CSA water supply system is economically beneficial for subdivided rural residents, and I am convinced it is. Your Board could direct Public Works to go to these areas and have ad hoc meetings to educate the communities how a CSA works, and how it can add reliability to their water situation and at the same time this will not threaten their home values. An economic analysis indicates that a CSA water supply system (consisting of pipes, two wells, and water storage tank) can be installed and would conservatively cost (i.e., estimated on the high side) the rural resident \$100 per month. Over the 30-yr life of the debt service, the present value is \$15,000, or \$10,000 less than the cost to drill a new well today for an individual home owner. The O&M of such a system is estimated to be less than \$40 per month.

4. Create a Stand-Alone Water Department within County Government

There are good people within Public Works that spend part of their time working on county-wide water issues. They are within the Utilities Department. They spend time looking at flood control, capital projects, and policy matters to satisfy State DWR grant programs. They are understaffed though when it comes to focusing on long-range water planning and problem-avoidance. This drought is impossible to be addressed on an urgency basis, and furthermore, can be entirely avoided (or nearly avoided) if your Board had a department, let us call it the SLO County Flood Control and Water Conservation District Department, that is adequately staffed, lead, and managed that spends all of its energy heading off problems like we are experiencing now. Several other counties have stand-alone water departments (e.g., Monterey County Water Resources Agency). Perhaps your Board can create such a department using the urgency ordinance process as a

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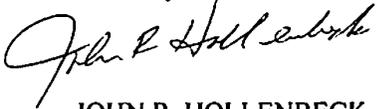
quick stop-gap measure for the North County, while in parallel working with the Administration Department to more thoughtfully organize a permanent department. This department, in my opinion, should not be in the Public Works Department because their focus is segregated with water, special districts, traffic, and road maintenance.

Alternatively, your Board should consider supporting a stand alone water agency that overlies most if not all of the Basin that is within San Luis Obispo County. The advantages of a stand-alone water district is that it does not need to take more County resources. The County can serve as a partner on projects when necessary. Your Blue Ribbon Committee is likely to highly rank a stand-alone water district as a solution for your Board to consider.

#### **Final Thoughts on the Ordinance Proposal**

The Staff Comment Item 3 on page 7 is extremely appropriate in that the stakeholder function that this County has a good record of exercising has not been utilized in the proposal of this ordinance language. A more well thorough stakeholder process in my opinion could result in urgency actions that might reduce the demand on the basin. But once again I will refer back to the hydrology of the basin – demand IS NOT the only part of the equation! Taking actions to affect the “inflow” component of the equation is just as important. Mother nature will do that one of these days when it rains and floods; however, a smart government also implements supplemental water supply projects to hedge against drought. And smart government also seeks real solutions that limit the risk to subdivided regions that are occupied by residential dwelling units. Hind sight is always 20-20, and if in the 1980’s when Jardine and other areas were subdivided, they should have also required the developer to put in the infrastructure for a CSA system with deeper, more reliable wells, rather than rely on individual property owners, who are not engineers and geologist that understand the risks of drilling a well, to make the decision on how deep they should have gone. Believe me, saying “we should of or we could of” will not solve this issue. We must live in the “now” and find practical solutions. The Planning Department’s effort, in my personal opinion, is not a solution oriented proposal that will reduce demand on the basin nor put wet water into the pipes of those who need it.

Sincerely,



JOHN R. HOLLENBECK  
A Sole-Proprietor



Ms. Kami Griffin  
SLO County Planning & Building Department  
976 Osos Street, Room 300  
San Luis Obispo, CA 93408

*Sent Via Email:* [kgriffin@co.slo.ca.us](mailto:kgriffin@co.slo.ca.us)

August 13, 2013

**RE: Request for Stakeholder comments on Interim Ordinance for Paso Robles Groundwater basin**

Dear Ms. Griffin,

Thank you for the opportunity to comment on proposed Interim Ordinance language.

We strongly support the adoption of an ordinance that covers the entire main basin.

In assessing other options for a targeted area of the basin referred to as the "red zone", we encourage your department to obtain the mapping that reflects the current condition of the basin. We believe a new map will reveal that there is little of the basin that is not at risk. Also, we request that in your report to the Supervisors, you include an assessment of the impact of current plantings on the specific basin areas where they are planted and consider that impact in assessing a "red zone" are of distress. In reality, it will not be long before the new plantings have an effect on basin levels. We request that you include language in the ordinance that would require a semi-annual update of the "red zone" mapping and an automatic extension of the ordinance provisions to the expanded "red zone". Updates of the "red zone" should occur within 2 months of the October and April well data collection.

In considering the moratorium and expansion of crops, we request that you include in the definition of expansion the practice of inter-planting between existing vines in established vineyards. We understand the inherent difficulty in tracking such expansion but we feel it is absolutely necessary to require offsets for such expansion. We urge you to define the cut off for current irrigated as only those plantings that were in the ground as of August 6, 2013. If it wasn't in the ground on August 6<sup>th</sup>, it is expansion and subject to the provisions of the Interim Ordinance.

Attachment 2G  
Stakeholder Comments

We believe that "offsets" must actually offset real, current water usage, by retrofitting or converting existing agricultural high-volume water use to more conservative methods of application at a 4 to 1 ratio. Simply paying into a mitigation fund for future projects is not acceptable. The applicant should be required to identify and provide the voluntary conversion, (such as installing drip irrigation in place of overhead irrigation, replacing overhead frost protection infrastructure with "smudge pot" type field heaters, etc) and provide documentation that the conversion is in place before obtaining a new well permit, as the County does not have an existing program or adequate resources to oversee or implement such a program. Offset measures will have to be such that they will remain in place and can be verified as providing the agreed upon water benefit for the life of the new irrigated use. A table should be provided in the staff report showing comparisons of a 2:1, 3:1 and 4:1 offset to show how long it would take to make up the deficit at these three offset options at current usage rates.

We urge you to make all provisions of the Interim Ordinance retroactive to August 6 and that all applications for wells that had not received their permits by August 6, be processed under the provisions of the Interim Ordinance.

Installation of meters on new wells is essential. We support mandatory meter installation on replacement wells. We urge you to include a requirement for reporting meter readings semi-annually on the newly metered wells.

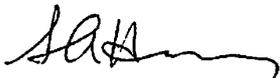
We support the moratorium on new ponds and the exemption language in Section 22.52.070.C.2.b of Title 22 of the County Code.

We request that you include language options for allotment of water based on acreage that overlies the main basin. A supporter has suggested that after a set aside for the water needs of rural residential development, the remainder safe yield could be allotted based on soil types. We suggest that once an allotment system is adopted, overlies who are not utilizing their allotment could contractually lease their allotment to irrigated ag. It would be a market based system.

Thank you,



Andrew Christie  
Executive Director  
Santa Lucia Chapter of the Sierra Club



Susan Harvey  
President  
North County Watch



## SAN LUIS OBISPO COUNTY FARM BUREAU

651 TANK FARM ROAD ♦ SAN LUIS OBISPO, CA 93401-7062  
PHONE (805) 543-3654 ♦ FAX (805) 543-3697 ♦ [www.slofarmbureau.org](http://www.slofarmbureau.org)

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August 13, 2013

Board of Supervisors  
San Luis Obispo County  
Room D-430, County Government Center  
San Luis Obispo, CA 93408

Re: Paso Robles Groundwater Urgency Ordinance Proposal

Chairman Gibson:

Per request from Kami Griffin, Acting Director of Planning and Building Department, San Luis Obispo County Farm Bureau would like to comment on the proposed Urgency Ordinance to place restrictions on certain agricultural activities. We are concerned that any action taken in haste that is presented as a temporary ordinance is a path by which a permanent ordinance is created outside of a more comprehensive and public process.

During the various hearings regarding this ordinance, it has been stated many times that this urgency ordinance is imperative until a permanent ordinance is in place. It is not clear that an urgency ordinance will result in resolving any of the problems faced by the landowners. The momentum to head down this fast track posed as "temporary" and "urgent" without a reasonable expectation of benefit from an urgency ordinance will bypass the appropriate and open policy development process. With the current political environment, the reality that an urgency ordinance will become permanent gives Farm Bureau concern. The lack of the public's ability to have a free and open discussion with the Board on the potential impacts of the ordinance, the absence of the opportunity to expand the shared knowledge base of the issues contributing to the problems and potential solutions, the reality that an urgency ordinance will not change the current water situation, the Boards disinterest in fully understanding agriculture in a non-hostile environment where you are not cut off in three minutes all undermine our expectation of good governance.

We have a few specific comments and concerns that we hope will help direct the discussion on August 27<sup>th</sup>.

Lack of true discussion from those to be impacted and discussion of alternative actions. We ask that any agricultural restrictions be fully vetted in an environment that can bring in science and economic facts to help ensure better understanding what the impacts will likely be. These restrictions should be weighed against other alternatives to solving both the immediate and long term issues.

Focus on the most impacted areas first. We agree with Supervisor Mecham that if there is to be any urgency actions, not an ordinance, that those actions be focus on only those areas that are most

Attachment 2G  
Stakeholder Comments

impacted. Any ordinance or action by the Board that has a permanent status should be vetted in an open and appropriate manner.

**Offsets:** The 2:1 offset ratio is unrealistic and cost prohibited for agriculture versus those in the urban/residential communities. Again, fair and open discussion needs to take place for understanding this concern.

**Ag Ponds:** The restriction on the size of agriculture ponds goes against solutions to water shortage and efficiency for agriculture. I have attached an article from the California Agricultural Water Stewardship Initiative that spells out the benefits from agriculture ponds. It is a tool for irrigation and frost protection. It allows for blending well water for water quality reasons. Pumping at night saves on energy efficiency. Why would you restrict a tool that allows for capturing of other water sources for irrigation? Ag ponds are a solution, not a problem.

We ask that you consider our concerns as you deliberate on any actions concerning the groundwater basin.

Sincerely,

A handwritten signature in black ink, appearing to read "Bernard Olsen", with a long, sweeping flourish extending to the right.

Bernard Olsen  
President

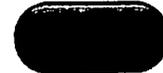
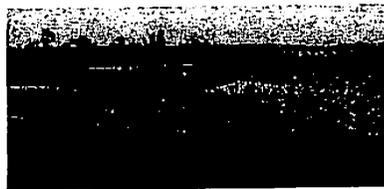


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## Farm Ponds for Irrigation

Overview | Water Savings | Applications | Additional Benefits | Resources | Case Studies



### Overview

Farm ponds have great potential to improve agricultural water security through the capture, storage, and provision of water for irrigation in all regions of California. Farm ponds can also supply a water source for frost protection, recharge groundwater, and provide a wide range of additional economic and environmental benefits.

Ponds can be filled by rainfall, as is common with farm and ranch ponds that are sited at a low point and serve to collect runoff from higher in the watershed. Alternatively, farm ponds can be filled with tailwater from irrigation, which can then be recycled. Ponds can also be filled by diverting water from streams at peak winter flows, offsetting water withdrawals during the dry season when higher instream flows are needed.

Ponds can recharge groundwater, which keeps more water in the system for longer, providing greater quantities for use in the watershed and allowing seepage into streams later into the summer. Devoting more land to ponds in valleys that are overdrafting groundwater would help minimize impacts and would contribute positively to overall watershed management.

Ponds can also be used to trap, filter, and store tailwater from irrigation. Sediment can be settled and returned to the fields; water can be re-used in subsequent irrigations, reducing the need to divert or pump more irrigation water. Pumping from a pond uses much less energy than pumping groundwater. A common approach is to construct a smaller sediment trap that then flows into a pond.

Ponds are common on farms and ranches, however the vast majority of ponds are currently constructed for fish farming, fire protection, stock watering, or simply landscape beautification. Their usefulness as irrigation and watershed management tools have not been sufficiently appreciated or exploited in the West, probably because farmers have largely been able to rely on organized irrigation districts and their reservoirs to store and deliver irrigation water. As water supplies become more uncertain in California, it will behoove farmers and water regulators to make more concerted efforts to institute on-farm ponds.

### Obstacles

The regulatory context for constructing new farm ponds is currently challenging. A significant obstacle to using ponds to manage watersheds is the system of water rights. As the State Water Resources Control Board attempts to permit and regulate farm ponds, they are faced with dilemmas in trying to rearrange water rights to accommodate in-stream flows and fish. The Department of Fish and Game, the Environmental Protection Agency, and county governments also have jurisdiction and their own laws and rules that govern when and how such ponds can be filled. The cost and time involved in such permitting is often discouraging to the farmer.

The cost of constructing the pond can be an issue. A tailwater return pond can easily cost \$20,000-\$40,000 plus \$1,000 a year to maintain, although the federal government (through NRCS) will often share the construction cost, and ponds provide a long-term offset for the cost of purchased water.

Another obstacle to creating more farm ponds in intensively farmed areas is simply the opportunity cost of removing land from production. In the Central Coast, for example, where land can rent for \$2,000 per acre per year, and most of the land is not owned by the people farming it, this is a barrier. The recent rise of often irrational food safety concerns in such areas as the Salinas Valley has also slowed or reversed the creation of ponds, as frogs are associated with salmonella bacteria by some in the food industry.

Ponds can attract wildlife and increase populations of endangered species such as red-legged frogs or the San Francisco garter snake. However, the National Fish and Wildlife Service has developed "safe harbor" agreements that allow the development of such ponds and limit any subsequent Endangered Species Act consequences for the farmer.

### **Water Savings**

Farm ponds can significantly offset growers' and ranchers' reliance on purchased water. One calculation in Pennsylvania showed that a 2-acre clay-lined pond with an average depth of 7 feet will provide roughly 10 acre-feet of irrigation water, accounting for loss to seepage and evaporation. For a vegetable crop that requires 4 inches of irrigation water, this 2-acre pond will irrigate 30 acres of crop. [Click here for more detail on the calculation.](#)

Ponds also present an opportunity to store water in ways that can have other beneficial effects on water supply for growers and ranchers. For example, seepage from ponds can recharge groundwater and help to offset pumping from groundwater basins. In this sense, ponds act to slow the flow of water through the basin, allowing more of it to be retained for use. In a clay soil-lined pond, seepage of only 500 gallons/day is considered excellent and 1,000 gallons/day good, so even in these cases the ponds will augment groundwater supplies throughout the year.

In the case of using ponds to maintain in-stream flow levels for anadromous fish, as in the Pine Gulch Creek case study, removing irrigation water from the stream in the winter provides more water for the environment in the summer. Though more total water would have to be withdrawn for agriculture due to seepage from the ponds (though this would be returned to groundwater flows) and evaporation from the ponds (which reportedly averages 6 inches a month during the summer in this region) than would be the case if the water were pumped as needed for irrigation directly from the stream to the fields, the added water is essentially going to sustain fish (salmonid spawning).

The greatest water savings associated with ponds can be realized by constructing tailwater return flow ponds. By capturing tailwater in a pond and allowing sediment and contaminants to settle out, the pond provides the dual benefit of recycling irrigation water while also recharging groundwater. This approach is carried to an extreme in the Red Rock Ranch case study "RED ROCK RANCH", where on-farm drainage management in the southern San Joaquin Valley by John Diener reuses tailwater again and again through a series of ponds, applying the resulting water to ever more salt tolerant crops.

### **Applications**

Ponds do not function well on sandy or other highly porous soils, but the many clay soils around California provide ample opportunity to employ this practice. Irrigation ponds can be effectively applied in both coastal and Central Valley agriculture. The use of ponds to simultaneously supply irrigation water and regulate streamflows for anadromous fish is being explored along the coast from Santa Cruz northwards. Tailwater recovery ponds are being implemented all around the state, especially in the Sacramento and San Joaquin Valleys.

The size of ponds, the water demands of the crop, and the acreage of irrigated land all determine the efficacy of ponds. While ponds can benefit all sizes of farms, they can have the greatest impact on smaller acreages of intensive crops.

### **Additional Benefits**

Ponds can provide the following benefits in addition to the provision of irrigation water.

Ponds are commonly used on ranches for stock watering. Cattle and horses require 12-15 gallons of water per day. Rather than allow the stock to drink directly from the pond, a more environmentally friendly innovation is to fence the pond and use solar pumps to move water into troughs for the cattle.

Ponds are often used for frost protection, particularly on wine grapes. The use of water for this purpose typically ranges from 0.4-1.6 inches of water in a year. Ponds can be managed to provide wildlife habitat. Although any pond will attract waterfowl, a number of RCDs, Audubon California, and other organizations have been working with farmers to plant native habitat around farm ponds. Researchers are also exploring the use of such ponds to re-introduce native fish species, for example an effort to raise threatened Sacramento perch in Yolo and Solano counties.

Ponds constructed primarily for fish production, typically at least a half-acre in size and a minimum depth of 8 feet, can yield 100-300 pounds of fish per year for each acre of water surface.

Ponds can assist in flood control by capturing and slowing the flow of water through a watershed. Particularly as climate change leads to greater storm flows, a distributed network of ponds could play an important role in attenuating peak flows and reducing flooding.

Ponds help recharge groundwater. Whether filled with water diverted from a stream or with tailwater from irrigation, clay-lined ponds seep water into the ground at highly variable rates (anywhere from 500-10,000 gallons/day depending on size and construction), but typical seepage loss from a well-sealed pond is estimated at one foot of water per year. Every acre of pond would thus on average recharge groundwater with one acre foot—or 325,000 gallons—of water a year.

Ponds at least one acre-foot in size can serve as water sources for fire protection if they are sited in proximity to structures.

Ponds can be used to settle and filter farm runoff, capturing soil that can be returned to fields and filtering pollutants and particulates that would otherwise negatively impact the broader ecosystem.

A more localized and distributed water supply can offset water transported from distant reservoirs, reducing the energy needed for water conveyance.

### **Resources**

**Farm Pond Poster**  
Published by the Upper Midwest Environmental Sciences Center in July 2002, this poster describes the various uses and benefits of a farm pond, how to manage the pond, habitat requirements, and where to go for more information.

**Ponds—Planning, Design, Construction**  
An 85-page guide to constructing farm ponds, with engineering detail, provided by USDA NRCS. Revised November 1997.

**USDA Natural Resources Conservation Service Pond Standard**  
A description of farm pond standards required to obtain cost sharing from the federal government.

**On-Farm Water Storages: Guidelines for Siting, Design, Construction & Management**  
A New South Wales, Australia, guide to farm ponds. While intended for a different geographic context, this is a good summary of the farm pond construction process.

**Rainfall Capture and Storage for Marin Agriculture**  
This primer on using rainwater for agriculture is specific to Marin County, but may be applicable to other areas as well.

### **Rangeland Ponds, Irrigation Ponds**

**Hill Ponds for Landowner and Wildlife Benefit**  
A concise overview of ponds with a special focus on ranch ponds and habitat considerations. Sources of technical and financial support are identified.

Sanctuary Forest, Mattole Flow Program Newsletter, Spring 2009

Describes the current status of the Mattole River Project, which aims to address the problem of low summer stream flows by helping landowners install storage tanks that capture winter flows for summer use.

#### Legal Options for Streamflow Protection

A publication by Sanctuary Forest that explains various legal options for shifting stream withdrawals from summer to winter, including Section 1707 water rights dedications to in-stream flows.

Water Storage Guide: Storing Water to benefit streamflows and fish in North Coast creeks and rivers

A May 2008 guide to household and garden water requirements, practical water withdrawal techniques, and storage solutions, published by Sanctuary Forest.

#### Water and Wine

A brochure that describes Trout Unlimited's work with landowners and government agencies to restore streams for salmon and steelhead spawning, including their efforts to work with grape growers to install farm ponds.

#### Coastal Streamflow Stewardship Project

A Trout Unlimited project along the coast of California working with landowners on physical and management solutions - including ponds - to streamflow problems.

#### Hill Ponds

A Yolo County Resource Conservation District article on hill ponds that covers aspects of construction, maintenance and obtaining support.

#### Ponds and Wildlife

##### Bring Farm Edges Back to Life!

A Yolo County Resource Conservation District publication excerpt covering hedgerows, native grasses, vegetating canals, managing ponds and sloughs, encouraging beneficial insects and wildlife, weed control, and government cost-share programs. From the Landowner Conservation Handbook. 5th Edition. July 2001.

Audubon California Land Stewardship Program A description of Audubon's programs to work with landowners to implement conservation practices and improve wildlife habitat. Audubon California has worked with partners to develop farm ponds in the Sacramento Valley.

#### Fish Ponds

A Guide to California State Permits, Licenses, Laws and Regulations Affecting California's Aquaculture Industry

A description of the State guide to permitting and operating an aquaculture facility, including fish ponds. Explains how to obtain the guide, which is available for purchase from the State.

State of California, Department of Fish and Game "Farm Fish Pond Management in California

A 35-page manual about siting, stocking, and managing a farm fish pond. Contains a list of useful references.

Sonoma Cooperative Extension This website contains useful information and links pertaining to stocking farm ponds, aquaculture and pond management.

Managing for Wildlife Habitat on Rangeland Video This YouTube video is one of eight produced by USDA's Natural Resources Conservation Service in California in December 2011. The videos provide a quick glimpse into some of the Agency's most popular conservation opportunities.

Managing for Wildlife Habitat on Rangeland: There's a Plan For That

Conservation planning Video This YouTube video is one of eight produced by USDA's Natural Resources Conservation Service in California in December 2011. The videos provide a quick glimpse into some of the Agency's most popular conservation opportunities. Conservation Planning: There's a Plan For That

#### NRCS Technical Guide

NRCS provides a set of key technical resources to guide on-farm water (and other

resource) management practices. These include information and recommendations about specific practices related to farm ponds for irrigation as they pertain to local areas. Visit the online Field Office Technical Guide (eFOTG) and click through to the map to your county for details. Once there, you can search through practices listed in Section IV of the pull-down menu in the left-hand column of the page. Here, you may also find information about financial support that may be available for implementing these practices. In addition to practice-specific assistance, the eFOTG provides key data to help growers in resource management decision-making, including natural resource information (Section II in the pull-down menu) about local soil (e.g. web soil survey), water, air, plant and animal resources; planning tools for developing resource management systems (Section III); and other useful tools and information.

### **Case Studies**

#### **Suncrest Nurseries**

Suncrest Nurseries is a California Institute for Rural Studies case study of a nursery utilizing tailwater ponds to clean and recycle water in the Watsonville area. Access the full report, California Water Stewards or download just the Suncrest case study.

#### **Pine Gulch Creek**

A pilot project more than 10 years in the making involves a group of farmers in West Marin and is detailed in the Pine Gulch Creek case study, -Marin-County. Farmers will swap summer riparian water rights for winter appropriative water rights and build ponds to store water in the winter and spring for use in the dry season.

#### **Mattole River Project**

A project on the Mattole River and its tributaries, led by Sanctuary Forest and its partners, is providing large storage tanks to homeowners in addition to encouraging farm pond storage to similarly minimize summertime water withdrawals. The project also envisions some 100 groundwater recharge efforts: off-stream ponds and wetlands; in-stream ponds upstream of fish habitat; infiltration swales (small check dams); and infiltration areas (shallow basins or drain fields).

#### **Sustainable Conservation: Ponds Project**

Published in 2008, the Ponds Project details the benefits of new or modified off-stream water storage ponds to boost declining fish populations – including endangered coho and steelhead salmon – while increasing the certainty of irrigation supplies for farmers within coastal watersheds, particularly San Mateo and northern Santa Cruz counties.

#### **Clos Pegase Winery**

This article from the Napa Valley Register discusses the water security garnered by the irrigation ponds of Clos Pegase Winery in the Napa Valley. The winery's newest 22 acre-foot irrigation pond covers a surface area of 2.8 acres and irrigates a 35-acre vineyard.

#### **Red Rock Ranch**

A concise description of John Diener's Integrated On-Farm Drainage Management system, the crops he grows, and by-products produced.

#### **Lindencroft Farm**

This video is part of the Water Stewardship video series produced by the Ecological Farming Association. Lindencroft Farm captures rainwater in farm ponds to ensure a supply of irrigation water for their specialty crops during the dry season.

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< [Back to On-Farm Practices](#)



**FW: Stakeholder input - Proposed Urgency Ordinance Paso Robles  
Groundwater Basin**

Jennifer Porter to: kgriffin@co.slo.ca.us

08/14/2013 11:06 AM

Cc: Patricia Wilmore, "Still Waters Vineyards - Paul & Pat Hoover  
(paul@stillwatersvineyards.com)"

1 attachment



pic12098.jpg

Good morning Kami-

Thank you for the opportunity to provide input on the Urgency Ordinance for the Paso Robles Groundwater Basin.

I understand the Department of Planning has had limited time to prepare this ordinance. Unfortunately, this limited timeframe also means that stakeholders do not have sufficient time to prepare a well-reasoned, thoughtful analysis of the proposed ordinance. On behalf of the Paso Robles Wine Country Alliance, we do not have any further comments other than what was communicated in person during our meeting on Thursday, August 1.

We again encourage the Board to consider all available, and soon to be available, data sources, as well as input from the Blue Ribbon committee to devise a methodical and measured approach to solving this problem before extreme measures are instituted.

Regards,

Jennifer Porter  
Executive Director  
Paso Robles Wine Country Alliance

Attachment 2G  
Stakeholder Comments



**Interim Ordinance**

Daniella Sapriel to: kgriffin, kgriffen  
Cc: darnold, fmecham, ahill, bgibson

08/14/2013 10:48 AM

Hi Kami,

In response to the request that all comments be received by noon today on the proposed ordinance, I would ask that my previous letter sent on the 8th be included, so as to cover the issue of the improper designation of the ordinance as an "emergency ordinance" rather than the proper framing, which is that the proposed ordinance is an Interim Ordinance not meant to deal with individual emergencies such as an individual well failure, but rather with the public health, safety and welfare threat posed by the large number of rapidly increasing well problems.

I hope that throughout the staff report the ordinance will be properly designated as an INTERIM ORDINANCE.

On another issue, please note that the resistance to additional large ponds and reservoirs is not based on a lack of understanding of the value and effectiveness of such ponds or reservoirs for frost protection or irrigation. The concern is that FILLING and maintaining the level of such huge ag ponds requires sucking a lot of water from a depleted aquifer. Everyone understands their value to the agriculturalist, it's the STRAIN and DRAIN ON THE AQUIFER that is of concern. Mr. Dana Merrill's request that the Board just : "stall" for a few months and that after that the farmers will be done with pumping and irrigating and the aquifer will then "recover" is a clear indication that they understand that such pumping is straining the available water resources. I would also question the assertion that the aquifer will simply recover as soon as they stop for the season, or we have a normal rainy season.

On the issue of the economic and other data requested primarily by Supervisor Arnold, I urge Staff to make sure that any data provided include date on BOTH sides of the ledger. In other words, if you are required to provide data on the impact restrictions would have on the local economy and the wine industry, equally thorough data should be provided on the issue of the impact on the local economy of the loss of wells by rural residents, and also the decline in property values for such homes. In addition, the issue that residents are already holding back from spending money on their homes because of the fear of declining property values needs to be noted. I can personally attest that over two million dollars that I know of personally has been directed elsewhere due to concern about buying property in North County. (My source is a personal friend with \$1,000,000 cash who was planning on purchasing a property in West Templeton and who has decided to buy in South County instead. Also my immediate neighbors who have shelved plans to build their dream home on 100 acres behind my property, and my own husband's refusal to go forward with the planned kitchen renovation of our home.) All these economic issues are difficult to quantify. If the ordinance is properly framed as an "INTERIM" ordinance, they should not be needed for the findings required re public health, safety and welfare. But if the Board is requiring the economic data on the cost of any proposed restrictions, the equal or greater costs of failing to act should also be presented.

In addition, on the issue that we don't yet know where the wells are being drilled, and the request for detailed data on exactly how deep and where etc., I would point out that there are only three drillers in North County, Filliponi & Thompson, Miller, and Maazi. Mr. Filliponi's assertion

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that the Board and staff need only call him and he could easily clarify anything that the Board needs to know, and the public acknowledgment that Board members indeed have spoken to well drillers, makes the assertion that we don't know where the wells are failing untenable. The drillers know, the Board members know, and the public knows the wells are failing throughout many areas of the County, mostly right near where the new huge vineyards have been planted.

All the information and data needed for a finding on the public health, safety, and welfare issue are available. We need an Interim Ordinance to push the "PAUSE" Button so that the Board has the time to address the underlying long-term issues of depletion of the aquifer without further delay.

Finally, I would urge the Board and staff to take whatever measures are legally available to make sure that the Environmental Health Department or whoever it is that processes permits for new wells be instructed to prioritize its staffing resources to process permits from landowners who have dry or failing wells before processing any permits from landowners simply rushing to beat regulatory restrictions. I would also request that staff look into requiring any new wells of over a certain size to have limits on the amount of noise and vibration caused to adjacent properties, as described in the letter to the Board from Billie Parks, my neighbor, who has told me she needs to play music at night to cover the noise from the well pumps in adjacent vineyards.

Thank you for your hard work and all the effort staff has put into this critical issue.

Daniella Sapriel  
Templeton



Paso Robles Groundwater Basin Urgency Ordinance ("Ugency Ordinance") Comments  
Thomas Adams

to:  
kgriffin  
08/14/2013 12:00 PM  
Cc:  
"Steve Lohr", "Jerry Lohr"  
Hide Details  
From: "Thomas Adams" <tadams@dpf-law.com>

To: <kgriffin@co.slo.ca.us>

Cc: "Steve Lohr" <slahr@jlohr.com>, "Jerry Lohr" <jlohr@jlohr.com>

Dear Kami,

The following comments on the above referenced matter are being submitted on behalf of J Lohr Vineyards and Wines ("J Lohr") in response to your request. Given the short amount of time provide these comments focus only on J Lohr's main concerns with the potential options for the Urgency Ordinance presented in the County's staff report dated August 6, 2013. J Lohr will be submitting more comprehensive comments on the County staff report currently being prepared for Board of Supervisors meeting scheduled for August 27, 2013.

**Agricultural Reservoirs:** Reservoirs are vital to agriculture, especially the grape growing industry for many reasons. The value of Reservoirs for agricultural purposes is similar to the value and necessity of lakes, reservoirs and tank systems used for municipal and residential supply. Ag Reservoirs, like domestic water storage is especially important in the arid regions of California. For the purposes of this discussion, it is assumed that water supply comes primarily from groundwater (GW). The demand for water in growing wine grapes occurs at two specific times (irrigation during the hot dry season and frost protection for very isolated days in the winter). Since all grape growers in the area need supply water at the same time (whether for irrigation or frost protection), good stewardship (reducing impacts on municipal and residential supplies) requires adequate storage.

#### Advantages

1. Reservoirs allow water to be collected (stored) in the off season (and at off times) for use when demands are high.
2. Reservoir storage prevents the impact to the GW basin from occurring at the same time throughout the basin (especially for frost protection).
3. Pumping GW can be controlled to reduce electric demands during peak electric grid demand (night hours vs. day hours); this has cost benefits as well.
4. Reservoirs can be strategically located to enhance water distribution, reduce distribution costs and reduce electric demand.
5. Pumping and distributing water from Reservoirs is more efficient and less expensive than direct pumping from wells.
6. When not needed for agricultural purposes, Reservoirs could be used to aid the basin wide management allowing temporary storage and strategic distribution for GW recharge.
7. Reservoir water could be used in emergency situations for fire suppression or distribution for residential supply (e.g., where a shallow well is impacted)

Further, reservoirs whether processed pursuant to the Alternative Review Program or grading permit process are subject to CEQA review and therefore, required to analyze and mitigate for significant environmental impacts, including those associated with groundwater. For these reason the Urgency Ordinance should not place any limitations on Reservoirs smaller than 50 acre-feet in size.

**Offset Ratio for Urgency Permit:** The Urgency Ordinance proposes either a 2:1 or 1:1 ratio for offsets for new development and new irrigated crop production. The law requires that mitigation measures or conditions be roughly proportional to the impact. New irrigated crop production cannot be required to offset twice the amount of its impact to the groundwater basin without exposing the Urgency Ordinance to potential legal challenge.

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**Projects in Process:** The Urgency Ordinance must recognize that landowner have reasonably relied on the County's issuance of well permits and have undertaken substantial work and incurred significant liabilities in reliance on those permits. These landowners have vested rights to complete the development of their property and the Urgency Ordinance must recognize those vested rights by providing for projects with existing well permits and evidence of substantial work and liabilities NOT be subject to the proposed prohibitions in the Urgency Ordinance and be allowed to complete development including irrigation of the final planted vineyard once development is completed.

Thank you in advance for your consideration of these comments and please feel free to contact me with any questions you may have.

Regards,

**THOMAS S. ADAMS, ESQ.**  
DICKENSON, PEATMAN & FOGARTY  
1455 FIRST STREET, SUITE 301  
T: 707.252.7122 | F: 707.255.6876  
D: 707.261.7016  
[TADAMS@DPF-LAW.COM](mailto:TADAMS@DPF-LAW.COM) | [WWW.DPF-LAW.COM](http://WWW.DPF-LAW.COM)

For current wine law news, visit [www.lexvini.com](http://www.lexvini.com)

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August 14, 2013

Ms. Kami Griffin  
Assistant Director, Planning and Building  
[kgriffin@co.slo.ca.us](mailto:kgriffin@co.slo.ca.us)

Dear Ms. Griffin:

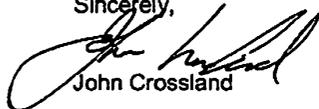
This is in response to your Friday afternoon (August 9) offer for stakeholders in the Paso Robles groundwater basin to submit ideas by noon Wednesday (August 14) on the proposed ordinance. It should be apparent to all concerned that the proposed ordinance is a major undertaking with significant potential impacts on residents and businesses throughout the basin. The proposal needs thoughtful discussion with regard to its terms and anticipated impacts. While we appreciate your effort to give at least some minimal opportunity for stakeholder involvement, there is clearly insufficient time to provide real stakeholder input. A complex, far-reaching ordinance requires discussion and understanding, not haste and autocratic imposition.

A major concern of ours is that there is no evidence that the County has clearly identified the precise emergency that has triggered the need for this urgency ordinance or how the ordinance would address such an emergency. We can only say at this point that the proposed ordinance appears to be inappropriate, as it fails to address any current problem in the basin and does not even seem to offer relief in the immediate future. As proposed, it certainly does not meet the test for urgency.

We would also point out, although this may not be within your jurisdiction, that the entire process leading up to the drafting of the ordinance (and therefore the ordinance itself) was improper and illegal, since it was initiated without notice and proper placement on the agenda of the Board of Supervisors as required by California law.

While we would like to work with staff to evaluate and resolve the issues of the Paso Robles groundwater basin, the current time line does not provide for it.

Sincerely,



John Crossland

cc: Board of Supervisors



Supervisor Arnold's direction to staff  
Susan Harvey

to:

kgriffin, jcaruso

08/14/2013 12:13 PM

Cc:

"Santa Lucia Chapter of the Sierra Club"

Hide Details

From: "Susan Harvey" <ifsusan@tcsn.net>

To: <kgriffin@co.slo.ca.us>, <jcaruso@co.slo.ca.us>

Cc: "Santa Lucia Chapter of the Sierra Club" <sierraclub8@gmail.com>

Dear Kami and James – In a position paper on Priorities issued by Supervisor Arnold dated August 6th, she offers as direction to staff:

*Identify additional urgency ordinance language targeting water waste and conservation strategies.*

We consider the use of overhead sprinklers to be an outrageous waste of water and request that you present Interim Ordinance language banning ALL uses of overhead sprinklers for agriculture. I observed Red Head Ranch using overhead sprinklers in mid July in the late morning on a very hot day. I was told by a south county vineyard owner that the practice was common and that vines could absorb additional moisture from overhead application of water early in the day. I have also observed a number of fallow fields in the Creston area water weeds on hot days.

We agree that targeting water waste is a priority and we request that you include the option of a ban on overhead sprinkling in the proposed Interim Ordinance language. We understand that, as with many of these options, enforcement may offer challenges but we do not feel that should be an impediment to adoption given the scope of the crisis.

Thank you for your consideration of our comments.

Susan Harvey  
North County Watch

## **Creston Advisory Body**

Chairperson: Sheila Lyons Ph. (805) 239-0917, P. O. Box 174 Creston, CA 93432 salyons@airspeedwireless.net

August 12, 2013

Kami Griffin, Acting Director Planning and Building Department, San Luis Obispo County  
976 Osos Street, Room 300  
San Luis Obispo, Ca 93408  
805-781-5708

RE: Stakeholder input from CAB on Urgency Ordinance proposals by SLO County Board of Supervisors to reduce potential future pumping from the Paso Robles Groundwater Basin

Dear Ms. Griffin and Staff,

Thank you for the opportunity to provide comments from Creston Advisory Body (CAB) on the proposed Urgency Ordinance for the Paso Robles Groundwater Basin. We will not have an opportunity to hold a CAB meeting before August 14<sup>th</sup>, your deadline for input on this topic. However, several items voted on by CAB and submitted to you in our July 26, 2013 letter, specifically address items in the Urgency Ordinance(s) being proposed. The CAB members and the public at our July 17, 2013 meeting were in favor of these items. I have included those items once again in this letter (see exact excerpts from July 17, 2013 letter below) followed by summary comments on these items.

- 1) **Place restrictions on new irrigated crops/lands.**
  - a) *Require all new irrigated lands of more than 2-5? acres to obtain a discretionary permit prior to planting.*
  - b) *Implement the permitting process immediately. Agriculturalists are in a planting frenzy, rushing to beat the clock. Allowing more time for projects "in the pipeline" accomplishes nothing beneficial towards balancing the Basin.*
  - c) *No planting on slopes of greater than 15%.*
  - d) *Require water offsets for new irrigated crops like they do for development. For example: For each acre of irrigated Ag planted that requires 1 AF/acre/yr of water, 4 acres must be set aside un-irrigated. Rationale: If we divided the water up by acreage over the basin there would only be 0.19 AF/acre and most crops, including grapes, need 1 AF/acre or more of water, so to use the limited water fairly those who want to use 1 AF/acre would need to offset their usage somehow.*
  - e) *Exclude all food crops such those that go directly from the field or orchard to the kitchen table. Also excluded should be food crops like nuts and olives. Wine grapes should not be considered as a food crop.*
  - f) *No construction of new Ag ponds.*
  - g) *Require a water impact report<sup>3</sup> from two certified hydrologists with PhDs for any project that would pump more than 5000 gallons in any 24 hour period, or more than 10 AF/yr. Final report must show no harmful impact to the water table of neighbors within a 3 mile radius. We have heard that South County has something somewhat similar, requiring an Irrigated Availability Analysis for due consideration riparian rights. In this case it would be to consider the water rights of neighbors.*
  - h) *Impose a bonding requirement on new vineyards. They must post a bond to insure they will do no harm to their neighbor's wells. Consider a "zone of impact" system. If a new vineyard is planted all the neighboring properties adjacent or within a designated distance of the vineyard ("zone of impact") would be entitled to restitution if the level in their wells drop excessively (50ft?) and most definitely if their well goes dry and they need to drill a new one (in case the hydrology report got it wrong).*
  - i) *Require all new wineries to install recycling catch basins so all processing water is captured and reused.*
- 2) **Implement an Urgency Ordinance requiring "Best Management Practices" to be utilized by existing irrigated agriculture.**

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- a) *Require all wells with discharge pipes of greater than 3 inches to install flow meters and to report water usage utilizing already existing systems to capture and store the information (pesticide/herbicide permits or the system for filing run off plans). Impose penalties for not reporting such as revocation of Williamson Act contracts, or denial of tax payer subsidized crop insurance.*
  - b) *Require the viticulture industry to adopt best management practices that are state of the art rather than archaic. Ask them to consider implementing a system like the one used by farmers such as Driscoll in the Pajara Valley, Santa Cruz County<sup>4</sup>, where all irrigation is managed through a telemetric system. Agriculturists log on-line to reserve times for irrigation and reporting usage. They should consider applying for grants to assist with this form of water management.*
  - c) *Stop the use of overhead sprinklers for vineyards. Vineyards should be planting frost tolerant varieties and they should not be planting in low lying areas that require frost protection. Again, they should take into account the type of climate in this area and choose their crops with this in mind. This is simply common sense.*
  - d) *Impose fines on properties that are documented as continuous water wasters with repeated offences such as standing water or leakage from drip systems. Leaks should be repaired within 24 hours of occurrence or the water should be turned off. Fines could be on a tiered basis but they must be significant so as to be effectual.*
  - e) *The County could adopt a certification system such as SIP (Sustainability in Practice) as a formal program, however, there must be metrics and independent verification to demonstrate "reasonable and beneficial" water usage.*
- 3) **Other measures we have previously suggested that we feel also need to be considered:**
- a) *The County should institute water quality analysis on all county monitored wells to document reports of increased Boron and Sulfur levels, and any other components of concern (e.g. nitrates, etc.)*
  - e) *No subdividing or lot splits until the Basin stabilizes. Many who currently complain about rural residential water usage are the ones who have pushed for allowing subdividing to occur in the past.*

We understand there is a difference between Emergency Measures such as those proposed by Supervisor Arnold, which are also important, and an Urgency Ordinance (UO). It is our understanding that an Urgency Ordinance would be put in place to stop the potential increase in pumping (a "time out" as someone at the July 9 B of S meeting said) until we are able to put in place a management structure that would help us manage the overall usage of water over the Paso Robles Groundwater Basin. The proposed Urgency Ordinance set forth at the July 9, 2013 B of S meeting was perfectly in line with discussions and outcomes of the July CAB meeting as evidenced in the excerpts from our July CAB letter submitted to you after that meeting. Our discussions were concerning the whole basin not any individual sub-areas of the basin. We are aware that the Atascadero sub-area is mostly separate from the main basin. Limiting the UO to only be over smaller sections of the basin will simply divert development to those areas not under the UO and cause the exempted areas to fall further into crisis, drawing down their water tables faster. We need to fix the whole problem not just part of it.

It is clear that a "rush to plant/develop" has already begun as evidenced by the number of new well applications the county has received since the beginning of August, and by the drilling, ripping and planting Creston residents see each time we drive back and forth into town. For each 1 acre that is not planted, 1 Acre Foot or more of potentially future pumping is halted.

CAB would like to see Urgency Ordinances adopted without delay, using the Aug. 6 cut off, allowing only project permits approved prior to that date to move forward outside the UO. Please include CAB in any further stakeholder requests for comments on management of the Paso Robles Groundwater Basin

Sincerely,  
Sheila Lyons  
CAB Chairperson

Cc: Courtney Howard, Water Resources Engineer, SLO County Public Works Department  
Supervisors Debbie Arnold, Frank Mecham, Adam Hill & Bruce Gibson  
Planning & Building Department, James Caruso, Nick Forester, Mike Wulkan