



Ventura River Watershed Council

Meeting Summary

Wednesday, June 13, 2012

Our mission is to facilitate and support efforts by individuals, agencies, and organizations to maintain and improve the health and sustainability of the Ventura River watershed.

[Mostly because of time constraints, this summary does not generally include the names of who said what.]

Acronyms are defined at the bottom of the summary.

Water Quality Subcommittee

1. Algae TMDL

The group discussed the algae/nutrient TMDL CEQA Scoping Meeting, held on May 30, 2012 in Ventura. Many expressed frustration that we were not provided with any new information of substance, as it was understood we would. We do not even have a “project description” upon which to base an environmental assessment. We still do not know anything about what the regulation will require in terms of implementation. There has been no real opportunity for public participation and input on the TMDL.

The upcoming dates in the process were outlined:

- July 31, 2012. RWQCB to issue the draft regulation. Start of 45-day public comment period.
- August 31, 2012 End of public comment period.
- October 2012 The regulation will likely be presented to the Los Angeles RWQCB for approval. If approved, the EPA decides whether to approve it or remand it back to the State Board.
- March 13, 2013 The EPA must approve the TMDL.

If the Regional Board does not meet their date targets, then EPA can step in and take over the TMDL. The July 31, 2012 deadline to issue the draft TMDL regulation is imposed on them internally by their desire to bring it to their board at the October 2012 hearing. So they count backwards to determine when the public comment period would have to end, and then count 45 days backwards to when they would have to release the draft. They could change their schedule, but they’ve been sliding things forward in time for the last several years and now their backs are up against the wall. If they don’t get it done, they will be in violation of the Heal the Bay consent decree. This is the last TMDL on a long list of TMDLs that the Regional Board was required to get done by the consent decree. EPA has stepped in and developed a number of the TMDLs on the consent decree list. This one has been saved from that fate so far.

After this one is done, it is likely the RWQCB staff will take a break from generating TMDLs and will start addressing a long list of TMDL reopeners whose deadlines are coming up.

The Regional Board is not obligated to share anything with the public until they share a draft of the entire TMDL.

It has been 17 years since the river was listed as impaired for algae. Work on the TMDL originally started in 2007. There has been no seeming continuity with the new staff and all the data and work that went into the process with previous staff.

Regional Board staff is still gathering data, at this late hour, from stakeholders to feed their models. (e.g., number of cattle and horses, irrigated pastures).

Marvin Hanson, who used to work with stream gauges on local rivers, reported that one of the biggest problems he had in the upper Sespe was algae. If it is a problem up there in the wilderness, how can we ever hope to get it under control? The idea of banning photosynthesis was proposed, or refrigerating the river.

On the question of other examples of TMDLs like this one: In our water quality control board region, Region 4, there are other algae TMDLs on the books. The one that is most germane to our situation is the Malibu TMDL, however the EPA wrote that one. Across the state there are other stream TMDLs for algae/nutrients. Chorro Creek is one. There are others. Ours is a precedent for Region 4 staff, and for them to write their own.

This TMDL also comes at a critical juncture in terms of a larger state policy under development. The State Water Board has announced that they are going to adopt a policy for deriving numeric limits for nitrogen and phosphorus (called NNE, numeric nutrient endpoint). This means they are adopting a process that must be used. The Regional Board staff, on this TMDL, is officially buying into that process, which involves a number of steps including some modeling tools. So this is kind of a trial run for Regional Board staff to use this NNE process. Because of this, the TMDL is being looked at by dischargers all across the state as one of the first TMDLs out of the box that purports to be consistent with this proposed state policy. So while we have a lot of local angst about this policy, it is also under the microscope statewide.

It was mentioned that SCCWRP (Southern California Coastal Water Research Project), has looked at the NNE approach in the Orange County/San Diego area and has found flaws with it.

Treatment plants statewide are hitting the wall in terms of the limits of technology. The only way Ojai Valley Sanitary District's (OVSD) treatment plant can go below 3 mg/L (total nitrogen), and to hit it on an everyday basis, is to move to reverse osmosis (RO). This will cost close to \$75 million. CASA (California Association of Sanitation Agencies) and the treatment plants are really struggling with what to do to get below 3 mg/L (total N). There really isn't a solution. And RO creates a lot of greenhouse gases, and so runs into the policies of sustainability. Our watershed is on the cusp with this new TMDL; we are the lab rats.

If the state comes out with 1 (mg/L total nitrogen-N) and 0.1 (mg/L total phosphorus-P) as targets, as expected, and not just for the treatment plant discharge, but for nonpoint sources, will we have to test water that comes off of city storm drains? At what point are we reaching the limits of our ability to clean every drop of water that hits the watershed. And how are we going to manage horse waste products (joke about horses wearing Depends and catheters)?

One of the big unknowns about what the regulation will look like is whether the 1 (total N) and 0.1 (total P) targets will apply to individual samples, or for points in the river, thereby allowing for dilution and natural treatment process to do their work. How the regulation looks with regard to this question is critical.

Targets in the stream are one set of numbers; the other set of numbers that are just as, if not more, important, are the load allocations. The load allocations are the numbers that individuals actually have to comply with. The allocations say: "you have to do this; your storm drain has to look like that; your orchard runoff has to look like that." The allocations won't necessarily be the same numbers as the target. The waste load allocations are also part of the regulation.

On the question of technological solutions: A month ago, the Department of Energy went online with a nutrient removal system (using chemistry) for treating groundwater at a nuclear facility in Washington. It is exciting new technology, but costs billions of dollars. There was a demonstration project at the OVSD treatment plant a year and a half ago of a system that took nitrate down to non-detect. But that was measured on gallons per minute, not on millions of gallons a day. Maybe in 10 to 20 years these technologies will offer something affordable, but

not today. And if the TMDL regulation gives the treatment plant 20 years to comply, in order to build an RO plant and do all the environmental permitting, they would need to start right away. They can't wait for 15 years to see if the technology is there.

In the 2008 Chorro Creek TMDL, the target was 1 (total N) and 0.1 (total P) and the final waste load allocations were the same. This was an EPA written TMDL. When EPA writes a TMDL for streams or lakes, from now on, you can be assured that they are going to stick to 1 and 0.1 as the N/P targets. That is EPA's agenda now.

An example of how crazy the TMDLs can get: There are a bunch of lakes in the Los Angeles region that got lumped together in a LA Lakes TMDL, and they got those targets, with no implementation plan, no length of time to respond. But the only water one of the lakes receives is some urban dribble, so the implementation plan said you have to take drinking water and supply it to the lake, but the drinking water had more nitrogen in it than the EPA is permitting there to be.

If EPA were to write our TMDL, 1 (total N) and 0.1 (total P) would not only be the targets in the stream, they would likely be the load allocations.

Working together as a watershed may be a better approach than letting each entity deal with their allocation alone, regardless of costs. A group of the agencies likely to be impacted—the city of Ojai, the city of Ventura, the County of Ventura, and OVSD—did present the Regional Board with a recommended implementation plan, under the assumption that we were heading toward 1 and 0.1 targets. They each outlined what they could individually do. Perhaps the non-agency groups would like to join in that discussion and see if there is anything to add to the strategy presented to the Regional Board. The hope being that when we get to the hearing, we can all support a stakeholder-driven implementation strategy that actually cleans up the river. This approach was taken in the Malibu Creek watershed, and has been very cost-effective. There are also strong precedents for regional solutions in the world of air pollution regulation. EPA, Cal EPA and ARB have long endorsed credits, offsets, trading, cap and trade, etc. that offer strategies for collectively coming up with the low-hanging fruit.

The problem is that at the hearing individual stakeholders or entities can stand up and say something for only five minutes. You can get through maybe three slides and one paragraph. The hearing is not a long workshop with lots of presentations or where you get to present a complicated watershed approach. Sometimes the Board will excuse themselves and go behind closed doors, maybe with a lawyer or two, and they come out and they have suddenly decided to redact certain portions of the TMDL or add new things. By the time you get to the hearing, you have to rely on brief messages that might hit a cord of the ordinary citizens that form the Board itself. Sometimes those arguments are based on economic cost-benefit analysis.

Because the Regional Board staff has not engaged stakeholders for a couple years leading up to this TMDL, we don't have time to coordinate a watershed approach. We'd have to get everybody together, sign an MOA, write documents that everybody's board could agree to, and get this all done in the next six weeks prior to release of the draft regulation on July 31, 2012.

There are TMDL "reopeners," but recently there have been some dreadful reopener outcomes where what the Board approved in the end bore no resemblance to the negotiated approach going in. So, the final waste load allocations that get adopted in the regulation are the numbers that you better like, because reopeners can hurt you.

OVSD is compiling a complete history of their water quality monitoring results as part of the record for this TMDL.

OVSD invited anyone interested, including those who may get dragged into the regulations, such as septic and horse owners, to get together soon to talk about what we can do collectively. Otherwise, time is short, we're all on our own, and we live with the numbers. Whether or not we get a finished product out of this effort, showing

the cross-community partnership when you show up at the Regional Board can change the tenor of the communication significantly in favor of the stakeholder.

It was pointed out that the ultimate goal of all this is to delist the river from the impaired list. We want an end point that is achievable. So whatever the target is must allow for this. If it is an impossible target, then we are in jeopardy, because we can never achieve it. And our children's children will still be trying to figure out how to reduce nutrients.

The person who is left out of this discussion is the ratepayer. The costs are enormous on many fronts. And this is happening all over the country. *High Country News* reported that there are literally hundreds of tiny wastewater treatment plants that may service only 200 people, and they are having to reach these limits. It is bankrupting cities.

A meeting was set for July 19, 2012, from 12:00 to 2:00 pm, at OVSD's facility to brainstorm on collective strategies.

2. Water rights as they relate to the pumping/diversion impairments

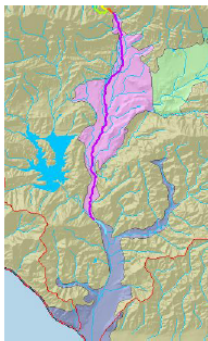
(Shirley Birosik, Regional Water Quality Control Board)

(Shirley clarified that she is not an expert on water rights. The Regional Board does not deal with water rights. Water rights are dealt with at the State Water Resources Control Board, Division of Water Rights, in Sacramento.)

There is another impairment on the Ventura River that has to be dealt with through the Heal the Bay consent decree, and that is pumping/diversion impairments on reaches three and four. Reach four goes from just below Matilija Dam down to just south of Foster Park. Reach three is a small reach, which goes from Weldon Canyon to the confluence with Coyote Creek.

Why Are We Talking About Water Rights?

- Pumping/diversion impairments in Reaches 3 and 4 of the Ventura River
- TMDLs are typically used to address impairments
- We are looking for alternate ways to address impairments
- Water rights may play a role but it's a complex topic



The Regional Board does not want to deal with this impairment with a TMDL because they don't see how a TMDL can be done on this topic. So they are looking at a different way of doing it.

Most impairments go on the part of the 303d list that requires a TMDL; there are other parts of the impairment list that are not as well known. One is called "4b," which relates to impairments being addressed through alternate programs.

The Regional Board is proposing using the 4b route to deal with the pumping/diversion

impairment, because it isn't amenable to a TMDL. Like the algae TMDL, there is a consent decree deadline of March of 2013. If the impairment is not moved to a different part of the 303d list, then EPA would have to do a TMDL, and they don't really know what that might look like. It could tie in to a pollutant of some sort. No other pumping/diversion TMDLs have ever been done.

To pursue the 4b route, staff would go to the RWQCB this fall with a proposal to move the impairment to the 4b part of the list. Staff would need to say that the stakeholders are committed to alternative programs that would address the impairment. Then the issue would go up to the State Board for their approval. If they approve, then EPA would not have to do a TMDL.

Water Rights

- A water right is legal permission to use a reasonable amount of water for a beneficial use such as swimming, fishing, farming, and industry; it is not ownership of the water itself
- If you take water from a lake, river, stream, or creek, or from underground supplies for a beneficial use, the California Water Code requires that you have a water right (with one exception)
- This is not the same as having a permit or license

Water rights issues naturally come up with this issue that involves pumping, diversion, flow, and lack of flow. This presentation is meant to give some background on water rights. The information for the presentation was obtained from the State Board's website or from a presentation put together by one of State Board's lawyers.

A water right is not ownership of the water. People do not own water; they have the right to use water.

You don't have to have a water right if you are taking a small amount of water. A small amount means up to 4,500 gallons a day for immediate use, (not storage) or 10 acre feet (AF = 325,851 gallons) per year in a pond or reservoir. You do have to register your use of this water.

The Benefits of Water Rights Laws

- Water rights are based on a priority system that is used to determine who can continue taking water when there is not enough water to supply all needs
- Water rights permits include conditions to protect other water users and the environment
- State Board has continuing authority over permits it issues and can modify permits and licenses

Domestic use refers to indoor household uses, watering of non-commercial livestock used for household, and irrigation of one-half acre or less of household land.

If the river or stream is fully appropriated, you are not allowed to register a water use.

The Ventura River is not fully appropriated. There are three tributaries that are fully appropriated. "Fully appropriated" does not mean all the water is used; it includes leaving water some in the river for the environment.

Exception to Needing a Water Right

- If you take and use a small amount of water only for domestic purposes or use a small amount for commercial livestock watering purposes
- Use must be registered with State Board's Division of Water Rights and notification made to Fish & Game
- Maximum registered use is 4,500 g/day for immediate use or 10 ac-ft per year for storage in a pond or reservoir

There is also a public trust doctrine, which requires the State Board to consider the impact of water appropriations on public trust resources.

The public trust doctrine originated in Roman law and was asserted to protect rights regarding commerce, navigation, fisheries, and navigable waters. "Harm to public trust resources should be avoided or mitigated if feasible."

There is also the reasonableness doctrine, which prohibits waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water. This applies to all uses of all waters of the state, and is a limitation on every water right and every method of diversion. No

matter what water right you have, you are not allowed to waste water.

What About Groundwater?

- State Board does not have authority to issue permits for GW diversions, except from subterranean streams
- BUT, pumpers may be regulated by a local entity, such as the Ojai Basin GWA

Groundwater: The State Board has no authority to issue permits for groundwater, except for subterranean streams.

The term groundwater is assumed to mean “percolating” groundwater; water that is going deep. If someone claims that some groundwater is not groundwater, that it is in fact a subterranean stream, they have to prove that that is the case.

Although the State Board does not require permits, groundwater pumpers can be regulated by a local entity, like the Ojai Basin Groundwater Management Agency. In the Upper Ventura River basin, there is no regulatory entity, so no one regulates groundwater pumping.

Groundwater

- A “subterranean stream flowing in a known and definite channel” is not groundwater
- To get a right to “groundwater” (percolating), you simply extract the water and use it for beneficial purpose
- Overlying GW rights have a higher priority than appropriative GW rights

To get a right to groundwater, you just extract the water and you have a right. If you overlie the groundwater basin, you get to have a right. If you don’t overlie the basin, you can still get a right, but you would have appropriative groundwater rights. It is not that you are assigned it by anyone; it really only comes up if the issue goes to court.

If the water is flowing underneath the surface, and you have riparian rights, those riparian rights attach to the parcels that overlie the subterranean stream, and you’d have rights to get that water underneath the ground.

What are Subterranean Streams?

- A subsurface channel must be present
- The channel must have relatively impermeable bed and banks
- The course of the channel must be known or capable of being determined by reasonable inference
- Groundwater must be flowing in the channel

The definition of “subterranean streams” has four parts, as outlined in the slide.

The Two Most Common Types of (Surface) Water Rights

- Riparian
- Appropriative

Two basic types of surface water rights are “riparian” and “appropriative.”

Riparian Rights

- The right to use the natural flow of water on land that touches a lake, river, stream, or creek; it extends to the amount of water that can be reasonably used on the parcel
- Water cannot be stored during a wet time for use during a drier time under a riparian right
- Riparian rights are not lost by non-use
- A riparian right is superior to any permit or license issued by State Board to appropriate water
- Riparian right holders on a stream all have the same priority; they share any shortage

Riparian rights are rights using the *natural* flow of water. This does not apply to flow that has been augmented.

You cannot store water for later. You have no limit on the amount of water you can take out of the river, but you can’t misuse it or waste it.

The parcel of land for riparian rights has to be contiguous to the source stream or overly the subterranean stream.

A riparian right is not lost by non-use. But you can lose the right if your land is cut off from the water source, or if the owner of the land sells the land and

does not transfer the water right with the land. Riparian rights do not require a permit, a license, or government approval. You cannot use the water outside of the watershed; you have to use it on your parcel. Since there is no licensing or permitting involved, if people in a watershed have disputes over rights, these disputes get resolved in court.

Appropriative rights are not dictated by land abutting a stream. These rights are established by the State Board. The right includes a limit on the amount of water, and you have to use it or lose it. There is a priority hierarchy.

Appropriative Water Rights

- Someone who takes water for use on non-riparian land, or who uses water that would not be there under natural conditions on riparian lands, appropriates water
- Can be lost through non-use
- Shortages are not shared: “first in time, first in right”

Those who got rights earlier have priority over those who got rights later. If there is a water shortage, the higher priority, early appropriator will get their share before the later appropriator.

If a stream is determined to be fully appropriated, and no more water is available for all the uses, the State Board would not continue to issue permits.

There are three streams in the Ventura River watershed that are fully appropriated: Cozy Dell Canyon (from the confluence of Cozy Dell Canyon and Ventura River upstream), Reeves Creek, and Santa Ana Creek (from Lake Casitas upstream). Even

if a stream is not on the fully appropriated streams list, water may still be unavailable for appropriation. Small users and riparian users may be using all the water and this would not show up in the records.

Pre-1914 Appropriative Rights

- An appropriative right acquired before 1914 does not need a water right permit unless use of the water has increased since 1914
- Quantity is the amount put to reasonable beneficial use
- Priority is based on when the appropriation was initiated

There are a couple kinds of appropriative rights. One is pre-1914 appropriative rights. This is the year that the State Water Commission was formed, the agency that handled water rights before the Division of Water Rights was formed.

An appropriative right acquired before 1914 did not need a permit, and is not subject to the permitting process at all.

Post-1914 Appropriative Rights

- Can be acquired through filing a water right application and paying required fees
- State Board must determine if there is water available for the proposed project
- And, that the proposed project will not deprive anyone who has a higher priority water right of the use of water under that right
- And, show that the proposed project will not harm public trust resources and is in the public interest

Post-1914 appropriative rights are acquired by paying fees, filing an application, and State Board determines whether there is room for another appropriation.

Permits versus Licenses

- A water right permit is an authorization to develop a water diversion and use project
- The right to use water is obtained through actual use of water within the limits described in the permit
- After the project is constructed it is inspected
- If there is compliance with permit conditions then a water right license is offered
- The license confirms actual use which may be less than the permit allowed; license is only for that water that has been reasonably and beneficially used

A water right permit authorizes the holder to construct a diversion project and use water, and after it is constructed the State Board inspects and determines the actual amount of water needed and issues a license for that amount. The license can only be for the amount of water that you can put to beneficial use.

Statement of Water Diversion and Use Program

CA law requires each person or entity that uses diverted surface water or pumped groundwater from a known subterranean stream to file:

- A Statement of Water Diversion and Use, or
- An application to appropriate water with State Board

Statement of Water Diversion and Use Program

- A Statement is filed if water is diverted and used under a claim of riparian entitlement to the natural stream flow; it is advantageous to document since it is a superior right
- A Statement should also be filed for water appropriated prior to 12/19/1914 and is not covered by a permit or license

Purpose of Statement Program

- To create a central repository for records of diversions and uses of water
- This repository differs from the records of appropriated water rights that are permitted and licensed
- Information from the Statements helps State Board protect the rights of existing and known diverters and help determine whether there is water available for appropriation by new applicants
- No fees required

California Law requires each person or agency using diverted surface water or pumped groundwater from a known subterranean stream to file a statement of water diversion and use.

If you have riparian rights, it is important to submit the statements of water diversion and use to the State Board, because you are protecting your rights. If the State Board does not know the number of people diverting water under riparian rights, they can't know for sure if the stream is fully appropriated, and they could be adding additional diverters. The statement should also be filed for pre-1914 rights.

The State Board recently switched from a paper system to a computer system, and the online computer system does not necessarily reflect the current paper records.

The purpose of the statement program is ultimately to know if there is any water available to add new applicants. There is no fee to file the statements.

Those who are registered also get notified when others make requests for appropriations.

When a Statement Should Not Be Filed

- The diversion is covered by a permit or license to appropriate water that is on file with State Board
- A notice is filed with State Board for the recordation of GW extractions and diversions in LA, Ventura, Riverside, and SB Counties
- The diversion is covered by a registration for small domestic or livestock stockpond uses
- The diversion is regulated by a Watermaster

The statement does not have to be filed if you are appropriating water through a permit or license, as you are already covered. In the counties of Ventura, Los Angeles, San Bernardino, and Riverside, there is a requirement that groundwater extractors and diverters send the statement to the State Board. If you have a groundwater management agency, that agency does that for the individual extractors.

If the diversion is for personal domestic use (below 4,500 gals/day) filing is not required.

Recordation of Groundwater Extractions and Diversions

- The Groundwater Recordation Program began in the 1950s and applies to only Los Angeles, Riverside, San Bernardino, and Ventura Counties
- Requires those persons with wells with aggregate extractions of more than 25 ac-ft (or 10 ac-ft or more from a single source) to file a report with the State or a delegated local agency (Ojai Basin GWA)
- Fee required

The recording of groundwater extractions is not required for extractions under certain amounts. There are fees for recording groundwater extractions.

Enforcement and Penalties

- A diversion without a water right is illegal and a person or entity can be fined up to \$500 per day of diversion and use
- Failure to file a Statement for each diversion that occurred after 1/1/2009 may be subject to civil liabilities that carry a maximum fine of \$1,000 plus \$500 for each day the violation continues after 30 days of the State Board notification of the violation

If a person does not have a right, it is illegal to take the water, and there are fines associated with this.

Sources of Information on Water Users

- Statement of Water Use and Diversion Program
- Division of Water Rights Permitting and Licensing
- Groundwater Recordation Program
- Small Domestic Use and Livestock Stockpond Use Registration

There are a number of sources of information on water users. Not all of the info is readily accessible or easy to interpret. Shirley found 87 records in the State Board's database for this slide's first three categories in the Ventura River Watershed. But her interest is in the Upper Ventura River groundwater basin area (reach four overlies this basin) so this may not represent all the records.

Shirley was not able to find the original information upon which the impairment on reach three was based, and she could not find any information that would support an impairment listing, so staff will be

suggesting that reach three be delisted. The basis of the listing for reach four was the 1996 *Steelhead Restoration and Management Plan* for California, which was written by the Department of Fish and Game. In that report, there is reference to Ventura River having issues with flow, and it specifically mentioned the area in reach four. The beneficial use that was considered impaired was broadly stated as "coldwater habitat." The river is also listed as impaired for fish barriers at Matilija Dam, but this is not being addressed as part of this process, as it was not part of the consent decree.

Local Actions That Can Be Taken to Address the Pumping/Diversion Impairment

- Participate in discussions to form a groundwater management agency and develop a groundwater management plan
- Be committed to water conservation during dry periods
- Make sure State Board knows about your riparian right through submitting a Statement of Use http://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/index.shtml

The EPA believes that a commitment to do a groundwater management plan must be part of an alternative program listing for the pumping/diversion impairment.

Another part of this alternative program would be that the Regional Board would investigate with State Board whether anyone is pulling out water inappropriately.

EPA is actually going to start working on a TMDL in case the 4b strategy doesn't work. Hopefully a locally-driven alternative approach can work instead.

EPA needs a legally binding agreement like an MOU

from the pumpers in this watershed saying they agree to pursue the alternative actions, such as developing a groundwater management plan. The work being done now in the watershed, to cooperatively go after a grant to study groundwater-surface water interactions, is a good start, but other agencies should be involved. The Regional Board would like to see all of those agencies, like NMFS, getting together to draft an MOU. The

For additional questions or comments

Stay in the loop or provide comments by giving your name and email address to

Shirley Birosik sbirosik@waterboards.ca.gov or call at 213-576-6679

Division of Water Rights will have responsibilities and may need a certain amount of time in order to investigate all the water rights issues, and whether the subterranean stream issue is valid. That may take a year or two. So that might need to go into the agreement. EPA feels that a draft MOU needs to be in place by October.

The group that is working on the LGAP (Local Groundwater Assistance Program) grant offered to serve as the local group to work on this issue. Anyone interested is invited to participate. The grant is due in one month, so that is the immediate focus. The group (city

of Ventura, Ventura River County Water District and Meiners Oaks Water District) already has an MOA as a result of the grant process. They have identified that there are 160 pumpers in that groundwater basin, and are planning outreach to them. Shirley wants to be kept apprised of activities so she can keep EPA informed. EPA wants to see that progress is happening.

Watershed Council Meeting

2. Announcements

Kathy Bremer, Friends of Ventura River: The Friends of the Ventura River, along with other community groups, businesses, and the Hillside Conservancy, held an event at the river last weekend to explain the concept of the Ventura River Parkway Vision Plan. It was well attended, and many questions were received. Rob Orth of Project Understanding was there to answer questions about the homeless issue. The Stream Team gave a demonstration of water quality monitoring. Tours were offered, including through some homeless camps. People learned a lot. It was a good community awareness event about the river and future events.

Melina Watts, Ventura Hillside Conservancy: The Hillside Conservancy is about to close escrow on the property that last weekend's Friends of the River event was held on. It is the Willoughby property, which is eight acres located behind Patagonia on the river, between the Main Street bridge down to the freeway. The property was donated by the landowner. The Hillside Music Festival has been set for September 22.

Bren School: At last month's meeting the Bren students provided a presentation on the project they are going to be doing on the river this year. They just finished their draft project proposal and are seeking feedback on that. The title of the study is "Sustainable Water Use in the Ventura River Watershed." One of the big goals is to build a water budget model for the watershed, and then run various scenarios on that budget, such as climate change, increased grey water use, and water reclamation.

Lynn Rodriguez, Project Manager, Watershed Coalitions of Ventura County: The Southern California Water Committee is putting on a workshop on June 28th on stormwater management and integrating with the needs of watershed planning. 9:00 am – 2:30 pm, in Los Angeles. \$100, \$50 for students.

Gerhardt Hubner, Watershed Protection District: The Watershed Protection District received last week, after many months of negotiations and work, their water rights permit for a diversion on San Antonio Creek for the San Antonio Spreading Grounds Project ("V2"). The project is now out for bid, and is on schedule to be completed this year.

3. Climate change and the IRWMP

The Department of Water Resources requires that climate change related criteria must be part of the project selection process in our IRWMP. Ann Hewitt has been retained to assist the three watersheds in our county/region with this part of our IRWMP update. Ann, owner of Anacapa Consultants, is an accredited greenhouse gas verifier under the State Air Resources Board, and has been working in the climate change field for 12 years.

Ann will work with us to do vulnerability analyses, identify specific actions that will help increase adaptability, and develop criteria for selecting priority projects in our IRWMP. Each watershed will develop its own approach to climate change and its own climate selection criteria, and this will all be integrated at the WCVC level.

There are two areas of focus in dealing with climate change: adaptation and mitigation. With adaptation we are asking ourselves, "how can we be hurt; how are we vulnerable?" With mitigation we are asking ourselves, "what is our role in climate change and how can we mitigate it?"

Since the Copenhagen Conference in 2010, it has been realized that we are not responding fast enough to reduce greenhouse gas emissions (mitigation), and so more focus has been placed on adaptation. Some island nations that have already been evacuated because of rising sea level.

How can we adapt to our vulnerabilities? Based upon data from the California Adaptation Strategy (www.cal-adapt.org), California is expected to have rising temperatures, more heat waves, hotter nighttime temperatures, and changes in precipitation (less on the coast). It will be drier, sea level will rise about 55 inches, and there will be extreme weather events.

Cal-Adapt has taken a lot of the global research and models and applied them at the local level. It is important to understand, however, that scientists are fairly confident about the global changes and long-term changes, but as the time frame shortens and the area looked at becomes more local, there is more uncertainty.

Ann presented data for our watershed from Cal-Adapt based upon a high emissions scenario (since at a global level we are not making any emissions reductions). The historical average temperature for the lower part of the Ventura River watershed was 60°F; this will go up to 66°F by 2080. This is a significant increase. In 1970 in the lower river the average nighttime temperature in April was 41°F, and in 2050 it will be 46°F. Precipitation is harder for scientists to predict with specificity. Soil moisture will go down, which makes us more vulnerable to fires and pests.

Chad Cook, Ventura County Fire Department: Soils in the Ventura River watershed are at critical levels right now. They cannot keep up with the fire danger. They base their planning now upon fuel temperature, not outside air temperature. Our fuel temperature is running roughly 15 to 20° hotter than the outside air temperature. There is no moisture in the soils. The late season rains we received this year did not help, because the sun came right behind them and dried everything out.

Melina Watts noted that in the Santa Monica Mountains, the fires have been so frequent that the ability of the vegetation to grow back is being seriously compromised. Chad echoed this, saying that the Simi fuel beds have burned so often in the last ten years that there is no regrowth other than grasslands.

The State DWR has a climate change vulnerability matrix, and the vulnerabilities listed include higher temperatures, earlier snow melt, more rain/less snow, more extreme flood events, longer more frequent droughts, decreased freeze events, and sea level rise.

The group did an exercise using an example project that might be in our IRWMP - removal of invasive species - to see how we might rank such a project based upon climate change. We looked at the project from two points of view: how climate change is responsible for invasive species, and how the removal of invasive species helps us adapt to climate change. Points mentioned:

- Increased threat of pests to native plants and agriculture (from fewer freeze events, greater adaptability of invasive plants to disturbance from fires and changing flooding regimes)
- We are going to see entire ecological systems migrating, so we need to get the exotics out of the way because they are occupying valuable migration space. Brian Stark, of the Ojai Valley Land Conservancy, now deliberately integrates genetic variety into his restoration projects. Yesterday's vegetation isn't necessarily going to be that competitive. Restoration protocols used to always look for really local genetics, but now he experiments with genetic diversity that might introduce advantageous genetics.
- Arundo is very flammable, so by removing it we reduce not only its water demand but also fire threat.
- The California DWR has said that the biggest risk to watersheds from climate change is fire.

Many concerns that were also raised that were not exactly on the "invasives" topic.

Chad: In the recent past, the fire department was averaging at least one fire a day in the Ventura River watershed, largely attributed to the homeless encampments in the Arundo. Many of the fires were small, but some up to five acres. He has noticed that Arundo seems to thrive after a fire.

Rivers are usually fire breaks, but in Santa Clara River, Arundo has actually has caused fire to spread.

The Nature Conservancy is leading a coastal resilience study on the Santa Clara Watershed. Information from that effort that may be helpful will be incorporated into the IRWMP.

Next: This issue will continue to be address in a subcommittee. The first meeting will be in the fall.

Lorraine Walter, Ventura River Watershed Coordinator: When Lynn and Ann held a climate change and water planning workshop some months back, the audience was asked to brainstorm what they were concerned about, and everything that was mentioned – which was comprehensive – was all related to adaptation. No one suggested reducing greenhouse gases. Everything mentioned related to getting ready for floods, and droughts, and other impacts. The group actually had to be prompted about reducing emissions. (The link to that workshop’s materials is at watershedscoalition.org.)

Lorraine: When we look at the projects we are going to put in our plan, and we rank them for climate change impacts, a lot of the things we might need to do to address our watershed issues actually *increase* emissions. For example, if we need to take people off of septic and put them on sewer to address water quality, then we would be pumping and treating more water and so using more energy. This demonstrates that ranking our projects in light of climate change is a complex challenge.

Chad: The Fire Department is conducting a fuel study right now in the County of Ventura. They do live fuel sampling every week, and they get data on all of their fuel beds. They measure live fuel moisture and dead fuel moisture. (This information is available on their website.) According to the National Weather Service, and what they are seeing with our weather pattern, they think we are treading toward warmer sea water right now. So think we are trending into an El Nino pattern, and moving out of the La Nina pattern. This affects wildfire.

Chad: The Fire Department does have a vegetation management/controlled burn plan. They have some grants in place for controlled burning. The problem with controlled burning is that considerable strategy and study has to go into how they do it. It reduces the threat but it has to be done correctly. A real hot fire could destroy the composition of the plant life. They now sometimes cut and stack brush for burning. They also sometimes just target dead fuels. Burns also affects runoff. They try to do burns systematically to protect the watershed. The window for controlled burns is very small, because of nesting bird season and other issues. It is usually in the fall/winter, when we are most susceptible to fires. Our fire season doesn’t get going until August/September and is in full swing in October/November.

Fire is also a greenhouse gas. The Fire Department is using different methods to address this. For example, they are using goats now for fuel reduction. Goats have a different set of impacts to the ecosystem though. They eat everything.

When our live fuel moistures drop below 100, a fire will actively back, which means it doesn’t have to be pushed by head-fire and wind and topography, it will back up a slope outside our threshold of control. And moisture is already below 100 in most of our fuel beds.

The Wheeler Fire was the last big fire in Ojai and that was in 1985. There have been a few smaller ones. The last big one in Ventura was the School Canyon Fire in 2005, which affected School Canyon and Canada Larga.

If there is a large fire in the watershed above Lake Casitas (Santa Ana Creek, Coyote Creek, Matilija Canyon) there will be a large water quality impact. Those areas have not burned since the Wheeler Fire and the fuel load right now is “unbelievable.”

4. Harmonizing IRWMP and WMP

Lynn and Lorraine discussed how the update to the countywide IRWMP and the Ventura River Watershed Management Plan (WMP) need to be synchronized. The IRWMP, which qualifies our region for bond funding, must adhere to state guidelines and deadlines. The IRWMP was originally adopted in 2006, and it is time for that plan to be updated, and the schedule for that update is fairly ambitious. At the same time the Watershed Council is launching the development of a watershed management plan. We want to synchronize these efforts as much as possible. The plans have different levels of detail: the IRWMP takes more of a large-scale look and the WMP takes more of a fine-scale look. So this presents some challenges.

Lynn has outlined a schedule of the sections of the IRWMP that need to be updated first, and among them is the objectives section. A new requirement is that the objectives must be measurable.

Our first IRWMP definitely tended to focus on bigger infrastructure projects and water supply projects. We've done wonderful things in this county with the \$25 million we received in Prop 50 (e.g., taking septic systems offline and replacing them with sewer in El Rio, upgrading water treatment plants, adding in some wetland areas, working on a brine line for salinity management). Then with Prop 84 funding the projects types have expanded to include more creative projects (e.g., the Santa Clara River Natural Floodplain Management project, which integrates flood management, protection of agricultural land, and species protection).

Major changes required in the update:

- New plan performance and monitoring requirement.
- Project selection process needs to be more rigorous.
- New requirement for more robust data management.
- New climate change requirement.

This time around the plan will have stand-alone sections for each watershed.

Lorraine proposed that in the next few months we hold a 3 to 4 hour subcommittee meeting for each of our goals to work in more detail on the objectives, and how to measure them, and to make sure she has all the available background information.

This idea was supported by Greg Gamble, Ojai Valley Land Conservancy, and Bill O'Brien, NextGen Engineering. Lorraine will schedule those meetings.

5. Prop 84 – the next round of funding

By December of this year, the WCVC needs to bless a list of projects for this region for the next round of Prop 84 funding. There is \$31 million in this round for our region. This is less than last time, and there is more competition.

The grant process is not easy or cheap. It was suggested that to be worth the effort, the project cost should be at least one million dollars.

Greg suggested that this group should have another discussion about how the grants come to be, the writing, administration, how we as a group decide to engage a consultant and pay them, etc. It is important that this information be very clear to applicants up front. It cost close to \$250,000 to write the application last time. (LA County paid \$1 million for their consultant, for five sub-regions.) The economic analysis that is required in the application is particularly burdensome. DWR may be modifying these requirements based upon input from the regions on the last grant cycle. You also have to be able to float the funding because the state does not reimburse quickly. Prop 50 projects saw a one year delay in reimbursement.

The outer limit of funding the watershed (or region?) might reasonably expect may be in the range of \$5 – 10 millions. Lynn recommends this watershed propose one strong, integrated, multiple-entity project.

6. Ojai Valley Land Conservancy's Ventura River Steelhead Preserve

Greg: The OVLC acquired a property that includes roughly a mile of the Ventura River. It is called the Ventura River Steelhead Preserve. It has some buildings on it which they are in the process of converting to an environmental and education center that will serve students, research, the Watershed Council, and will offer meeting space. They are going through the change of use process with the County to open the facility up to the public. OVLC just received a grant from the Coastal Conservancy to help with the facility design process. Greg invited people to contact him (greg@ovlc.org) if they have ideas about how the facility might be used or designed. He also plans to eventually hold a meeting on that topic to get input.

7. Hillside Conservancy update

Lee Sherman, Ventura Hillside Conservancy (VHC): The parcel of land in the river that the HC is about to acquire includes most of the channel of the river. It is a bit of an environmental and humanitarian disaster. The land that they are about to acquire is populated. It has tenants. Their vision is to open the property up to the public as a preserve in a future. They are going to start removing Arundo right away to make it less attractive for camping. They are working with Project Understanding to try to connect those who want help to get the help. There are a certain number of that population that don't want help, and they will have to figure out how to deal with that. They are also partnering with the city of Ventura. He attended a meeting yesterday of the Social Services Task Force, which is working on a timeline for ending homelessness in the river. This is a big project, with a lot of partners. Their goal is by the time they get the California Lutheran University students do their annual clean-up in the river in September, it will have been cleared out.

All of this ties back to the Ventura River Parkway Plan. There will be a more formal roll-out of that plan on July 18 at the County.

Next Watershed Council meeting:

July 10, 2012, 2:00 – 5:00 p.m.

Ventura City Hall, Community Meeting Room, 501 Poli Street, Ventura

Acronyms

CEDEN..... California Environmental Data Exchange Network
CEQA California Environmental Quality Act
CWQMC.. California Water Quality Monitoring Council
DWR..... Department of Water Resources
EPA United States Environmental Protection Agency
IRWMP.... Integrated Regional Watershed Management Program
MOA Memorandum of Agreement
MOU Memorandum of Understanding
MOWD.... Meiners Oaks Water District
NMFS National Marine Fisheries Service
NNE..... California Numeric Nutrient Endpoint
OFG..... Ocean Friendly Gardens
OVLC..... Ojai Valley Land Conservancy
OVSD..... Ojai Valley Sanitary District
RCD..... Resource Conservation District

RO..... Reverse Osmosis
RWQCB... Regional Water Quality Control Board
SCCWRP.. Southern California Coastal Water Research Project
SMC Stormwater Monitoring Coalition
SWAMP... Surface Water Ambient Monitoring Program
SWRCB.... State Water Resources Control Board
TMDL Total Maximum Daily Load
USFS..... United States Fish and Wildlife Service
USGS..... United States Geological Survey
V1 Ventura River Watershed Protection Project Grant
VCAILG.... Ventura County Agricultural Irrigated Lands Group
VHC..... Ventura Hillside Conservancy
VRCWD ... Ventura River County Water District
VRWC..... Ventura River Watershed Council
WPD..... Watershed Protection District
WCVC..... Watersheds Coalition of Ventura County