

# Cuyama Basin Groundwater Sustainability Agency Board of Directors & Standing Advisory Committee Hosted Two Public Workshops

June 6, 2018

## Summary of Comments and Questions

### Background

On June 6, 2018, two community workshops were hosted by the Cuyama Basin Groundwater Sustainability Agency Board of Directors and the Standing Advisory Committee. They were held at the Cuyama Recreation District facility in New Cuyama, CA. The workshops were noticed through a number of methods. (See page 8, Appendix A: Workshop Notification). The workshop began at 6:15 pm and concluded at approximately 8:30 pm. The English workshop was attended by approximately 42 community members and landowners. The Spanish language workshop was attended by 8 community members. Both of the workshops had two discussion components: An overview of the Physical Conditions of the Cuyama Basin followed a question and answer session and a presentation about Sustainability and Role of Water in the Future of the Cuyama Basin followed by an interactive discussion.

The information gathered from the English and Spanish language workshops and six written comments is summarized below.

### Workshops Part 1: Overview of Physical Conditions of the Cuyama Basin

Following a presentation on the Physical Conditions of the Cuyama Basin, workshop attendees asked the following questions and provided the following comments and observations. The questions are noted along with the answers.

#### GSP Plan

- What happens if the Cuyama Basin does not reach the minimum threshold by 2040?
  - The Cuyama Basin GSP will be reviewed every 5 years, from 2020 to 2040, and adjustments to the GSP can be made if progress toward the minimum threshold is not being made.

#### Water Use

- Farmers in the main portion of the Cuyama Basin are pumping too much water as fields are being irrigated 12 to 24 hours a day.

#### Water Quality

- There is water quality contamination, specifically from salinity and arsenic.
- Salinity is a problem specifically with the water in New Cuyama townsite as well as low water pressure. If you are in New Cuyama and you wash your car, there is a white film left on it from the salinity. When you take a shower, your skin gets dry and irritated from the salinity. The salinity in the water causes build up in the pipes so the pipes need to get replaced more frequently.

- In the area toward where Hwy 166 and 33 intersect, there is a problem with salinity and low water pressure.
- How can water quality help understand the flows and barriers of groundwater and help with the geologic modelling?
  - Water quality can be significantly different on one side or another of a groundwater barrier that impedes or diverts groundwater flows, so water quality analyses can help identify barriers and how groundwater flows. However, water quality testing can be expensive so should be considered carefully.
- Can you define groundwater plumes?
  - Plumes are areas of contamination that can move through and spread in groundwater. Plume fronts determine the direction and speed of spreading contamination.

### Hydrogeologic Model and Geology

- What is the depth to groundwater levels on the three Cuyama Basin hydrogeology layers?
  - In the center of the Cuyama Basin, the deepest groundwater level is at 1,000 feet; followed by the middle layer at 800 feet; followed by the top later 600 feet.
- Regarding the two faults (Russell Fault and Rehobeth Fault), why are they of such interest?
  - The two faults are of interest because there is less recorded data regarding the faults and how these faults generally affect groundwater flows. The published studies are not consistent regarding the impact of faults on water flow.
- Is more research going to be done on Santa Barbara Canyon fault and its effect on the aquifer?
  - The existing published data is consistent for that fault so it is a low priority for further research at this time.
- What is the significance of “basement” rock?
  - Basement rock is a catch-all term for rock formations that generally do not hold water and are a barrier to water movement. If you consider the basin a bathtub filled with sand and water, the basement rock is the porcelain bathtub. In some cases the rock can be fractured, which allows some movement of water through basement rock.
- Do we know if the “bathtub” or basement rock leaks?
  - Most basement rock in most basins does leak but that cannot be measured. It is included in the model as an estimate.
- On the ground surface and groundwater elevation profile, does it consider the sides of the river as opposed to just the river end-to-end? Have you done anything to look at the sides of the Cuyama Valley? Are you identifying water bearing layers of wells?
  - The groundwater conditions section of the GSP will also consider the sides of the river, i.e., how the groundwater levels change from the edges of the Cuyama Basin to the Cuyama River. The next phase of work will look at the data to estimate the elevation contours and use existing reports to understand groundwater movement. USGS looked at groundwater layers and determined that they are not consistent from well to well because, over time, the Cuyama River has deposited fine sand and coarse rocks in varied ways in the Cuyama Valley.

- Have you given thought to Water Management Areas based on the hydrology and geology?
  - Water management areas are a possible consideration, based on the hydrology and geology, however there is no decision at this time; there is more work to be done. We will start talking about water management areas at future meetings and more information about management areas will be provided for discussion as the GSP process continues.
- Are you looking at well logs to identify geologic layers?
  - If well logs are provided.
- When was the last USGS study done?
  - The latest data from the USGS study was 2014. We used previous studies from different geologists over the years, not only USGS. Geology does not change over time much. We are also using more recent data to understand current conditions.

### Data Gaps

- How and when will data gaps be addressed? Before and after the draft plan?
  - While developing the plan, we will document the unknowns and how to address those gaps while moving forward. Activities to address data gaps and reduce uncertainty will be included in the plan and used to refine the plan at the 5-year updates.

### Workshop Part 2: Sustainability and Role of Water in the Future of Cuyama Basin

After a general introduction about sustainability and what it means in SGMA, the first question asked of the attendees was “What does sustainability of the Cuyama Valley mean for you?” The responses are noted below:

#### **Balanced Water Use**

- Balance water use among all water users.
- Balanced water use by the people and by the farmers allows everyone to stay.
- How can we work together to find and maintain balance among water users for our future, for our children?
- Continue to do business and have a thriving community, but balance resources.
- The GSP that is chosen has to provide balance.
- Water needs to be balanced and water needs to be used wisely by all users.
- Water table is replenished and fills to levels that will not fall to dangerous levels even in drought.
- Water has to support residential, family and farm needs.

#### **Economic Productivity and Stability**

##### Current Perspectives

- Without water, how can we survive and maintain our livelihood?
- The community is already subject to greater impacts now with the high cost of water (\$160 to \$200 per household per month) and the water contamination (salinity and arsenic) that has come as a result of the increase in farming. The farmers/ranchers can pack up and leave the

area if they want to, leaving the community with no jobs and no community. Currently, the large agricultural businesses can leave the area and go somewhere else to grow, but the people in the community can't just pick up and leave.

- There were a lot more homes on the farms back in the day.

#### Future Perspectives

- Water and jobs are directly connected.
- The Cuyama economy should continue to grow.
- Economic productivity and quality of life are necessary.
- Solutions to the water issues have to be economical.
- Cuyama needs an economy that will keep people employed.
- Money generated in the Cuyama Valley should stay here.
- For the future, add 40 to 50 new homes to improve the economic base for the community.
- Adding more homes is not the right direction.
- Water use by homes is negligible compared to agriculture.
- Access to affordable quality water is the only thing that can support people and the economy in the Cuyama Valley.

#### Water Equality

- Need to fix the current water inequality in the future. (people have bad water with salinity and arsenic, and farmers pump all day)
- Regulate the amount of farming and irrigating so that residents can have clean water, affordable water.
- Water needs to be used wisely by all users.
- All water users must evaluate their use and determine where they can cut back – individuals must have enough water to maintain good health and large and small farms must evaluate their use and change their practices to be more conservation oriented.
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#### Local Ecology

- We would like to see more plant growth along the riverbed and improvement to local ecology (specifically trees).
- Utilize trees for windbreaks, etc.
- Habitats are restored for migratory birds as well as insects and wild animals.

#### Farming Management Practices

- Farms have to change how they do business.
- Consider crop shift and value-added processing.
- Grow crops that are more permanent to reduce tilling and soil drying.
- Maintain the dry rangeland that is sustainable in parts of the valley.
- Farmers need to change what they are growing to use water more wisely.
- Use hedge-rows around fields.
- Rebuilding soil for moisture retention (no till and cover crop).

## **Water Delivery Infrastructure**

- The community services district pumps break, the wells go down now. This didn't happen 5 to 10 years ago.

## **Water Quality**

- The water has not been drinkable for at least 28 years (the number of years the speaker has lived in the Cuyama Valley near the intersect of 166 and 33). The water is better in Maricopa, so they go there to get water.
- 3 to 4 times per year the water is brown.
- Water quality has been bad for a long time, and the salinity has gotten worse.
- Salinity is bad for swamp coolers – lumps of salt get deposited, have to clean out 3 to 4 times a year when it used to be once a year.
- Water quality has been bad for a long time, and the salinity has gotten worse.
- The people need better water sources in the future, with no salinity.
- Better drinking water, some wells not drinkable, total dissolved solids, etc.
- Increased salinity from overdrafting on large farms leads to more overdrafting to remediate the problem which leads to dust and poor air quality.

## **Groundwater Depth**

- 10 years ago, when there were fewer farms, the depth to water was okay. Now with more farms, the water depths are worse – have to drill deeper now to find water.
- Depth to water was bad during the drought but it is even worse now since even more farming (North Fork Vineyard) has come into the Valley.
- Stop wells from going dry.

## **Other**

- Sustainability means the return of environmental and groundwater conditions to rates that were previous to the negative effects taking place.
- Sustainability means improving water quality, the reverse of land subsidence, and decreasing well depths.
- Sustainability is maximizing resources and increasing quality of life for members of community.
- Sustainability is not just water, rebuild soils in the area.
- Sustainability means survival of the community and wildlife through drought periods, that mega-farming is not expanded beyond current levels, and no additional residential development.
- Sustainability means people, animals, and crops must be able to survive without using more water than is replenished in an average year. This requires re-evaluation of current practices.
- The water connection to the natural and human environment is important – e.g., water retention can support natural and human communities.
- The future has to be different – we are at a change point.
- Consider that there will be longer cycles of wet and dry in the future.
- Re-establish reservoirs.

- Use a 60-year cycle to accommodate for a full wet and dry cycle of the Pacific Decadal Oscillation (we entered a wet cycle in 2014).

The next question asked of participants was, “Water is important for the future of the Cuyama Valley. What do you see as important challenges or undesirable effects for the future of water in the Cuyama Valley for the following?”

1. Water and Jobs
2. Water and Community/Households
3. Water and Small Farms
4. Water and Large Farms
5. Water and Natural Resources

While the workshop discussions did focus on these five topics, another topic of comment emerged: Water and Economy.

### **General Undesirable Results**

- Everyone will be getting less water. It is a closed system.
- What if the Groundwater Sustainability Plan doesn’t get the outcomes we want?
- Well infrastructure is old and falling apart, which contributes to poor water quality.
- Groundwater pumping could limit access to water for the community.
- Land subsidence could be a problem that leads to infrastructure issues, less recharge for children to take on business and have a positive experience in Cuyama.

### **Water and Jobs**

- The water used for farming is okay but the water for the community is still bad.
- Jobs go if the water goes.
- We want water for all – a balanced approach.
- We want to keep jobs in the Valley for people that live here.
- For homeowners, the value of the homes will drop drastically if there is no water and no jobs.
- With most farms, worker housing has been removed causing families with children to move away which has impacted the schools. Family housing needs to be addressed.
- Affordable, quality water supports jobs.
- The only jobs are farming jobs, so some people live here but don’t work here.
- Need increased population to work at both small and large farms – keep the money in the Valley.

### **Water and Community/Households**

- Water of good quality must be available for people and animals at an affordable price.
- CCSD needs to provide safe and affordable water.
- Are the problems with the town water (low pressure, salinity, brown color at times, arsenic, unreliable delivery system) because of the nearby over-pumping? Can there be a way to not pump at all within a certain range to the town?
- We want good water quality for the community.
- We want water for the community pool, for community recreation.

- Grimmway should pay the CCSD water bills which are between \$160 and \$200 a month.
- Increasing arsenic, salinity, and carcinogens.
- The town well is drying, need functioning wells in town.
- Don't want to have to decide between washing clothes or taking a shower like it is now in New Cuyama.
- Need to educate children now about how to use water wisely, how to conserve water.
- With most farms, worker housing has been removed causing families with children to move away which has impacted the schools. Family housing needs to be addressed.
- Groundwater pumping could turn the Cuyama Basin into a desert, making homes impossible to sell, making it impossible to move elsewhere.

### **Water and Small Farms**

- Many small farms are gone now.
- Generational farming is being phased out.
- Small farms have been and continue to be affected because as the water is deeper they can't afford to drill deeper like the big farms can.
- Deeper wells to reach water makes more expense for the small farmer, this is not sustainable.
- A bad impact would be that the community and small farms are unfairly punished for the negligence of the responsible parties of the negative effects. Small farms need to be protected.
- Wells going dry, crops going dry.

### **Water and Big Farms**

- No Water = No Jobs.
- Bad water quality will impact the crops negatively – the crops will not be as good.
- Big farms should operate sustainably with the amount of water to keep water use balanced for everyone.
- Farming needs to reevaluate water use and crop choice.
- Can farmers grow crops that use less water?
- Regulate the water so farmers will change what they are growing.
- Big farms don't care about how much water they use, they don't care about the community, they don't care. They have the money to drill new wells. They have the money to pick up and leave but the people don't.
- Large farms operated by industrial ag-corporations appear to be blind to the damage that they do to the environment and the community.
- Shrink industrial ag by at least 50%.
- Wells going dry, crops going dry.
- Agriculture must pay for water based on the actual amount that they use.

### **Water and Natural Resources**

- Chemicals are being sprayed onto the crops and then going into the groundwater.
- If there is no water, Big Ag will leave, and they will leave a polluted dust bowl full of the chemicals that have been sprayed.
- Air quality is bad because of Big Ag operations.

- Animals like deer and rabbits will be left with no water.
- There are fewer deer and rabbits now probably because they've been eating and drinking the sprayed chemicals.
- If there is no clean water for animals, then there will be no animals.
- Need diversity of species
- Build organic matter into the soil.
- 45 years ago, streams ran year-round, not just as torrents after rains. With a sustainable water table, the streams could run again.
- Over pumping has already destroyed much of the natural environment that drew people here years ago.
- Sustaining riparian areas, supporting wildlife habitat.

### **Water and Economy**

- Cost of water needs to be affordable.
- Economic stability through boom and bust.
- We want water that is affordable.
- Affordability of well drilling to depth.
- Economic impact: agriculture and urban – need to connect with uses
- It will be undesirable for long-term management if the whole valley is treated the same.
- We need a diversified economy; we are over-reliant on certain industries.
- Changes in farming practices are important to the economy.
- If the GSP fails, there will be no economic stability.



## Appendix A – Workshop Notification

Two CBGSA notices were prepared for the June 6, 2018 workshops – one in English and one in Spanish. The notices were distributed as follows:

1. May 19, 2018 - Posted to the CBGSA website.
2. May 31, 2018 - Emailed to the CBGSA email list.
3. June 4, 2018 - Emailed to the CBGSA email list as a reminder..
4. May 16 through June 5, the Cuyama Valley Family Resource Center (CVFRC) distributed the notices:
  - a. 60 notices distributed at the Big Food Truck on May 16, 2018 and 30 notices distributed by the CVFRC at the Little Food Truck on May 23, 2018.
  - b. 30 notices distributed via the CVFRC
  - c. 140 notices were hand delivered in the Cuyama Valley on May 16, 2018 (40 notices were distributed to the U.S. Post Office, 20 notices were delivered to The Place restaurant in Ventucopa, 40 notices were delivered along Highway 33, 60 notices were delivered to one of the local churches.
5. From May 26 through June 5, 2018: CVFRC developed their own unique English and a Spanish flyer for the workshops and distributed approximately 500 copies (half English and half Spanish) by hand throughout New Cuyama. They were also emailed to the CVCA email list.