

# SOLANO

## GROUNDWATER SUSTAINABILITY AGENCY

### BOARD OF DIRECTORS:

#### *Chair:*

*Supervisor Skip Thomson*  
Solano County District 5

#### *Vice Chair:*

*Mayor Ronald Kott*  
City of Rio Vista

#### *DIRECTORS:*

*Vice-Mayor Scott Pederson*  
City of Dixon

*Director Jack Caldwell*  
California Water Services

*Director Spencer Bei*  
Dixon Resource  
Conservation District

*Director Ryan Mahoney*  
Maine Prairie Water District

*Director Dale Crossley*  
Reclamation District No. 2068

*Supervisor John Vasquez*  
Solano County District 4

*Director John Roteveel*  
Solano County Farm Bureau

*Director Russ Lester*  
Solano County Agricultural  
Advisory Committee

*Director Kurt Balasek*  
Solano Resource  
Conservation District

### SECRETARY/TREASURER:

*Roland Sanford*  
Solano County Water Agency

### BOARD OF DIRECTORS MEETING

**DATE:** Thursday, April 11, 2019

**TIME:** 5:30 P.M.

**PLACE:** Berryessa Room  
Solano County Water Agency Office  
810 Vaca Valley Parkway, Suite 203  
Vacaville

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **APPROVAL OF AGENDA**
4. **ELECTION OF OFFICERS**

#### RECOMMENDATION:

1. Rotation of Vice Chairperson to Chairperson for Solano Groundwater Sustainability Agency Board of Directors.
2. Election of Vice Chairperson for Solano Groundwater Sustainability Agency Board of Directors.

5. **PUBLIC COMMENT**

Limited to 5 minutes for any one item not scheduled on the Agenda.

6. **CONSENT ITEMS**

- (A) Minutes: Approval of the Minutes of the Board of Directors meeting of October 11, 2018.

7. **BOARD MEMBER REPORTS** (*estimated time: 5 minutes*)

RECOMMENDATION: For information only.

**8. SECRETARY/TREASURER REPORT (estimated time: 5 minutes)**

RECOMMENDATION: For information only.

**9. SOLANO SUBBASIN GROUNDWATER SUSTAINABILITY PLAN OPEN HOUSE MEETINGS (estimated time: 30 minutes)**

RECOMMENDATION: For Information only.

1. Hear presentation from staff and technical experts on April Groundwater Sustainability Plan Open House Meetings.

**10. TIME AND PLACE OF NEXT MEETING**

Thursday, June 13, 2019 at 5:30 p.m. at the SCWA offices.

***The Full Board of Directors packet with background materials for each agenda item can be viewed on the Agency's website at***

***[www.scwa2.com/resources-management/ground-water/solano-gsa-bod](http://www.scwa2.com/resources-management/ground-water/solano-gsa-bod)***

Any materials related to items on this agenda distributed to the Board of Directors of Solano Subbasin Groundwater Sustainability Agency less than 72 hours before the public meeting are available for public inspection at the Agency's offices located at the following address: 810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688. Upon request, these materials may be made available in an alternative format to persons with disabilities.

**ACTION OF  
SOLANO GROUNDWATER SUSTAINABILITY AGENCY**

**DATE:** April 11, 2019

**SUBJECT:** Election of Officers

---

---

RECOMMENDATION:

1. Rotation of Vice Chairperson to Chairperson for Solano Groundwater Sustainability Agency Board of Directors.
2. Election of Vice Chairperson for Solano Groundwater Sustainability Agency Board of Directors.

FINANCIAL IMPACT:

None.

BACKGROUND:

The Board of Directors has developed a rotational basis for officers based off of the different representative groupings. For example, year one, the Chairperson was elected from the Unincorporated Area Representatives, and the Vice Chairperson from the Municipal Representatives. The Board then determined that due to the nature of this Board meeting periodically, retaining officers for two years would provide continuity for the Board.

If past practices are held, the Vice Chairperson would become the Chairperson, and a Vice Chairperson would be selected from the Agricultural District Representatives, whom then becomes the Chairperson on year five. This example is shown in the table below.

Election of Officers is the purview of the Board of Directors. Any officer may resign at any time upon written notice to the Chairperson.

Recommended: \_\_\_\_\_  
Roland Sanford, Secretary

Approved as  
recommended

Other  
(see below)

Continued  
on next page

---

---

Modification to Recommendation and/or other actions:

---

---

I, Roland Sanford, Secretary to the Solano Groundwater Sustainability Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on April 11, 2019 by the following vote.

Ayes:

Noes:

Abstain:

Absent:

\_\_\_\_\_  
Roland Sanford  
Secretary to the  
Solano Groundwater Sustainability Agency

Year One

Year One

Chairperson

Vice Chairperson

Unincorporated Area Representative  
Solano County District 4  
**Solano County District 5**  
Agricultural Advisory Committee  
Solano Farm Bureau

Municipal Representatives  
City of Dixon  
**City of Rio Vista**  
California Water Service

Year Three

Year Three

Chairperson

Vice Chairperson

Municipal Representative

Agricultural District  
Dixon Resources Conservation District  
Maine Prairie Water District  
Reclamation District No. 2068  
Solano Resource Conservation District

Year Five

Year Five

Chairperson

Vice Chairperson

Agricultural Representative

Unincorporated Area Representative

The Board of Directors may establish internal subcommittees as it determines necessary. Each such internal subcommittee shall be comprised of members of the Board, shall exist for the term specified in the action establishing the committee, shall meet as directed by the Board, and shall make recommendations to the Board on the various activities identified within the scope of the subcommittee’s responsibilities as determined by the Board of the Agency.

**SOLANO SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY  
BOARD OF DIRECTORS MEETING MINUTES**

**MEETING DATE: October 11, 2018**

The Solano Subbasin Groundwater Sustainability Agency Board of Directors met this evening at the Solano County Water Agency Offices. Present were:

Mayor Thom Bogue, City of Dixon  
Mayor Ronald Kott, City of Rio Vista  
Supervisor John Vasquez, Solano County District 4  
Supervisor Skip Thomson, Solano County District 5  
Director Jack Caldwell, Cal Water Services-Dixon  
Director Spencer Bei, Dixon Resource Conservation District  
Director Dale Crossley, Reclamation District 2068  
Director Russ Lester, Solano County Agricultural Advisory Committee  
Director John Rotteveel, Solano County Farm Bureau  
Director Joe Martinez, Solano Resource Conservation District

**CALL TO ORDER**

The meeting was called to order at 5:35 p.m. by Chairman Thomson.

**APPROVAL OF AGENDA**

On a motion by Mayor Bogue and a second by Supervisor Vasquez, the Board unanimously approved the Agenda.

**PUBLIC COMMENT**

There were no public comments.

**CONSENT ITEMS**

Staff indicated that the Agenda erroneously had the meeting minutes of the last Board of Directors meeting as April 12, 2018. The correct date was June 14, 2018.

On a motion by Supervisor Vasquez and a second by Director Rotteveel, the Board unanimously approved the following consent items:

- A) Approval of the Minutes of the Board of Directors meeting of April 12, 2018.
- B) Pre-approval of specified categories of bills for fiscal year 2018-2019.

**BOARD MEMBER REPORTS**

There were no Board Member reports.

**SECRETARY/TREASURER REPORT**

Staff informed the Board that an initial email update went out to those who had signed up on the Agency's website on the current status of groundwater activities, approximately 400 individuals. Staff are anticipating that email blasts may occur fairly frequently over the next few months as work on the Groundwater Sustainability Plan is underway.

**SOLANO GSA 2018/2019 BUDGET**

The proposed Fiscal Year 2018-2019 budget was postponed due to the timing of the final agreement with the Department of Water Resources for the Proposition 1: 2017 Sustainable Groundwater Planning Grant. The Agency budget has been simplified since many of the typical expenses associated with a new Agency are covered at no expense by the Solano County Water Agency, such as payroll and office costs. The only anticipated costs for the Agency this fiscal year would be for liability insurance, GSP costs, and possibly for applying for additional grant funds. Projected costs for GSP development over the next four years have also been estimated.

Mayor Kott stated that it looks like we are approximately \$300,000 short for anticipated costs for the GSP. Does staff feel confident that we will be able to get grants to cover that gap?

Staff indicated that they are hopeful in securing additional grant funds to finalize the GSP. If such funds do not materialize, staff will come back with recommendations for other potential funding sources for the Board to consider.

On a motion by Mayor Kott and a second by Director Lester, the Board of Directors unanimously approved the Agency's Fiscal Year 2018/2019 budget.

**ACWA/JOINT POWERS INSURANCE AUTHORITY**

The Association of California Water Agencies (ACWA), through the Joint Powers Insurance Authority (JPIA) can provide liability insurance to its members. Liability insurance would protect the Agency against personal injury, errors and omissions, cyber liability, employment practices, and bodily injury and property damage type claims.

On a motion by Mayor Bogue and a second by Director Caldwell, the Board of Directors unanimously approved adoption of Resolution 2018-01, electing to join the Joint Powers Insurance Authority.

**PROPOSITION 3**

Proposition 3, which will be on the November 6, 2018 ballot, includes \$675 million dollars for local entities to develop Groundwater Sustainability Plans and more generally, to comply with the Sustainable Groundwater Management Act of 2014. The Solano Groundwater Sustainability Agency is actively seeking additional funds to prepare a Groundwater Sustainability Plan for the Solano Subbasin. Proposition 3, like the predecessor Proposition 1 bond measure of 2014, is a potential source of funding for preparation of the Solano Subbasin Groundwater Sustainability Plan.

On a motion by Supervisor Vasquez and a second by Director Crossley, the Board of Directors unanimously approved adoption of Resolution 2018-02, electing to support Proposition 3.

**GROUNDWATER SUSTAINABILITY PLAN**

Staff and technical experts from Luhdorff & Scalmanini and Ag Innovations gave the Board of Directors a presentation on the Solano Subbasin Groundwater Sustainability Plan (GSP).

Highlights of the presentation included: objectives of the GSP, technical Team organization/coordination, overall GSP Schedule, current groundwater conditions, current groundwater monitoring efforts, water budgets, inter-agency coordination, stakeholder outreach & communication, and a discussion on the parallel processes, in particular the Basin Boundary Modification requests.

Director Lester asked if there were groundwater transects next to Putah Creek or south towards Rio Vista already available.

Staff stated that is one of the requirements of the GSP, to develop cross-sections of the aquifers to have a better understanding of overall groundwater conditions.

Director Lester stated that this is important information, there is a lot of groundwater extracted along the Dixon Ridge.

Director Martinez stated that there was dye study done a number of years ago on Cache Creek that had the dye showing up in wells along Putah Creek some 10 days later.

Staff stated that surface water-groundwater interactions will be something we have to look at when developing the GSP. We do not have a strong grasp of those relationships right now.

Mayor Bogue asked if we would be monitoring what would happen to our groundwater if there were major amounts of water pumped from the Delta to the south.

Staff indicated that is beyond the scope of what the GSP will be looking at. The GSP will be looking at a number of Undesirable Results, to make sure they do not occur in our subbasin. There will be management actions that will take place if groundwater levels fall to a certain threshold. We will hope that we will have enough information at that time to determine if there are interactions of surface water, in the Delta, that are affecting our groundwater levels.

Supervisor Vasquez asked about recharge, will that be prioritized in the GSP? We have Chromium issues in some parts of the County, putting more water in may flush it down to an area we don't want it.

Staff indicated that will be covered in the GSP. When the undesirable result thresholds are determined, there will be various management actions that could take place when certain things occur, and recharge basins could very well be a management action implemented. However, we have to also take water quality into account as well.

Mayor Kott asked if the technology existed now where we could measure all of the inflows into the aquifers to determine the water budget. How do we demonstrate sustainability?

Staff stated that the technology exists to measure a lot of these things. It can be challenging to figure out how much water is moving between the various aquifers at depth, these models do require we make some assumptions. We cannot monitor every avenue for inflow and outflow. Sustainability is actually shown through our monitoring and the parameters we set up as the thresholds of not to exceed for groundwater levels.

Supervisor Vasquez asked what would the public engagement and stakeholder process look like? We need to be able to simply articulate to our constituents what this all means.

Staff stated that there are key moments to have stakeholder engagement. The intent is to have robust, worthwhile, meaningful engagement in multiple locations in the subbasin. So that it is easy for stakeholders to find us and participate. Spring of 2019 will be the start of this engagement process. There will be three workshops and a webinar next year. There is a real challenge to make this messaging accessible to stakeholders so that they understand it. We are in the process right now of trying to figure out the best way to do that.

### **TIME AND PLACE OF NEXT MEETING**

The time and place of the next meeting is Thursday, December 13, 2018 at 5:30 p.m., at the SCWA offices.

### **ADJOURNMENT**

This meeting of the Solano Subbasin Groundwater Sustainability Agency Board of Directors was adjourned at 6:36 p.m.

*Roland Sanford*  
\_\_\_\_\_  
Roland Sanford  
Secretary to the Solano Subbasin  
Groundwater Sustainability Agency

# SOLANO SUBBASIN

## GROUNDWATER SUSTAINABILITY AGENCY

### MEMORANDUM

**TO:** Board of Directors

**FROM:** Roland Sanford, Secretary to the Board

**DATE:** April 4, 2019

**SUBJECT:** April 2019 Update

---

---

#### Basin Boundary Modifications

There were a total of three Basin Boundary Modifications (BBM) submitted for the Solano Subbasin.

The Yolo GSA submitted a BBM that would place Reclamation District 150 and Reclamation District 999-both located in Yolo County-into the Yolo Subbasin. The Solano GSA submitted a letter of support for this BBM. This BBM was accepted by the Department of Water Resources (DWR).

The Sacramento GSA submitted a BBM that would move West Island (a 600-acre island in the Delta) from the Tracy Subbasin into the Solano Subbasin. The Solano GSA submitted a letter of support for this BBM. This BBM was accepted by DWR.

The North Delta GSA submitted a BBM that would have created a new groundwater subbasin by cleaving portions of three existing groundwater subbasins; the South American Subbasin, the Solano Subbasin, and the Eastern San Joaquin Subbasin, called the Delta Groundwater Basin. The Solano GSA submitted a letter of support for this BBM. This BBM was not accepted DWR.

#### Basin Prioritization Recommendations

Earlier this year DWR announced proposed reprioritizations of many groundwater basins across the state, including the Solano Subbasin – from “medium” to “high” - and the nearby Napa-

Sonoma Lowlands Subbasin, a portion of which is located in western Solano County, from “low” to “medium”. In general, the proposed reprioritizations are reportedly based on information regarding groundwater extraction impacts to aquatic habitats, information pertaining to groundwater-surface water interactions, and as a result of previously approved basin boundary modifications.

Elevating the priority of the Solano Subbasin from medium to high would have no significant impact to the scope of the Solano Subbasin GSP or the deadline for adopting the Solano Subbasin GSP. However, characterizing the Solano Subbasin as a high priority basin could, in the future, subject the Solano Subbasin to additional regulatory oversight. Elevating the priority of the Napa-Sonoma Lowlands Subbasin from low to medium would necessitate formation of a GSA for that subbasin, and preparation of a GSP.

As discussed at previous Board meetings, staff believes DWR erred in their evaluation of the Solano Subbasin, as well as the Napa-Solano Lowlands Subbasin, and pursuant to Board direction, the Solano Subbasin GSA, as well as the Solano County Water Agency, submitted letters of opposition to the proposed reprioritization of the Solano Subbasin. The Solano County Water Agency also submitted a letter of opposition to the proposed reprioritization of the Napa-Sonoma Lowlands Subbasin.

As of the date of this memo, DWR has not made any Draft Prioritization announcements. On their website, DWR states that such announcements would be made in the Spring of 2019. There would be a public comment period and public meeting also in the Spring of 2019. Release of Final Prioritization is supposed to take place in Late Spring of 2019.

### **Solano Groundwater Sustainability Plan Website**

Last month the Solano Groundwater Sustainability Plan website went public. The address for the website is:

<http://www.solanogsp.com>

The website offers information on SGMA and the Solano GSP. The website is pretty straightforward, it will be a continual work in progress as new information is developed. There are specific web pages for:

- Solano Collaborative
- SGMA Overview
  - Frequently Asked Questions
  - Definitions
- Solano Subbasin
- Groundwater Sustainability Plan
  - Schedule
  - GSP Sections (as they are completed)
- Get Involved
- References

This website is a really good starting point for those that want to learn more or are just now hearing about SGMA and the GSP. There are several handouts on the website that would be good references for your staff to hand out to stakeholders that have questions on any part of this process. Staff would like feedback from the Board on any additional information they would like to see on the website.

**ACTION OF  
SOLANO GROUNDWATER SUSTAINABILITY AGENCY**

**DATE:** April 11, 2019

**SUBJECT:** Solano Subbasin Groundwater Sustainability Plan April House Meetings

---

---

RECOMMENDATION:

Hear presentation from staff and technical experts on April Groundwater Sustainability Plan Open House Meetings.

FINANCIAL IMPACT:

None.

BACKGROUND:

Staff and technical experts held a series of Open House meetings in April 2019 to update stakeholders on implementation of the Sustainable Groundwater Management Act (SGMA) in the Solano Subbasin. Presentation topics included an overview of SGMA, Groundwater Sustainability Agencies and SGMA, and local Groundwater Conditions in the Solano Subbasin. Copies of the presentations are included in the Board packet.

Staff and technical experts will give the Board of Directors a presentation on what was learned from these Open House Meetings. Stakeholder input and addressing issues and concerns will be important in developing a Groundwater Sustainability Plan that works for all stakeholders in the Solano Subbasin.

Recommended: \_\_\_\_\_  
Roland Sanford, Secretary

---

<input type="checkbox"/> Approved as recommended	<input type="checkbox"/> Other (see below)	<input type="checkbox"/> Continued on next page
--	--	---

---

---

Modification to Recommendation and/or other actions:

---

---

I, Roland Sanford, Secretary to the Solano Groundwater Sustainability Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on April 11, 2019 by the following vote.

Ayes:

Noes:

Abstain:

Absent:

---

Roland Sanford  
Secretary to the  
Solano Groundwater Sustainability Agency

Slide 1



---

---

---

---

---

---

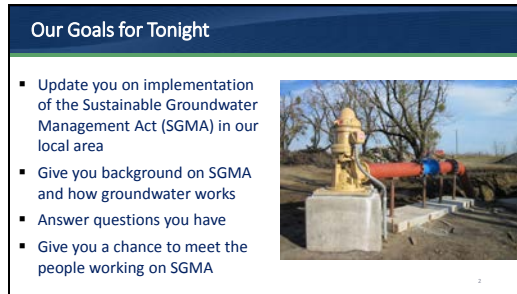
---

---

---

---

Slide 2



---

---

---

---

---

---

---

---

---

---

Slide 3



---

---

---

---

---

---

---

---


---

---

Slide 4

**Some Ground Rules for Tonight**

- Focus on SGMA implementation in our area
- All questions welcome—but some we will not have answers for yet...
- Respect different views



4

---

---

---

---

---

---

---

---

---

---

Slide 5



Thank You For Coming!

---

---

---

---

---

---

---

---

---

---

Slide 6

Sustainable Groundwater Management Act and Groundwater Sustainability Plan for the Solano Subbasin

Solano GSA Collaborative  
April 2019 Workshop



---

---

---

---

---

---

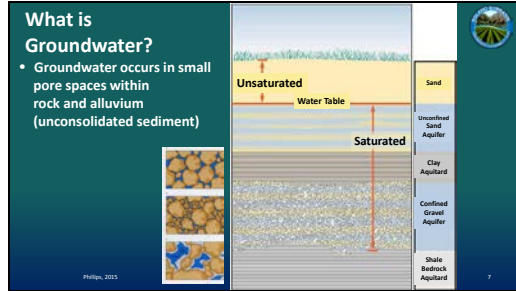
---

---

---

---

Slide 7



---

---

---

---

---

---

---

---

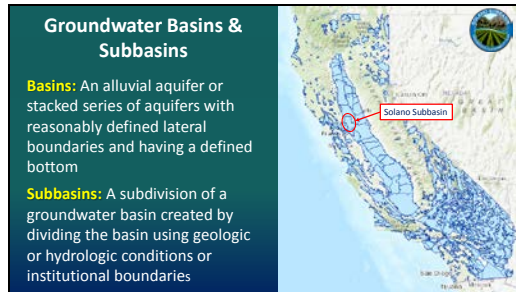
---

---

---

---

Slide 8



---

---

---

---

---

---

---

---

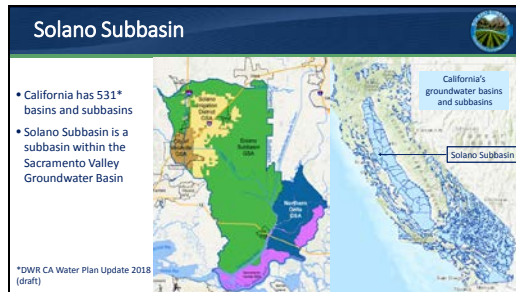
---

---

---

---

Slide 9



---

---

---

---

---

---

---

---

---

---

---

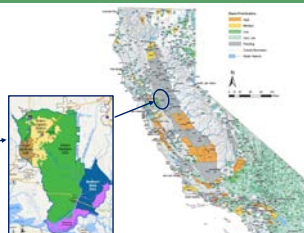
---



Slide 13

### Solano Subbasin Prioritization

- What is Basin Prioritization?
  - Classification based on factors identified in statute (i.e., population, number of water wells, etc.)
- What do Rankings Mean?
  - Indicator of the overall importance of GW
- Solano Subbasin
  - Medium Priority (currently)
  - Updated Priority (pending)



---

---

---

---

---

---

---

---

---

---

Slide 14

### Groundwater Sustainability Agencies (GSAs)

- A groundwater sustainability plan shall be developed and implemented for each medium- or high-priority basin by a GSA to meet the basin sustainability goal.
- A GSA is one or more local agencies that must develop, implement and enforce the subbasin's GSP.
- A local agency is any local public agency that has water supply, water management, or land use responsibilities within a groundwater basin.



---

---

---

---

---

---

---

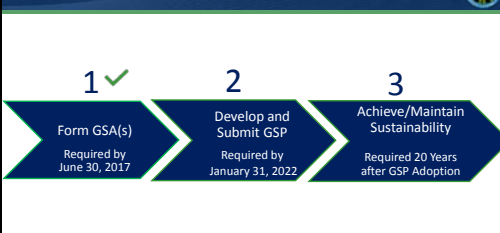
---

---

---

Slide 15

### Current Status of SGMA Compliance



- 1 ✓  
Form GSA(s)  
Required by June 30, 2017
- 2  
Develop and Submit GSP  
Required by January 31, 2022
- 3  
Achieve/Maintain Sustainability  
Required 20 Years after GSP Adoption

---

---

---

---

---

---

---

---

---

---





Slide 22



---

---

---

---

---

---

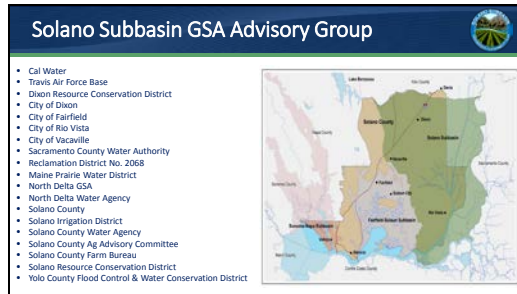
---

---

---

---

Slide 23



---

---

---

---

---

---

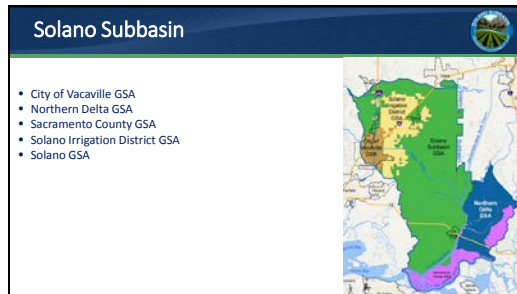
---

---

---

---

Slide 24



---

---

---

---

---

---

---

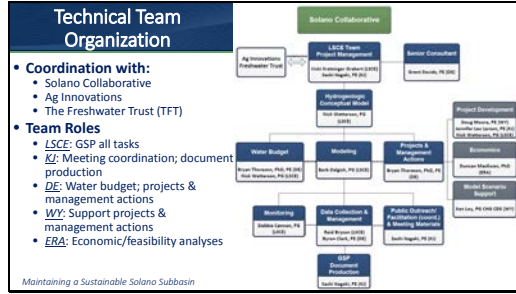
---

---

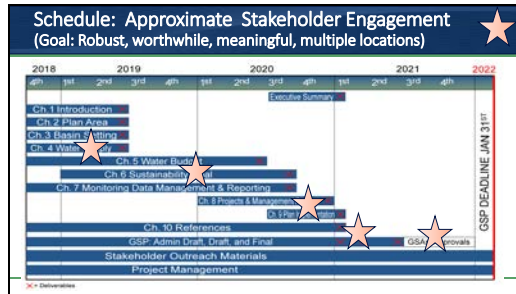
---



Slide 28



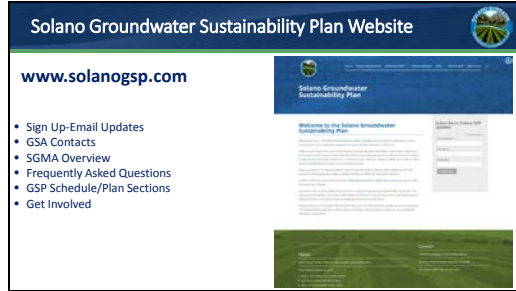
Slide 29



Slide 30



Slide 31



---

---

---

---

---

---

---

---

---

---

Slide 32



---

---

---

---

---

---

---

---

---

---

Slide 33



---

---

---

---

---

---

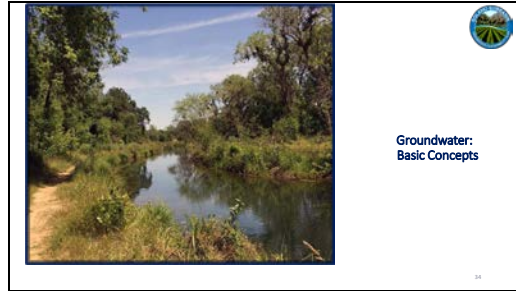
---

---

---

---

Slide 34



Groundwater:  
Basic Concepts



34

---

---

---

---

---

---

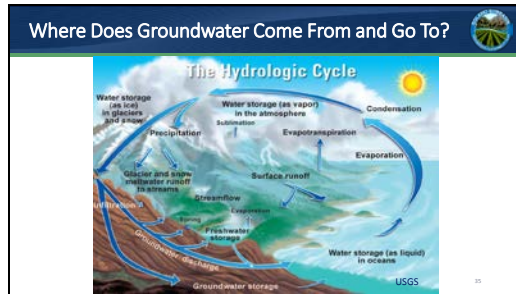
---

---

---

---

Slide 35



35

---

---

---

---

---

---

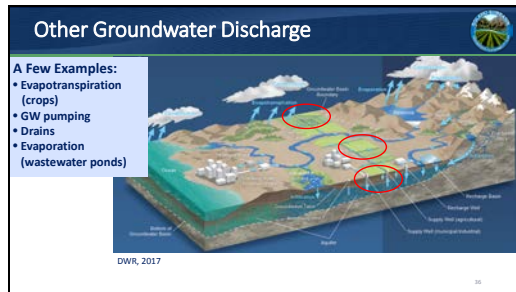
---

---

---

---

Slide 36



36

---

---

---

---

---

---

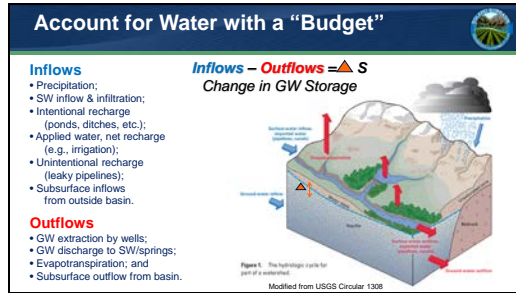
---

---

---

---

Slide 37



---

---

---

---

---

---

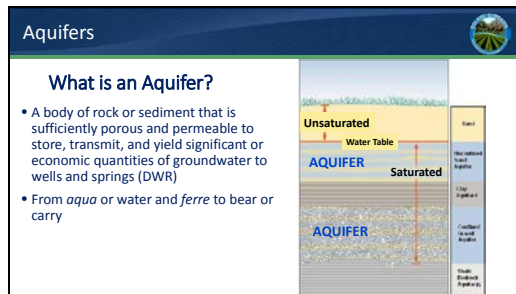
---

---

---

---

Slide 38



---

---

---

---

---

---

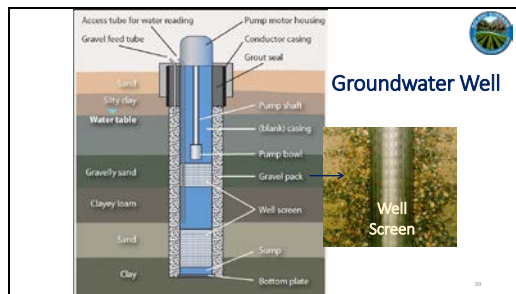
---

---

---

---

Slide 39



---

---

---

---

---

---

---

---

---

---



Slide 43

### Recharge and Streamflow Depletion

**Disconnected Stream:  
Stream Recharges Groundwater**

**Streamflow Depletion from  
Groundwater Pumping**

The Nature Conservancy

---

---

---

---

---

---

---

---

---

---

Slide 44

### Groundwater and Surface Water Interaction: A Key Sustainability Indicator

- Monitoring data and hydrogeologic understanding to characterize SW/GW relationship
  - Surface water infiltrating below stream channels and/or groundwater contributing flow to stream channels
  - Groundwater Dependent Ecosystems (GDEs)

**"ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface"**  
(CA Code of Regulations, Groundwater Sustainability Plans § 351(m))

- Establish baseline data to accurately assess whether groundwater pumping is influencing streamflow

Putah Creek  
Ulotis Creek

---

---

---

---

---

---

---

---

---

---

Slide 45

**Groundwater  
Conditions:  
High Level Overview**

---

---

---

---

---

---

---

---


---

---



Slide 49

Next steps



- Future workshops
- Targeted outreach
- Get on the list! GSP email updates
- Fill out our survey
- Meet with staff tonight
- Help us build a plan that protects what make Solano Subbasin special

49

---

---

---

---

---

---

---

---