



Public Agency Meeting Summary

Meeting Overview

Meeting Details

Meeting Date: Tuesday, January 9th, 9 - 11 AM

Meeting Location: In-person at Yolo Bypass Wildlife Headquarters, 45211 Co Rd 32B, Davis, CA

Total Participant Count: 16 Attendees

Meeting Objectives

Information Sharing

- Build mutual understanding on the Creek water challenges since the Accord and why the PCWM initiative is the forum to address these challenges
- Participants understand the Creek is a shared resource that needs to be more effectively managed (water balance). This can only happen with accurate up-to-date flow information (inflows and outflows).
- Participants understand that Solano County Water Agency (SCWA) cannot fulfill its environmental flow requirements and regulatory responsibilities without Public Agency pumpers measuring and reporting their water flows.

Gathering Input & Agreement

- Identify the public agencies and farmer lessee concerns regarding Creek water management and the need for flow information.
- Agreement that we need to identify solutions to this water balance problem and inform agencies that flow information will help us better share the Creek.

Meeting Agenda

9:00 - 9:15 Welcome & Meeting Goals

9:15 - 9:30 Introductions

9:30 - 9:45 PCWM Context

9:45 - 10:00 Putah Creek Water

10:00 - 10:45 Gathering Input

10:45 - 11:00 Next Steps

Meeting Materials

View the Public Agency Focus Group [Presentation here](#)



Meeting Notes

Meeting Highlights

Communication & Coordination Strategies

Attendees recommended increasing communication and coordination among water users. This included developing a website or portal where pumpers could share their diversion schedules and there could be a dashboard with data from internet-connected flow sensors or meters. There were suggestions to include Accord information in leases and notify farm lessees of their responsibility to report flows. Lastly, to account for property turnover, there were ideas to provide an informational notice about the Accord to new landowners along Putah Creek.

Water Supply and Infrastructure Strategies

Participants recommended water supply and infrastructure strategies for more effective water use. These strategies included off-stream storage, groundwater recharge, installing more sump pumps, using gravity siphon diversion to convey water, moving drainage water into the Creek, building parallel paths for conveyance water, farmers purchasing additional water from SCWA (similar to Yolo County Flood Control's system), and temporarily selling unused water rights to farmers.

Water Measurement Strategies

Attendees shared the need for more water flow information and strategies to gather that information. Folks suggested setting a standard for measurement equipment and the reporting process. Farm leases need to include flow measurement and reporting requirements. Questions arose regarding how flow would be measured, meter installation, and who would pay for meter installation and maintenance. Concerns arose on how flow measurement can be difficult in some parts of the Creek because of tidal action and vegetation, which may require building a weir to help calculate flows.

Financial Support Strategies

Attendees shared that the implementation of some of these solutions would require additional funds. There was agreement that SCWA and other organizations are and should continue to seek funding to offer financial support to farmers, landowners, and partners towards projects such as groundwater recharge, off-site storage, water efficiency measures, and more.

Meeting Summary

Introductions

Managing Facilitator, Juliana Birkhoff, welcomed participants and introduced herself, Ag Innovations, and the meeting objectives. Andrew Fulks, University of California, Davis, introduced the Lower Putah Creek Coordinating Committee (LPCCC). The mission of the LPCCC is to protect, monitor, and enhance the resources of lower Putah Creek, within the framework of the Accord, while respecting property rights, serving as a forum for dialogue about issues, and promoting synergy among stakeholders in the Creek community.



The LPCCC includes representatives from the cities of Davis, Fairfield, Suisun City, Vacaville, Vallejo, and Winters, Counties of Solano and Yolo, Solano and Yolo Riparian Landowners, Maine Prairie Water District, SCWA, Solano Irrigation District, Putah Creek Council, and the UC Davis. The LPCCC was established because of the 2000 Accord, along with the Putah Creek Streamkeeper position, and additional base and environmental flow requirements.

Since the Accord began there have been impressive successes to improve Putah Creek. In the Winters Putah Creek Nature Park, thousands of salmon have begun spawning. There has been a total of \$25 million in Restoration Projects. This success has been accomplished by a community that works together. However, there are still challenges. Mr. Fulks shared that landowners have turned over, and water trends are changing. The LPCCC thought it was time to bring Creek users together again to discuss Creek water management. Over the last year, there have been interviews with Putah Creek water users to find out about their concerns. Ag Innovations interviewed over 20 people with various perspectives. They found that people are concerned about diminishing water quantity, uncertain water predictability, fair Creek use, and regulatory compliance. Andrew explains the bottom line regarding the purpose of PCWM:

“The Creek water is shared by many. The Solano County Water Agency must provide water in the Creek, including environmental flows. Farmers have a right to pump water for irrigation from the Creek and a responsibility to measure and report their flows. The PCWM initiative is serving as the forum to coordinate these uses.”

PCWM Context

Dr. Birkhoff explained PCWM’s objective is to identify a suite of strategies to address Putah Creek challenges that are informed by stakeholder engagement, technical and scientific information, and laws and regulations. There are four major goals of PCWM: 1) Supporting Agriculture’s needs for water information to plan their operations, 2) Fair Creek management, 3) Complying with water regulations, and 4) Maintaining environmental flow.

Public communication will be prioritized throughout the year. There will be a series of community engagement opportunities throughout the year, including public community workshops, a Hydrology Symposium, and multiple focus groups with water users. View the [PCWM Fact Sheet](#) for more details.

Putah Creek Water

Putah Creek Streamkeeper, Max Stevenson, shared the Flow Compliance Locations map, as shown in Graphic A. The 2000 Accord mandates SCWA measure compliance. There are 3 compliance points: at the Putah Diversion Dam, I-80, and Toe Drain. Upstream to I-80 for the past 20-25 years SCWA has had a very good compliance rate. However there have been many compliance violations at the toe drain.

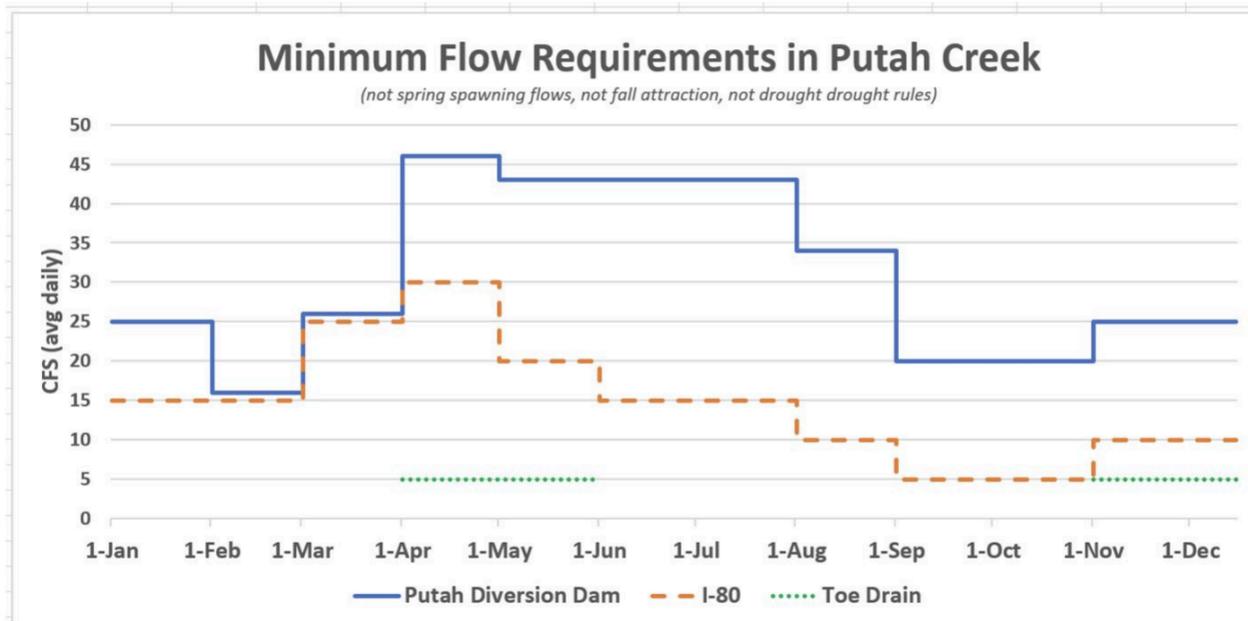
Graphic A: 2000 Accord: Flow Compliance Locations

Flow Compliance Locations



Dr. Stevenson explained the minimum flow requirements in Putah Creek, as shown in Graphic B. This chart shows the average daily Cubic Foot per Second (CFS) month to month in a calendar year. The blue line indicates what is required to be released from the Putah Creek diversion into the Creek as a minimum flow. The orange dotted line reports the required minimum flows at the I80 compliance point. The green dotted line reports the required minimum flows at the Toe Drain compliance point. The Accord states there must be 5 CFS for April-June and 5 CFS in November and December at the Toe Drain. SCWA is not always complying with the Toe Drain requirement.

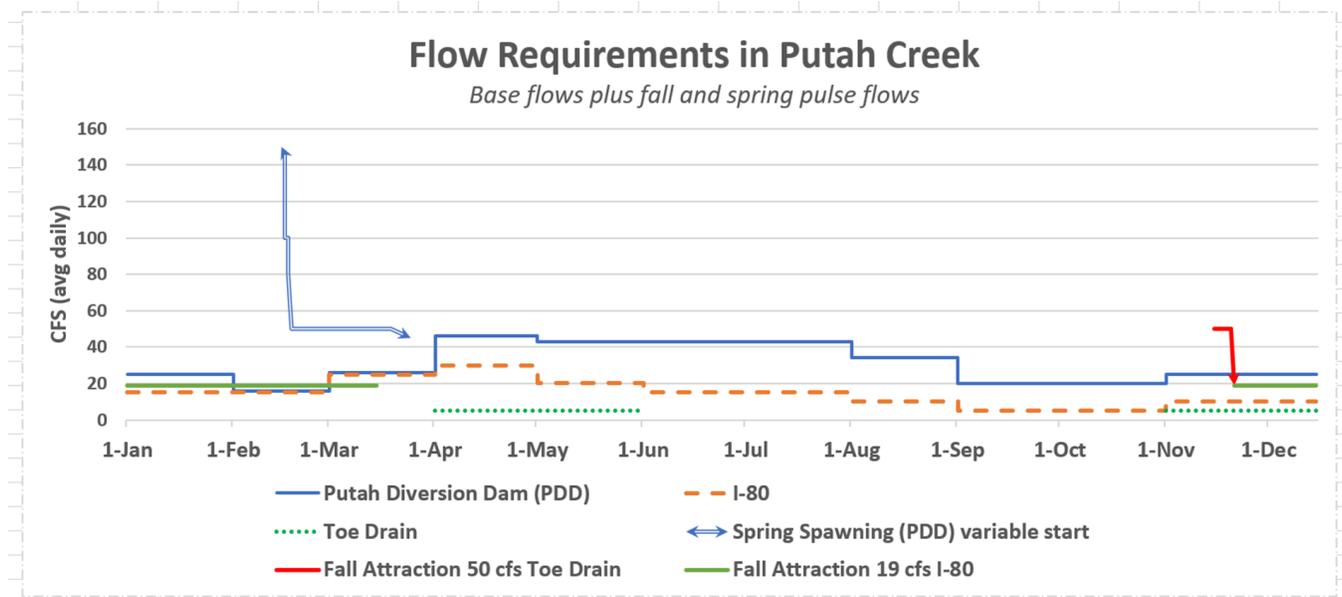
Graphic B: Minimum Flow Requirements in Putah Creek





Dr. Stevenson explained to comply with the 2000 Accord, SCWA releases water, known as Pulse Flows, in the fall and spring for the salmon. He shared a chart showing the Base Flows plus Fall and Spring Pulse Flows, shown in Graphic C: Flow Requirements in Putah Creek. This chart shows the average daily CFS at the 3 compliance points month to month in a calendar year. It also shows an additional red and green line for fall pulse flows and a double blue line for spring pulse flows. SCWA is required to release anywhere from 150 CFS in the spring to 50 CFS in the fall. These pulse flows requirements are variable timed, not fixed, which means they change depending on spawning activity. Dr. Stevenson explained how one of the biggest drivers of flow in the Creek is drought. If there is a drought, the groundwater levels are lower and there are fewer gains along the Creek from groundwater.

Graphic C: Flow Requirements in Putah Creek



Questions & Input Gathered

Questions & Input on PCWM

Question: Can you elaborate on the regulations for diverters and measuring their flow? What regulations apply to diverters?

A: The Water Resources Control Board has a requirement that all diversions, public and private, have to report the amount they pump annually to the State Board.

Question: Is the LPCCC or SCWA responsible for maintaining environmental flows and monitoring the flows?



A: SCWA

Question: Does SCWA respond by sending additional flows to maintain environmental compliance depending on how much diversion is occurring?

A: That is how SCWA has been responding the way SCWA responds. But there is more and more water that is required to supply the environmental flows because of larger and larger diversions over time. Before 1970 there were “natural flows” on the Creek, which means it would dry up in the summer. After 1970 the Bureau of Reclamation instituted a “fixed release schedule” that continuously released water down the Creek for recharge and agriculture. However, because of drought and increased water use in the 1990’s the Creek dried up and the fish were dying. This led to the litigation and establishment of the 2000 Accord and environmental flows.

Question: Is there data and charts that show the minimum and pulse flow realities from the past few years?

A: Yes. PCWM can put this information together for water users.

Question: How is the decision made to add more water to the Creek to meet the compliance points?

A: SCWA staff monitors water flow at the compliance points. If there is not enough flow, SCWA adds water to the Creek.

Response: *For more accurate Putah Creek Water flow monitoring, SCWA would need another 6 or so water flow meters. However, it is very difficult to measure flow at Los Rios Dam. The issues at the lower end have been there for years. Below Los Rios Check dam, there is tidal action and vegetation. Meters here would not be useful. To calculate flow below Los Rios there would have to be a weir or something to calculate flow.*

Question: How does the process work when diverters make phone calls to order more water? How is that working on your end?

A: SCWA rarely receives phone calls to order more water, that's one of the reasons why we initiated PCWM.

Question: Is it a communication issue or another issue? Were things working before and now they're not working? Are farmers diverting more or are alternative water sources not as effective as they used to be?

A: The PCWM initiative is exploring this question. Many different factors could be leading to the concerns on the Creek. These factors include, but are not limited to:

- *Drought, which lowers groundwater levels, game reach, and spillover water*



- *Changing priorities; decades ago SCWA and other organizations were focusing upstream on flow management, trash mitigation, and restoration. Over time priorities have shifted to focus more downstream.*
- *Increasingly complex Putah Creek system, with fish passage & conveyance use*
- *Missing information about Creek water in and outflows*
- *Landowner turnover, which has led to less communication and coordination over time*
- *More landowners installing pumps*

Participant Comment: I've been farming for decades in this area. I know we've had droughts these past 20 years. I farm downstream. I believe the system is working. I have ideas on how to bring more water to farmers and people. As long as the glory hole is not spilling, you could keep more water behind the dam so you could allow for more releases for the compliance points. But I feel like we don't need to change much.

Response: The SCWA board is against adding more water to meet downstream compliance. Board members are stressing that water needs to stay in the reservoir to account for drought. We want to figure out what's the best way to coordinate amongst all water users. We can't keep adding another 10 CFS and another 20 CFS to meet compliance. The PCWM initiative is to create solutions to compliance without additional water from the reservoir.

Response: SCWA and the LPCCC do not feel that everything is falling apart. In the future the Water Agency Board could tell us to stop adding more water. The way to preemptively respond to that is to put a little extra water down for riparian water rights, but make it clear that it is not an infinite amount. We want to increase communication amongst users to have more effective water resource management so the agency doesn't have to keep increasing water releases.

Questions & Input on Communication and Coordination Strategies

Participant Comment: We need more communication among water users. That could just be direct communication, but it could also be a website, portal, or dashboard with internet-connected flow sensors or meters. So we know what is happening and where so SCWA knows when it needs to release water and pumpers know when others are diverting.

Response: Agreed. I think making a phone call anytime you need water is a hassle. We need a better and easier system for people to communicate and coordinate water use.

Response: Agreed. We should set up a website for the diverters. They can put up their diversion schedules on the website so they can coordinate.

Participant Comment: When I looked at the Cities lease for a farm it did not say anything about the Accord. That's another thing we need to improve. When we are working with lessee's we need to notify them of the Accord and their responsibilities to report flow.



Participant Comment: When we're talking about property turnover, you could notify new landowners of the Accord. It could be good to find a way to create continuity among new property owners regarding the Accord. Let's plan for this transition.

Response: The water rights of landowners are independent of the Accord. The Accord is only applicable to SCWA and environmental flows and it's separate from diversion rights. I don't know if it's appropriate to append the Accord to the deed of a property if it has no bearing on that property owner, even if it's informational. I worry it would misinform a new landowner of their obligations or their rights. The obligation to comply with the Accord is not the landowners.

Response: Correct. The landowner has a right to divert, and under that right is a responsibility to report. So the suggestion is to include in the property title a notice that says something like, "Due to where your land is located you are part of a group of people that are affected by the Putah Creek Accord." The notice wouldn't say "Thou Shalt." It would only serve as informational notice. However, for a lease it would be required for the lessee to comply with flow reporting.

Questions & Input on Water Supply & Infrastructure Strategies

Question: Any discussion about off-stream storage? This is where you take water in the winter and store it. I know a lot of people don't have the land to do that because you need to build a big pond, but has that option been discussed?

A: Groundwater recharge is a great opportunity to use aquifer storage. However, the big issue with small surface water storage projects is that they are costly. However, there is State funding for this strategy.

Question: Are there water efficiency or land management practices landowners or farmers could adopt such as installing drip irrigation or less water-intensive agriculture?

A: Some practices could help, but they mainly focus on how the water is diverted. For example, diverters can use sump pumps. If we had a system with sumps off channels, farmers could still divert water, but water would not back up which creates fish passage barriers. Sump pumps also allow for better flow control for measurements. That is an infrastructure solution. SCWA is seeking funds to help farmers interested in sump pumps with purchase and installation. Another example is at the Yolo Bypass Wildlife Area where their water supply is on the north half of the Creek, but they want to move that supply to the south side. There is one siphon that brings water underneath the Creek. But another option is to pump water into the Creek and then pump water out of the Creek to move it to the southside. You can gain efficiency with gravity siphon diversion to get it across the Creek and you don't need the backup anymore. You wouldn't need the check dam anymore if you replaced it with a series of siphons. Several canal delivery solutions could be used.



Question: Hypothetically, what if you put a reporting system in place and then you have too many diverters who want to irrigate all at once and you still have to meet your environmental flow requirement? How do you respond to that? In a critically dry year do you tell the diverters there is not enough water?

A: It's not possible all the time for Putah Creek to meet all the user's water needs. Some years it can, but some years it can't. The issue is we don't know the flow measurements of the Creek water sources such as from the Solano Project, Toe Drain, wells, return flows, and groundwater upwelling. We don't know the water balance of the Creek. Just adding more water is not a solution. Maybe farmers could buy additional water, just like how some farmers buy water from Yolo County Flood Control. It's delivered down the Creek and the farmer picks it up. Other opportunities include groundwater recharge or toe drain water coming in on a parallel path so it doesn't block fish passage during certain times of the year. If your question is, "What if there is not enough water?" The answer is there isn't enough water so we have to figure it out.

Participant Comment: There is an opportunity to take drainage water and hold it. It would help landowners north of I-80 and north of Dixon. It would facilitate waters through the NE quadrant and the City of Dixon. It would provide drainage for them and could serve as a holding pond. It could also discharge into Putah Creek which would alleviate pressure off of Tremont 1,2, & 3, which are current sources of drainage for ag lands and the community. The problem there is politics.

Response: It's a flood control problem they are trying to solve. It could be a good multi-benefit strategy. However, there are jurisdiction constraints. The Water Agencies have minor jurisdiction over flood control. Counties have flood control jurisdiction. RCDs also have a role to play. There are also major infrastructure cost constraints.

Participant Comment: Some people have water rights and are not using the water. They could temporarily sell that water right to farmers.

Participant Comment: On our farm, we have 3 locations we pull from. We're on file with the state. We do have flow meters. If we pump from the Creek, we are required to report that information by February. Even if you don't pump you have to report that you have riparian rights to the Department of Water Resources. Additionally, after July 15th we're not allowed to pump anymore. So we use that data to determine what types of crops we plant. In areas where we are not pumping we cannot irrigate, so we plan dry crop rotation. In the farming community, we are all working with the same constraints regarding water availability. Also, every farmer in this location that has surface water knows you have to give a 24-hour notice for ordering and then also 24 hours of notice before shut-off so that there is no water waste.

Meeting Adjourned