

## Frequently Asked Questions: Sustainable Groundwater Management Act (SGMA) in Solano County

Last updated on January 17, 2017. For more information go to <http://scwa2.com/sgma>, or contact Brooking Gatewood, Ag Innovations at [brooking@aginnovations.org](mailto:brooking@aginnovations.org), (707) 823-6111 x140.

<b>SGMA &amp; SOLANO SUBBASIN OVERVIEW</b>	<b>3</b>
<b>What is the purpose of the SGMA process?</b>	<b>3</b>
<b>Why is the Solano Subbasin a medium priority basin? How is the priority level determined, and what does it mean?</b>	<b>3</b>
<b>Why are we subject to SGMA if groundwater monitoring data shows that we are in pretty good shape?</b>	<b>4</b>
<b>Aren't there other groundwater basins in Solano County, and are they subject to SGMA?</b>	<b>4</b>
<b>How will projects that are needed for SGMA compliance be evaluated for environmental impacts?</b>	<b>4</b>
<b>STAKEHOLDER PARTICIPATION IN SGMA IMPLEMENTATION</b>	<b>5</b>
<b>How can landowners, farmers, and other stakeholders participate?</b>	<b>5</b>
<b>Where can I sign up to be on the email list to receive updates on SGMA implementation in the Solano Subbasin?</b>	<b>5</b>
<b>How can I share my private well data with local public agencies?</b>	<b>5</b>
<b>GSA GOVERNANCE AND REPRESENTATION</b>	<b>5</b>
<b>What constitutes a GSA-eligible agency?</b>	<b>5</b>
<b>What is the legislative timeline for SGMA implementation?</b>	<b>5</b>
<b>Who is on the Solano County Water Agency (SCWA) board, and will SGMA implementation be a countywide process or focus just on agencies and stakeholders based in the Solano Subbasin based?</b>	<b>6</b>
<b>How will members of the GSA be chosen? What will the governance structure look like? How will agriculture be represented in the process?</b>	<b>6</b>
<b>Can a new agency be formed to become the GSA?</b>	<b>6</b>
<b>Can multiple GSAs be established with only one GSP?</b>	<b>6</b>
<b>What exactly are these possible authorities and tools in the GSP regulations?</b>	<b>7</b>

Can a local agency form a GSA for a portion of a basin located outside its service area boundaries?	7
<b>SPECIAL MANAGEMENT AREAS</b>	<b>7</b>
What is the extent of the authority that can be given to a management area?	7
How is authority delegated between the GSA and management areas? Can management areas use the authority of the GSA through a JPA with GSA?	7
Will the Special Management Areas (SMAs) be identified in the GSP?	8
Could a management area align exactly with a GSA-eligible agency's service area, such that, for instance, Reclamation District 2068's service area is considered a management area within the locally developed GSP?	8
What happens when one management area isn't managing groundwater sustainably to the detriment of the greater subbasin, and some level of GSP enforcement needs to occur within that management area?	8
<b>GROUNDWATER IN THE SOLANO SUBBASIN</b>	<b>8</b>
What percent of groundwater is pumped for agricultural uses?	8
How much groundwater is in the Solano Subbasin?	8
What are the names of the different aquifer layers, and what are their depths?	9
How do the groundwater levels vary year to year?	9
Why are there different groundwater conditions in different parts of the Solano Subbasin?	9
Is aquifer level synonymous with water table?	9
What is a "water budget"?	10
What is the ratio of lost water to retained water for most agricultural purposes?	10
Is groundwater quality currently being monitored?	10
Since there is a link between groundwater and surface water, how will that interconnection be managed? Will a GSA be involved in surface water in the future?	11
<b>DOMESTIC WELLS</b>	<b>11</b>
Will historical pumping have an impact on how much people are allowed to pump in the future?	11
Will domestic wells be regulated differently by SGMA?	11
Can I drill my well deeper or put in a new well?	11
Are you going to put meters on wells in Solano County?	11
Will the deep wells managed by the cities or SID, or those being put in by farmers, take water away from my shallower domestic well?	12

GSA FUNDING	12
How will the GSA(s) fund SGMA implementation activities? Will fee structuring have to be uniform across the subbasin?	12
Does state funding exist to help Subbasins implement SGMA?	12
Why would landowners be responsible for groundwater fees?	12
How will fees for landowners be determined?	13
When will landowner fees be put in place?	13
Will cities help pay for the GSA?	13
Is there funding for scientific and geologic testing?	13
WHAT'S GOING ON IN NEIGHBORING COUNTIES?	13
What are the other counties that are going through the same process doing? How are we coordinating with those counties?	13

## SGMA & Solano Subbasin Overview

### What is the purpose of the SGMA process?

SGMA exists to ensure sustainable management of groundwater resources. There are six undesirable results that SGMA requires the GSA in each medium and high priority Subbasin to prevent: chronic lowering of groundwater levels; reduction of groundwater storage, degraded water quality; land subsidence that substantially interferes with surface land uses; sea water intrusion; and depletions of surface water that have adverse impacts on beneficial uses of surface water.

### Why is the Solano Subbasin a medium priority basin? How is the priority level determined, and what does it mean?

The Department of Water Resources (DWR) is required to prioritize California groundwater basins to help identify, evaluate, and determine the need for additional groundwater level monitoring. Prioritization provides a statewide ranking of groundwater basin importance that incorporates groundwater reliance and focuses on basins producing greater than 90% of California's annual groundwater. It is not necessarily synonymous with a basin being in good or bad shape.

DWR currently uses 8 criteria to rank basins and subbasins as high, medium, low, and very low priority including: current and projected population, number of wells and reliance on groundwater, amount of irrigated farmland, and impact to groundwater (overdraft, subsidence, saline intrusion). These criteria are assigned a value from 0 to 5, weighted and scored for each basin or subbasin. The Solano Subbasin has a score of 15.5 using this method. A basin or subbasin is considered to be medium priority if it has a score between 13.43 and 21.08. The Solano Subbasin was ranked medium priority primarily due to the amount of irrigated lands, the density of wells, and the anticipated population growth relying on groundwater. No impacts to groundwater resources were identified by DWR.

A summary of the DWR ranking for the Solano Subbasin is presented below:

Criteria	Unit of measure	Solano Subbasin ranking and score
Population overlying the subbasin	Persons per square mile	1
Population growth	Percent	3
Public supply wells	# of wells per square mile	2
Total wells	# of wells per square mile	3
Irrigated lands	Acres per square mile	5
Reliance on Groundwater	Based on groundwater use (acre-foot/acre)	1.5
Other impacts, including overdraft, subsidence, and saline intrusion		0
Other information on water quality		0
<b>Total score:</b>		<b>15.5</b>

For more information on the prioritization process, you can refer to a DWR factsheet at: [http://www.water.ca.gov/groundwater/casgem/basin\\_prioritization.cfm](http://www.water.ca.gov/groundwater/casgem/basin_prioritization.cfm). For information specific to the Solano Subbasin ranking, you can refer to Data Ranking Component Table at: [http://www.water.ca.gov/groundwater/casgem/pdfs/basin\\_prioritization/NCRO%2068.pdf](http://www.water.ca.gov/groundwater/casgem/pdfs/basin_prioritization/NCRO%2068.pdf).

## Why are we subject to SGMA if groundwater monitoring data shows that we are in pretty good shape?

It is true that groundwater conditions in the Solano Subbasin appear stable. Monitoring shows seasonal changes from spring to fall during the height of agricultural production, and then the aquifer is replenished (i.e., groundwater elevations go back up from direct percolation of rainfall and return flows of applied water by agricultural and municipal users) from fall to spring, when the agricultural season dies down. These seasonal changes and overall stability of groundwater conditions have been observed and documented for the last 50 plus years since the [Solano Project](#) started delivering surface water.

The Solano Subbasin still fits the criteria of a medium priority basin, primarily because of substantial irrigated agriculture, a large number of wells, and a large projected growth in population. It is therefore imperative that groundwater use remains sustainable into the future, in order to support the health and vibrancy of the region’s communities, farms, and environment. Also, there is anecdotal evidence of localized issues with groundwater in some parts of the subbasin, including lowered groundwater levels, decreased flow rates and high salt levels. Well operators in the Winters and Norton area, and in central Solano County shared these observations at the public workshops held in February through March in Vacaville, Rio Vista and Davis. SGMA will require us to more fully understand the groundwater conditions within the subbasin, and adapt management approaches accordingly. Finally, while past measurements do not show unsustainable groundwater use, future growth and the recent increase in perennial crops (e.g., nuts orchards, wine grapes) that require more water could impact the groundwater supplies in the subbasin.

## Aren’t there other groundwater basins in Solano County, and are they subject to SGMA?

There are a total of 4 groundwater subbasins underlying Solano County. After a 2016 boundary modification, a very tiny sliver of the high priority Yolo Subbasin extends into Solano County. Yolo County is developing a GSA for their subbasins and will coordinate with the Solano County GSA on this small area of land as needed for GSP compliance. The two other groundwater basins in Solano County - the Suisun-Fairfield Valley Basin and the Napa-Sonoma Lowlands Subbasin - are designated as very low priority, so are not subject to SGMA.

## How will projects that are needed for SGMA compliance be evaluated for environmental impacts?

SGMA explicitly exempts Groundwater Sustainability *Plans* from evaluation under the California Environmental Quality Act (CEQA), but GSAs will need to evaluate, and mitigate, any environmental impacts on any *projects* that the GSA determines are required to reach sustainability.

## Stakeholder participation in SGMA implementation

### How can landowners, farmers, and other stakeholders participate?

There are many ways for the public to get involved. An email list-serv and informational website provides information regarding the Solano Subbasin and the SGMA process, including opportunities for public participation and upcoming workshops and events. This website can be accessed at: <http://scwa2.com/sgma>. Interested stakeholders can also participate through their representatives at local agencies, including: Resource Conservation Districts, Reclamation Districts, SID, cities, Farm Bureau, Solano County Water Agency, Solano County, and the Solano County Agricultural Advisory Committee.

The public engagement process has included 7 workshops in 2016 held in Vacaville, Rio Vista, Davis, and online forums, drawing a few hundred attendees. Presentations have been made by facilitators from Ag Innovations at meetings of the Solano County Farm Bureau, Solano Resource Conservation District, Solano County Agricultural Advisory Committee, North Delta Water Agency, Reclamation District 2068, and the Solano County Water Agency. There will also be a \$6066 public hearing as part of the GSA notification process in accordance with Water Code §10723(b) before the June 2016 notification deadline.

### Where can I sign up to be on the email list to receive updates on SGMA implementation in the Solano Subbasin?

Sign up for the email list on the web at: <http://scwa2.com/sgma>, or by emailing [info@aginnovations.org](mailto:info@aginnovations.org) with the subject: "Join SGMA Listserv". This website also contains local information, downloadable factsheets, and links to statewide and other resources.

### How can I share my private well data with local public agencies?

Those interested in sharing monitoring data with local public agencies were invited to contact Chris Lee at the Solano County Water Agency ([clee@scwa2.com](mailto:clee@scwa2.com), 707-451-6090). The agencies welcome such data as it can help fill in gaps in the existing monitoring network.

## GSA governance and representation

### What constitutes a GSA-eligible agency?

A GSA-eligible agency is any local public agency that has water supply, water management, or land use responsibilities within the Solano Subbasin. In Solano County, this includes: water agencies, cities, the County, reclamation districts, and resource conservation districts. A water corporation regulated by the California Public Utilities Commission or a mutual water company may participate in a GSA through a memorandum of agreement or other legal agreement.

### What is the legislative timeline for SGMA implementation?

SGMA requires medium- and high-priority groundwater basins in the state to be managed by local agencies that have formed a Groundwater Sustainability Agency (GSA) by June 30, 2017. Once formed, a GSA must develop and implement a Groundwater Sustainability Plan (GSP) with coordination agreements as needed for sustainable management of the basin by January 31, 2022 to guide the sustainable management of its groundwater basin. The GSA has 20 years following this date to achieve its sustainability goals. [The detailed timeline is available here.](#)

## Who is on the Solano County Water Agency (SCWA) board, and will SGMA implementation be a countywide process or focus just on agencies and stakeholders based in the Solano Subbasin based?

The SCWA Board consists of 15 members: 7 mayors (cities of Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo), 5 County Supervisors, and 3 Board members or managers from Irrigation Districts (Maine Prairie Water District, Reclamation District 2068, Solano Irrigation District). A number of those agencies or local governments do not overlie the Solano Subbasin. The consensus among stakeholders and local public agencies is that the SGMA implementation process should include agencies and stakeholder representatives that are within the Solano Subbasin.

At the direction of the SCWA Board, the GSA Staff Advisory Group (GSAG) was formed to develop recommendations for the governance structure for one or more GSAs for the Solano Subbasin to fulfill SGMA requirements. The GSAG is structured as an invitation-based, ad hoc Advisory Group of staff representatives from GSA-eligible agencies of the Solano Subbasin, as defined by state-administered maps, as well as representatives from a limited number of stakeholder groups. All recommendations developed by the GSAG will be reviewed and vetted by member organizations' boards and constituencies. The GSAG is not the GSA for the Solano Subbasin. The agencies will seek continuous input from and coordinate with other agencies and public stakeholders.

## How will members of the GSA be chosen? What will the governance structure look like? How will agriculture be represented in the process?

In 2016, Ag Innovations facilitated a series of meetings with the "GSA Advisory Group", which included representatives from all interested GSA-eligible agencies as well as representatives from the agricultural community, including the Solano County Farm Bureau, Solano County Agricultural Advisory Committee, and the Dixon and Solano Resource Conservation Districts. This group worked to develop recommendations for what the GSA(s) will look like and how to best include agricultural representation. The recommendations were released for board and public review in October 2016 and discussed in December 2016 public input meetings and are available [here](#).

## Can a new agency be formed to become the GSA?

Only an existing local public agency that has water supply, water management, or land use responsibilities in the Solano Subbasin can decide to become a GSA in that subbasin. A single local agency can decide to become a GSA, or a combination of local agencies can decide to form a GSA by using either a joint powers authority (JPA), a memorandum of agreement (MOA), or other legal agreement. A local agency that submits a GSA formation notice to DWR will not become an exclusive GSA for the portion of a basin within its service area until the conditions of the Water Code are met. It is conceivable but unlikely with the current timeline requirements that a new local public agency having water supply, water management, or land use responsibilities could be formed, and that this agency could decide to form a GSA. If an area over the subbasin is not within the management area of a GSA, the County will be presumed to be the GSA for that area unless it opts out. The County is required to notify DWR whether it will or will not be the GSA for the area.

## Can multiple GSAs be established with only one GSP?

Yes, multiple GSAs can form and work together through coordination agreements to develop a single subbasin-wide GSP. GSAs must create a “coordination agreement” specifying their roles and responsibilities, and outlining procedures for the timely exchange of data and the resolution of conflicts. Multiple GSAs could also develop multiple GSPs that cover the entire subbasin. If multiple GSPs are developed, those plans must utilize the “same data and methodologies” to establish criteria for overall management of the entire subbasin. In this situation, a single entity must serve in a coordinating role and synthesize data about basin conditions from all GSPs into a single report for submission to DWR.

## What exactly are these possible authorities and tools in the GSP regulations?

The SGMA gives GSAs numerous new tools and authorities to manage the groundwater and implement the objectives of the GSP. These include the authority to conduct investigations, determine the sustainable yield of a groundwater basin, measure and limit extraction, impose fees for groundwater management, and enforce the terms of a GSP. These authorities can be implemented by one or multiple GSAs. The authorities that each GSA assumes will be one of the key decisions in forming a GSA. [Chapter 5 of SGMA](#) describes the powers and authorities in greater detail.

## Can a local agency form a GSA for a portion of a basin located outside its service area boundaries?

No. Although a local agency may make the decision to become a GSA for an entire basin, that agency cannot be the “exclusive” GSA for any portion of the basin beyond its service area boundaries. Because service area is not defined in SGMA, DWR will rely upon a local agency to define its service area in its GSA formation notice.

## Special Management Areas

### What is the extent of the authority that can be given to a management area?

A GSA is the agency that is responsible for compliance with SGMA in an entire basin or subbasin. For one or more areas within the Solano Subbasin, the GSA(s) may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors. Each GSA may define one or more management areas within the Solano Subbasin if the GSA has determined that creation of management areas will facilitate implementation of the Groundwater Sustainability Plan (GSP). For example, if 80% of the pumping occurs in only 20% of the basin, then the density and frequency of monitoring could be different (likely greater) in that 20% of the basin, and management actions might be specific to that 20% of the basin. Or, the portions of the basin where the majority of the pumping is occurring (where people rely upon groundwater exclusively) could have different minimum thresholds, measurable objectives, and potential actions if conditions begin to reach significant and unreasonable levels. A GSA, through a GSP, can delegate implementation activities to a management area, but a management area is not necessarily intended to be a separate area for governance purposes. Ultimately, the sustainability goal for the entire basin must be achieved, and actions in one management area cannot cause undesirable results in another part of the basin. For more information, see the latest version of the Groundwater Sustainability Plan Emergency Regulations on DWR’s website: <http://www.water.ca.gov/groundwater/sgm/gsp.cfm>.

### How is authority delegated between the GSA and management areas? Can management areas use the authority of the GSA through a JPA with GSA?

A management area does not have the same authority as the GSA, which is ultimately responsible for SGMA compliance. Authority to implement SGMA-related activities can be delegated by the GSA through the GSP to a

management area, but the GSA is ultimately responsible for ensuring basin/subbasin compliance and sustainability. If management areas are established, the quantity and density of monitoring sites in those areas are required to be sufficient to evaluate conditions of the subbasin setting and sustainable management criteria specific to that area.

## Will the Special Management Areas (SMAs) be identified in the GSP?

Most likely, yes. Special Management Areas will be designed to allow local areas of the County to manage their own local groundwater issues. However, the advisory group's current recommendations for SMAs are simply draft possibilities for SMA boundaries and composition. The advisory group expects that there will be a publicly informed process that takes place over the next two to five years to settle on the precise boundaries and composition of Special Management Areas (SMAs).

## Could a management area align exactly with a GSA-eligible agency's service area, such that, for instance, Reclamation District 2068's service area is considered a management area within the locally developed GSP?

A GSA can only create a management area that coincides with a local agency's service area if that decision is based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors. The GSA would need to explain the reasons for creating that management area and describe any differences in the monitoring network, thresholds, objectives, or other elements of groundwater management.

## What happens when one management area isn't managing groundwater sustainably to the detriment of the greater subbasin, and some level of GSP enforcement needs to occur within that management area?

The GSA(s) in the Solano Subbasin must ultimately ensure that the entire subbasin is managed sustainably. DWR will review initial GSPs, annual reports, and 5-year updates to ensure that the subbasin is on track towards achieving its sustainability goal and the basin's interim milestones are met. Water Code Section 10735.2(e) specifies that the State Water Board "shall exclude from probationary status any portion of a basin for which a groundwater sustainability agency demonstrates compliance with the sustainability goal." See: <http://www.water.ca.gov/cagroundwater/legislation.cfm>.

## Groundwater in the Solano Subbasin

### What percent of groundwater is pumped for agricultural uses?

We don't know exactly what percentage of total groundwater use is for agriculture. Unlike municipalities and water agencies that are required to routinely report their water use to state agencies, independently owned wells, including those owned by farmers, are not required to report how much water they draw. Outside of pumping figures from the Solano Irrigation District and municipalities, there is no specific information on this. It is estimated by local UC Cooperative Extension and Conservation District specialists that agriculture may use up to 90% of groundwater pumped in Solano County. We are hoping that future groundwater studies will help clarify the amount of groundwater used by various sectors including agriculture.

### How much groundwater is in the Solano Subbasin?

We don't know because our toolbox is not complete. While groundwater levels throughout the Solano Subbasin have been monitored over time, the total quantity of groundwater within the subbasin has not been determined. Since implementation of the Solano Project, which brought water from Lake Berryessa, we haven't had a documented groundwater issue. Thus, while the Solano County Water Agency has tracked groundwater data for most of the westerly portion of the subbasin, until the SGMA legislation was passed, we didn't have a specific reason to spend the time or money to analyze the total amount of water available. We will now dedicate more resources to groundwater monitoring and developing models and a water budget, so we'll have more information in a few years. Through future studies, groundwater monitoring, and modeling, we hopefully will have a better understanding of the extent of groundwater resources in the subbasin.

## What are the names of the different aquifer layers, and what are their depths?

An aquifer is underground water in rock or sediment that is sufficiently porous and permeable to store, transmit, and yield significant or economic quantities of groundwater to wells and springs. Within Solano County, there are two major aquifers in the Solano Subbasin, the Putah Fan and the Tehama Formation. The Putah Fan is a shallow and non-uniform aquifer, coming near the surface by the English Hills and going down to a maximum depth of about 400 ft in the eastern portion of the County. The vast majority of groundwater users in Solano County utilize the Putah Fan. Underlying the Putah Fan is the much deeper Tehama Formation. The Tehama Formation also surfaces near the English Hills, but is generally found around 1,000-1,500 feet below the surface. The agencies drawing groundwater from the Tehama Formation include the Cities of Dixon and Vacaville, and Rural North Vacaville Water District.

## How do the groundwater levels vary year to year?

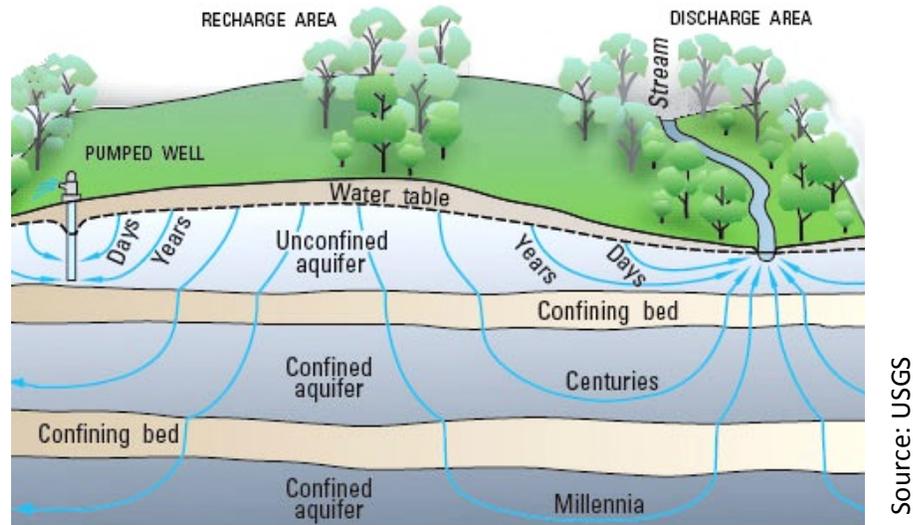
Groundwater levels vary seasonally based on location. Based on water level monitoring conducted by various agencies through the California Department of Water Resources (DWR), typical water levels in the Delta area range from 2 feet below ground surface (bgs) to 20 feet bgs; whereas water levels in the English Hills range seasonally from 60 to over 120 feet bgs. Information regarding water levels can be viewed on DWR's Groundwater Information Center website: <https://gis.water.ca.gov/app/gicima/>

## Why are there different groundwater conditions in different parts of the Solano Subbasin?

There are a variety of surface (e.g., land use associated demands, surface water imports) and subsurface (e.g., geology) conditions that influence groundwater conditions throughout the subbasin. Drilling for water in any one of the two aquifers in the subbasin is dependent on the local conditions impacting that well. For example, in one location a deep well may not yield water because an underground clay deposit exists rather than the sands and gravels that produce groundwater, while not far from that location the conditions could be different. Also, there are several regions within the subbasin that import surface water either from Lake Berryessa or the Sacramento River. While these regions may use some groundwater, they mainly rely on these surface water imports for irrigation, thus they may have a net positive impact on the groundwater in that part of the subbasin by recharging more groundwater than they take out. In the areas of the subbasin that rely heavily on groundwater (no imported surface water), two factors have highlighted concerns about groundwater supplies: the drought and the subbasin's ability to respond to it, and a significant increase in plantings of permanent crops (i.e., tree and vine crops). In general, permanent crops require more water than row crops on a per acre basis. When there is an abundance of permanent crops in close proximity, there is greater pressure on the aquifer caused by increased pumping, and it takes longer for these parts of the subbasin to rebound. In other parts of the subbasin, different crop or livestock production systems require less water, so less groundwater is pumped.

## Is aquifer level synonymous with water table?

It could be. The top level of groundwater in an aquifer that is not surrounded or confined by non-porous material is the water table; as such the water table can seasonally rise and fall based on the amount of rain that occurs. It is typically higher in early spring and lower in late summer. A groundwater level within an aquifer that is confined or surrounded by non-porous materials is not the same as the water table. Changes in water levels in these confined aquifers may be due to groundwater pumping. More information regarding aquifers and groundwater can be found on the USGS website: <http://water.usgs.gov/edu/earthgwaquifer.html>



### What is a “water budget”?

A “water budget” is the accounting of the total groundwater and surface water entering and leaving a basin, including the changes in the amount of water stored. Basic components of water budgets are precipitation, evapotranspiration (a combination of evaporation from the soil and transpiration by plants), surface water (such as streams and lakes) and groundwater flow (aquifers) into and out of the watershed, change in surface water and groundwater storage, as well as human withdrawals and interbasin transfers.

### What is the ratio of lost water to retained water for most agricultural purposes?

A ratio of lost-versus-retained water varies depending on factors including land use, crop type, and irrigation practice. The California Water Plan Update 2013 data summary (from 1998-2010), [water balances](http://www.water.ca.gov/waterplan/docs/cwpu2013/Final/04_Vol1_Ch03_Ca_Water_Today.pdf), presents the breakdown of the water use by sectors (urban, agricultural, and environmental) by hydrologic region and planning area and can be viewed in Volume 1, Chapter 3 of the Water Plan Update (for instance, see Figure 3-10 and 3-11): [http://www.water.ca.gov/waterplan/docs/cwpu2013/Final/04\\_Vol1\\_Ch03\\_Ca\\_Water\\_Today.pdf](http://www.water.ca.gov/waterplan/docs/cwpu2013/Final/04_Vol1_Ch03_Ca_Water_Today.pdf)

A tool used to evaluate soil/water balance is the Cal-SIMETAW (California Simulation of Evapotranspiration of Applied Water) developed by the California Department of Water Resources (DWR). This tool can be used to estimate water use by agriculture.

### Is groundwater quality currently being monitored?

Large domestic water systems, such as those for municipalities, are required by state law to monitor the quality of the water they supply to the public. Small water systems, such as schools, mobile home parks and food facilities that use groundwater wells to supply their drinking water are also required by the state to monitor water quality. Other state programs require groundwater quality monitoring for locations near leaking underground fuel tanks. A statewide database through State Water Resources Control Board Groundwater Ambient Monitoring and Assessment Program (GAMA) program integrates and displays groundwater information

from multiple sources for public review. The GAMA database can be accessed at the following website:  
<http://www.waterboards.ca.gov/gama/>

## Since there is a link between groundwater and surface water, how will that interconnection be managed? Will a GSA be involved in surface water in the future?

It is too early to say. Understanding the potential interconnection between surface and groundwater will be needed as part of the groundwater sustainability planning.

## Domestic wells

### Will historical pumping have an impact on how much people are allowed to pump in the future?

It is too early to tell what, if any, pumping restrictions will occur in the Solano Subbasin. If the GSA can show that the subbasin is being managed in a sustainable manner, then changes to current pumping regimes should be fairly limited. If problem areas are identified within the subbasin, they may be managed differently than the rest of the subbasin (see question on Management Areas below).

### Will domestic wells be regulated differently by SGMA?

Wells pumping less than 2 acre-feet per year (1,785 gallons per day) for domestic use are considered to be “de minimus,” and are exempt from SGMA requirements. This includes exemption from any metering or reporting requirements, and fees. Most private, non-agricultural wells will fall into this “de minimus” category.

### Can I drill my well deeper or put in a new well?

In Solano County, a permit is required to construct, repair or destroy a water supply, monitoring or cathodic protection well or soil boring. Well permit applications and requirements can be obtained by contacting the Solano County Department of Resource Management, Environmental Health Division at 707-784-6765, or [RMHelp@solanocounty.com](mailto:RMHelp@solanocounty.com). You can also visit the Department of Resource Management’s web page for more information about Environmental Health and its well program:  
[http://www.solanocounty.com/depts/rm/environmental\\_health/technical/default.asp](http://www.solanocounty.com/depts/rm/environmental_health/technical/default.asp)

### Are you going to put meters on wells in Solano County?

At this early stage of SGMA implementation we don’t know what tools will be used locally to monitor and ensure sustainable groundwater use. SGMA provides an array of regulatory and nonregulatory tools - mostly optional - from which Groundwater Sustainability Agencies (GSAs) can choose to achieve and monitor groundwater sustainability. The local GSAs, once formed, will have to decide which tools they will use, and well metering *could* be one such tool. Each GSA will have to develop a plan to collect sufficient data on groundwater conditions in order to demonstrate progress toward achieving their measurable objectives, but this doesn’t necessarily mean that all wells must be metered. SGMA requires that public stakeholders be engaged in the development and implementation of the Groundwater Sustainability Plan, which will allow additional opportunity for interested stakeholders to provide input on this issue.

*Metering may not be necessary for the Solano Subbasin.* Much of groundwater delivered by local agencies is already metered, and other data sources (such as cropping pattern data) provide solid estimates of groundwater

use around the Subbasin. If additional metering is necessary, the likely first step would be voluntary metering. If metering beyond voluntary becomes necessary, all groundwater users - landowners, cities, water purveyors, golf courses, etcetera - would be subject to metering.

## Will the deep wells managed by the cities or SID, or those being put in by farmers, take water away from my shallower domestic well?

Over the long term, implementation of SGMA is intended to make Solano County's groundwater users, from domestic to agricultural users, more resilient to future droughts and to help ensure adequate water supplies are available for all users. The basic premise behind the Act is to empower local agencies with acquiring the data about groundwater use and pair it with the authorities and tools that are needed to manage groundwater sustainably. Most domestic wells are shallower than wells used by cities and water districts. Water levels in shallow domestic wells may be impacted if an agency's well is too close to a domestic well. However, there are other aspects that may influence water levels between wells, including: well construction, which aquifers each well is drawing from, soil types, pumping rates, and distances from surface water sources and other wells. Questions about a local agency's well should be addressed to the well owner or agency.

SGMA requires the GSP to determine and maintain the sustainable yield of the Subbasin. The sustainable yield will be different in different parts of the Subbasin due to geologic and hydrologic differences. Under SGMA, a GSP must ensure that groundwater extraction does not lead to chronic lowering of groundwater levels.

## GSA Funding

### How will the GSA(s) fund SGMA implementation activities? Will fee structuring have to be uniform across the subbasin?

A GSA will need to determine a method to adequately fund its SGMA implementation activities. SGMA provides GSAs with a number of options for funding implementation activities, including regulatory fees, property-related fees or assessments, local taxes, local general obligation bonds, contributions from member agencies and state grants. SGMA specifically authorizes GSAs to impose two types of fees—regulatory fees and property-related fees—via ordinance or resolution. Fee structures may not be uniform across the subbasin, but the GSA(s) will make those decisions. Any fees proposed to be established by a GSA will require a public process before implementation.

### Does state funding exist to help Subbasins implement SGMA?

Yes. California State Proposition 1 provides \$100 million in funding to support SGMA efforts across the state through facilitation and technical assistance. Ag Innovations' facilitation of public meetings has been supported by state grants from the Department of Water Resources, and the GSA will actively seek additional state funding for the GSP planning process. At this time, there is \$76 million left in the fund to support the entire state. Our region will be more likely to receive state funding if we come together to work collaboratively.

### Why would landowners be responsible for groundwater fees?

All groundwater pumpers using more than two acre-feet per year are subject to regulation under SGMA. The GSA working group is trying to find creative ways to keep costs down, including pursuing state funding and local agency funding, but it is likely that user fees will be needed to adequately fund the actions necessary for SGMA compliance.

## How will fees for landowners be determined?

The GSA will conduct a study to determine appropriate fee structures. The study will include a public input period, as well as input from landowners and agencies on the GSA board.

## When will landowner fees be put in place?

The advisory group estimates that fees would not be imposed for another three to five years. The GSA will conduct research and receive public input into the fee structures before they are enacted.

## Will cities help pay for the GSA?

Ultimately everyone who relies on groundwater will help pay for the GSA, which includes residents of cities.

## Is there funding for scientific and geologic testing?

SGMA requires that GSPs describe any actions that must be taken to achieve sustainability. This will require the GSA to gain a better understanding of existing local conditions by researching and assessing conditions in the Subbasin. These costs will be incurred in the GSP planning phase. The GSA Advisory Group anticipates that some studies will be needed to better understand groundwater in the Subbasin. There may also be some creative opportunities to compile some of the needed information from existing data sources – for example, the County of Solano is conducting a study that focuses on the relationship between land use and crop patterns to determine water use and recharge.

## What's going on in neighboring counties?

### What are the other counties that are going through the same process doing? How are we coordinating with those counties?

Yolo County and Sacramento County are going through the same GSA formation process. SCWA, Solano County, and other agencies in Solano County have been cooperating with the local public agencies in both Yolo and Sacramento Counties. Yolo County agencies have submitted and received approval of a boundary modification request through the Department of Water Resources (DWR). The revised basin boundary modifications can be viewed [here](#).

***Disclaimer:** This working document is a product of Ag Innovations staff with input from Solano County's local public agencies and is intended exclusively for educational purposes and should not be construed as legal advice or a binding statement of the views of the local agencies involved in its drafting. This working document will be periodically updated to stay current with the emerging SGMA regulations and the changing realities in the Solano Subbasin. For further clarification of the SGMA regulations we recommend that you contact the [California Department of Water Resources](#) or the [State Water Resources Control Board](#).*