

Changing the Conversation: Environmental Water for the Sacramento Valley

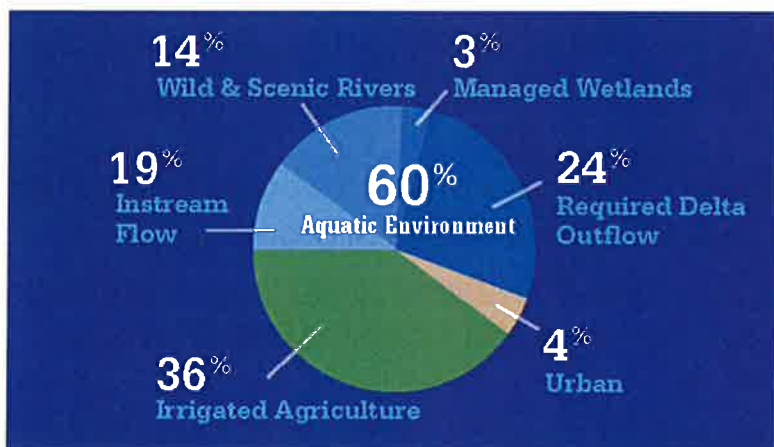
We have started a new and different conversation about water in the Sacramento Valley and we invite you all to join us in this dialogue.

For the past several decades there have been various debates that have led nowhere—this includes debates over more instream flows, unimpaired flows, fish vs. farms, share the pain, etc.....

Let me propose a different and more fruitful discussion that will more effectively serve the water needs for people, our economy and the environment. This proposal looks at serving functional flows that are directly linked to beneficial uses, including spreading the water out over the landscape.

The California Constitution calls for two over-arching principles for water management: 1) using our precious water to the fullest extent possible and 2) not wasting water or using it for unreasonable beneficial uses.

In the Sacramento Valley, water serves various beneficial purposes as shown in the attached pie-chart:



This includes cities and rural communities, farms, the Pacific Flyway and birds, fish and recreation.

With respect to the state of our rivers in the Sacramento Valley, if we look at our current river dynamics in an honest way, we have created high quality water (by human standards) in very channelized rivers and we are starving

fish and other aquatic life and creating a clear and sterile riverine environment that in many cases is inhospitable to their survival. As the work emerging from the Delta Science Program has suggested, you can add any increment of water you like to these sterile river channels and they are still equally inhospitable to fish. In other words, the quantity of water is not the limiting factor with respect to healthy fisheries.

In the Sacramento Valley, we have a flow-through system with an amazing landscape and an ingenious bypass system that has protected Sacramento and other communities for many years. As we look to the future in this region, we need to serve all beneficial purposes--cities and rural communities, farms, fish, birds and recreation—and we need to think in new and creative ways to do this effectively within this flow-through system. A couple of examples that illustrate current thinking and efforts:

- For birds, the Joint Venture has provided the guidance and inspiration for water district and refuge managers to spread water across the landscape for the ricelands and refuges that serve birds along the Pacific Flyway. The key has been nourishment for the birds to have energy when they travel. By most measures, the Pacific Flyway has been the environmental success story of our generation.
- For endangered salmon, the leaders in the different watersheds have worked with conservation partners and state and federal agencies to re-manage flows on every part of the system (see re-managed flows attached) for the benefit of salmon. We are also actively working on a *Sacramento Valley Salmon Recovery Program* that is designed to make the rivers more hospitable to salmon--better migratory corridors to prevent straying, habitat with suitable temperatures that is safe and free from predation, and food to nourish the salmon. As part of this, we are working with various partners in exploring creative ways to spread water across the bypasses and other agricultural lands for fish propagation (i.e., Nigiri project) and for food production for fish.
- For Delta smelt, water resources managers this year re-routed water into the Yolo Bypass for food production that will help smelt and looks very promising. See <http://www.norcalwater.org/2016/07/21/sacramento-valley-contributes-to-delta-smelt-food-production/>. This is part of the Delta Smelt Resiliency Strategy.
- We are also working with conservation organizations to explore environmental blocks of water that can be used for all of these purposes in the Sacramento Valley. This can include instream flows under Chapter 7; water acquisitions; and public benefit water under Chapter 8.

As you look across the Valley at these various programs, the strategies that seem to offer the most promise for a healthy ecosystem (and a vibrant economy) in the Sacramento Valley are out-of-stream functional flow strategies—not the in-stream strategies that have dominated the conventional wisdom for the past forty years. In fact, about 1.5 million acre-feet of water has been redirected to instream flows in the Delta over the past several decades, leading to fish declines in these areas. In many cases, it appears that water could be diverted and spread throughout the Valley in a way that provides multiple benefits: flood benefits; food and habitat for the Pacific Flyway; the generation of food for fish; and the recharge of the groundwater resources to help with sustainable groundwater management.

In sum, these ideas offer some very fertile ground for further conversations and discourse that we would like to pursue with your input and thoughts. We do not pretend to have all the answers to these issues, but we do have a leadership team and water resources managers in the Sacramento Valley who are willing to explore these new and different approaches and then honestly assess whether they work. Your thoughts, insights and collaboration would be much appreciated.