

Email from Randy Ray <r-ray@ccwcd.org> on January 27, 2015

I talked with Joe Frank via phone about this, we are in agreement that a dewatering project coupled with data gathering to measure the aquifer response from the pumping or "stimulation" is something we support - and without going to far off the edge, I feel the groundwater tech would accept. I also want to be clear again that coordination with the tech committee and the Roundtable is essential.

For dewatering:

I would like to pursue the swsp route with two delivery points. One being existing area drains, the other utilizing area canals. For delivery via drains, they need to have connectivity to the south Platte river. State law provides the ability, however some care or maintenance may be required for the dewatering operation to work smoothly. No carriage fees required as far as I would know. To discharge to nearby canals, I would like legislative power to grant dewatering by either 1) carriage from the well to the south Platte via the ditch by measuring groundwater inflow and measuring discharge to the Platte a volume equal to the inflow minus ditch seepage or 2) a reduction of river headgate diversions that equals the amount of groundwater pumped into the canal. All dewatering carriage options (drains and/or irrigation canals) would work at either Gilcrest or Sterling.

Joe and I both wish to leave the details to an swsp that's worked out by water users then submitted to the state engineer. Just describe the general practice.

Timing of dewatering would be left to the swsp applicant as each pilot project would have different times of the year when the dewatering process would be the most beneficial.

For costs:

Dewatering at Gilcrest: \$150,000 for operations of the well and canal carriage. \$50,000 for well pumping costs to deliver to the Big Bend drain.

\$125,000 should be allocated for canal and drain improvements to deliver the water to the south Platte.

\$80,000 allocated for getting the identified wells operational. Without a quote for a contractor to oversee operations I would recommend \$50,000. This would be for labor and temporary pipe to deliver groundwater to the drain/canal. The applicant would need funding for submitting the swsp, amount estimated to be \$10,000.

Lastly, \$200,000 would need to be secured for groundwater modeling to observe the reaction to the pumping.

All of these costs would be on an annual basis.

Joe and I think this would be a two year process, however swsp's are generally year to year approvals.

I still feel that Sonnenburg's bill would be the appropriate framework. Joe I think agrees. Joe and Jim Yahn I understand may see senator Sonnenburg tomorrow and will discuss with him.

Please let me know if I've left anything out, or if you have questions.