Regulatory Framework Working Group

Charge from Groundwater Management Area Advisory Committee

[Insert Charge]

Working Group Members

Jean Mendoza, Chair (Friends of Toppenish Creek), Andres Cervantes (Department of Health), Charlie McKinney (Department of Ecology), Chelsea Durfey (Turner and Co.), Dan DeGroot (Yakima Dairy Federation), David Newhouse (interested party), Ginny Prest (WSDA), Jason Sheehan (Yakima Dairy Federation), Jim Dyjak (Concerned Citizen of Yakama Reservation), Larry Fendell (interested party), Laurie Crowe (South Yakima Conservation District), Nick Peak (EPA), Patricia Newhouse (Lower Valley Community Representative), Steve George (Yakima County Farm Bureau), Stuart Crane (Yakama Nation), Sue Wedam (Lower Valley Community Representative), Vern Redifer (Yakima County Public Services), Jim Davenport (Yakima County Public Services)

Meetings/Calls Dates

Meeting: March 9, 2016, 5:00-7:30 PM

Call Number: 360 407-3780 PIN Code: 306589#

Participants

Present: Jean Mendoza (Chair), Jim Davenport, Sanjay Barik, Larry Fendell, Ginny Prest, Andre Cervantes, Dan DeGroot, Stuart Crane, Jason Sheehan, Sue Wedam, Steve George, and Bobbie Brady (Yakima County Public Services Support Staff) Guest Presenters: Ron Cowin, SVID, and Phil Rigdon, Yakama Nation. No one was present by phone

*via phone

Key Discussion Points

Chair, Jean Mendoza, opened the meeting at 5:00 PM. She introduced both speakers as noted above and then asked everyone present to introduce themselves.

Presentation by Ron Cowin SVID – Rules & Regulations that Apply to Irrigation Districts
Ron indicated that he has worked for the District for 13 years and that RID (Roza) and SVID have a joint board wherein they share water quality programs, drains and costs. There are 16 water rights within the District – 69 percent are senior water rights and 31 percent junior. They have 400 miles of laterals and/or canals. A lot of it is open ditch but they are in the process of converting to pipe. A member asked if any assistance is provided to landowners to convert to pipe. Ron stated that if a landowner would provide materials SVID would handle the installation.

SVID is also in the process of converting to flow meters as they give a better reading of water usage and the landowner can decide and control when they want water or not. Flow meters provide the landowner with a far more accurate reading of usage. The old system is difficult to manage and the landowner must call in by midnight the night before (on weekdays only) to indicate a change in water needs. Approximately 18,000 acres or 20 percent of the District have been converted to flow meters. Roza started their conversion earlier - approximately 75 percent of their District has been changed over to flow meters.

A member asked if water quality was monitored. Ron said that multiple water samples of anything coming into the drains are pulled and tested for turbidity. If there is a problem landowners are told and are required to fix it. One requirement to fix the problem may be a sedimentation pond. SVID will restrict irrigation water to the landowner if it's not fixed in a timely manner.

Crop surveys are done approximately every five years. From the survey in 2003 it was determined that 44% of the landowners use rill irrigation; 2% drip and 54% sprinkler. In the 2014 survey 21% of the landowners are using rill irrigation; 9% drip and 70% sprinklers. Ron was encouraged that landowners are moving in the right direction and stated that if landowners they have drip or pivots they have more control and will use less water which drives less nitrates.

A member asked if there was financial assistance from the Districts to the landowners to convert to this type of irrigation. Ron responded and said initially yes there was through loan programs, but not currently. He also noted the conversion can be quite expensive. Ron did add that there were no pivots over open ditches.

SVID does keep some flow estimations on the four major drainage ditches as those flow into the Yakima. These major drainage ditches are tested as well.

There is some testing for E-coli done in the main canal particularly around harvest time in order to meet food safety regulatory criteria.

Sanjay Barik added that studies were done by USGS and the Southern Yakima Conservation District that might be useful to the group as well.

Jim Davenport asked if the District had regulatory framework to work on water quality issues – he added that the group was aware already of the statutes on water quantity. Ron responded and said that he isn't aware of any regulatory framework with regard to water quality, but that the Board does have the authority to create a standard like they did when dealing with the turbidity issues. No law was generated with regard to turbidity because the District took a proactive stance and was in compliance long before the deadline became due. The Board was able to institute policies and the landowners were required to come into compliance with the policies or their water would be restricted.

A member asked if the District has the ability to pass a regulation requiring the landowners to clean up their water. Jim Davenport clarified and said a board does not have regulatory authority. It can only create policies and then require its members to comply with them. Ron added that

when they created a policy with regard to turbidity they recommended several best management procedures (BMP's) that the landowners could choose from and set a statistical level of expectation that each land owner needed to meet. If the level was not met they were flagged.

A member asked if Ron felt they met the timeline because landowners had been educated or because of they were threatened with a reduction of water. Ron indicated that he felt most landowners didn't really know they had a problem and change came about because of education and leadership. Another member commented that the District had a broader presence in getting the message out to the landowners because of the Ditch Riders – these people were already in the landscape and they could be consistent with follow-up. Ron added that the Districts received State funds through the Department of Ecology for low interest farm loans to convert away from rill irrigation by installing drip or sprinkler systems. Landowners with return water that was not in compliance received a letter and had to have a plan for short term compliance and needed to produce a long-term plan as well.

A member asked if the water was tested at the head gate. Ron said again they test for temperature, turbidity and bacteria as outlined previously. When asked if this was increasing or decreasing Ron said that it varies as it comes through the system. Another member wanted to know if they was testing for nutrients – Ron thought maybe some.

Another member asked if Ron could estimate the cost for SVID to test "ins" and "outs" for nitrates on all the major drains so that if the group decided to pursue this they would know what it would cost. A member commented that testing is only a piece of the picture – the group would still not know where the water came from. They also indicated that if the group would fund this they would need to have a good idea what's coming into the system, a good idea of irrigating, a good idea of drain out and a good idea of evaporation rate.

Ron added that he doesn't know how much water leaches back into the ground from the drains if any. It mostly flows into the drains and is then carried to the river. He felt that the canals do lose water through seepage which is why Roza has lined some of their canals.

A member asked if the District ever adds anything to the water. Ron indicated that the only additive was herbacides and that they have a NPDS permit for this.

The group then talked through a number of different questions: how would nitrates in drains relate to ground water? And, if nitrates are found in water in drains does that assume it goes to groundwater? In winter when the groundwater level is going down do concentrates go up? Some responses were that the groundwater would travel the path of least resistance to the drains. Another member felt that most of the nitrates in drain water are ground water. It was also noted that properly managed sprinkler systems don't drive nutrients much past the root system.

Presentation by Phil Rigdon, Yakama Nation – Laws and Policies from a Yakama Nation Perspective

Phil Rigdon from the Yakama Nation thanked the group for its invitation. Phil informed the group that Chair Jean Mendoza, had provided him with a list of questions. He stated that while

he was willing to talk about the issues Jean raised, he was cautious and reminded the group that these were tribal issues. Phil reminded the group that the tribe is not subject to State or County regulation but instead is accountable to the Bureau of Indian Affairs and the Department of Ecology as it pertained to issues of water and air quality – they deal with more federal agencies than people realize. Phil began by providing a bit of history as it pertained to the rights of tribal nations – various Supreme Court decisions, court cases, and treaties that had been reached.

Phil indicated that the tribe's greatest concerns were first, the needs of its people and second, the water and salmon in the river as their people depended on these resources for their survival. The tribe realized some time ago that there wouldn't be salmon in the basin if they didn't do something and so they began several programs. One was to create fish hatcheries in order to increase the fish population. The other was to consider how they could recharge the aquifer during the winter months and thus better regulate the temperature of the water in the summer giving the fish a better chance of survival. As a result they have been allowing specific areas of tribal lands (i.e., White Swan aquifer by cutting water from Toppenish Creek) to "fan flood" in the winter (so the water flows to infiltrate the land) by taking some of the dikes out. They also began planting trees to slow down the travel of the water thereby allowing for an increase in the level of the groundwater. This has made the water ways more "fish friendly." Phil felt as well that this ground water recharge may also have helped to improve the water quality. In addition, the tribe is hoping that deep groundwater springs and wells will be restored - they have found some evidence of this already and there are shorter periods of "low points" at Toppenish Creek.

Phil also expressed a concern about global warming and expressed a hope that what happened last year was a "1 in 50 year" event but was concerned it will be more the norm. The Yakama Nation is already working on a climate change strategy plan with a grant through the federal government. All programs are involved in it including water and fish. Phil believes that the tribe is way ahead of everyone else on climate change. Phil also advised the group that the tribe put a moratorium on CAFO's on the reservation in 2008. They are looking at strengthening this moratorium to provide better definition. He noted too that they had a concern about fertilizer and that they are paying attention when the GWMA talks about what it puts in the drains because they are concerned too. These issues can be a life-changing thing for a member of the tribe as they can't just get up and move – the land they reside on has been passed down family to family. The tribe had received only $100,000 to deal with groundwater issues on the reservation – they are stretched and don't have the resources to do it all. A member asked if the tribe was doing any water sampling – Phil indicated that this was a requirement of the funding they had received so they will need to report their findings but at present they are not testing for water quality – just monitoring the water level. Phil noted he would be interested too as the GWMA obtains information on atmospheric deposition. When asked about the tribe's involvement in the GWMA Phil indicated he felt they were involved as both Stuart Crane and Elizabeth Sanchey were part of several committees.

Jim Davenport asked Phil if the tribe had any regulations pertaining to manure applications. He said they did not. Another member then asked Jim why he only targeted complaints about manure applications. Phil responded and said that they would much prefer the use of what he termed "biosolids" meaning organic type fertilizers (not municipal sludge) such as manure and compost over synthetic fertilizers.

Phil discussed the likelihood of the Nation initiating groundwater adjudication. He said the Nation is hesitant to do so, preferring to work together to address the impact of groundwater withdrawals on the Nation's more senior surface water rights, but reserves the option to do so.

Matrix and Spreadsheet for Analysis of Regulations/Regulatory Work Group Plan for 2016
Ginny Prest has invited Grant Barnes of the WSDA speaking at next month's regulatory meeting on fertilization and chemigation.

Chair Jean Mendoza asked the group to write down three questions before they left that they felt the Regulatory Working group needs to address as they moved forward. The papers were turned into Jean who would compile a list and forward it on to the working group at a later date.

The meeting was adjourned at 7:10 PM

Resources Requested

Recommendations for GWAC

Deliverables/Products Status

Proposed Next Steps