

Sylvan Lakes Metropolitan District Regular Meeting 9/29/2018 2:00 PM
Lake County Public Library - Baby Doe Room
Board Members Present:

Ginny Peros
Greg Conway
Irv Tracy
Phil Huvall

Attendees:
Steve Monson
Ryan Farr
Tom Dea
Nathan Baker
Saran Twombly
Tom Hobbs
Dave Maurer
Marjorie Oyler

Meeting called to order at 2:10

Agenda – Phil acting president – as per procedure the Vice President takes on the responsibility of running meetings when the President is not present. Irv to begin presentation with his questions (see attached)

Main point is the new Output monitoring regulations being worked on by the state. How are we to move forward.

Grandote was discussed.

Should we change our water designation from fish propagation?

Greg: basic level: we have to get water, and we have to actually use it. Priority – we had none this year. Depends on the amount of snow and precipitation.

Phil explained our plan to use a low water year to do repairs to the system while the lakes are dry.

Steve:

Get a handle on exactly what are our depletions. There is a supply and demand.

Demand side: evaporation from the engineers. Are some of the lakes or portions of the lakes natural. That would save us water. Which means saving money. On fills and evaporation. We need surveys – bathymetric, perimeter, etc. - to do that. Facts. The engineers are able to do that. Water levels and what volume do each lake hold. Cash flow issues are a big problem for a small district. We have 30K a year to work with. This brings up budgeting issues – Tabor, etc. in 2019. The survey was estimated at 12K 4 years ago and will have to be upped. They will also have to do a perimeter survey – so about 20K.

Supply side. How many water rights do we need to fill the demand side? 15 if we keep the lakes full, 100% man made.

We will probably have to have a loan from CWCB (Colorado Water Conservation Board). Rates are in the 3's. or Colorado Water and Power authority Roy Heald President of that board. They are also Monson clients. Their collateral would be our ability to tax. No obligation bond. That would mean a vote on Tabor to work on that. Rates were 2.8 on loans.

Legal fees are hard to estimate as you really don't know who will be involved. We will most likely have major objectors: Aurora, Colorado Springs, Pueblo, CWCB.... Most likely the bottom line is about 50K on legal fees – minimum. A trial would almost double that. A professional bathymetric survey and charts done in a format for Water Courts usage to help minimize the possibility of a trial.

After surveys we might be able to lower our water requirements. Natural lake designation would help. Could we use one of the lakes as a Sacrificial lamb – so to speak – to use it to do measurements, take seepage, return flow credits, credits if there is a natural spring.... Greg referenced the staff gage study done in 2015 to depict the variation in lake seepage/exit rates. Chart below.

Big issue/hurdle – the CWCP as an objector – minimum flow requirement is 5 cfs at the area below the North Fork of the West Tennessee Creek, where the H2 and H1 head gates are located.

We have 3 more years for our SWSP. But we need to “front end load” the augmentation plan with facts. We have to go in prepared to answer objectors and make it acceptable in Court.

Where did the water come from that we started with. The State has not asked that question as yet. We need a master spread sheet of how much of the lakes are natural at what times of year are the supply and demand etc.... Very complicated but we need those facts to proceed.

Weather Station information would be crucial. Lance Hooper has a weather station. Determine the seepage rate by not filling a few of the ponds and test how the seepage has continued in the dry ponds with a transducer – a part of TZA's proposal. Official measurements. We need precipitation for sure. There is a program Prism that makes continuance map of weather - 1 Hectar resolution.

Are there other entities that have done the same thing we are trying to do/ Aug plans are pretty common but the seepage issues are very specific to each case. Steve asked the engineers what would they need to do to feel comfortable to make a reasonable estimate of the seepage rate. They want to put in a few transducers in several ponds. A transducer measures water pressure and related analysis covert

that data into 'Lake Level or height. The transducer would be put in to a full pond and then the input and output would be blocked and measure the levels as the water goes down. We should not have to do this to all the lakes.

They would need an area capacity report. There is also ditch loss – not just from the lakes – more specific to Hartner Ditch Number 2.

If we are required to put in Sutron units on the Parshall Flumes for more official measuring we could apply for grants or “scholarships” to pay for them. They are around \$1,500.00.

Monson: proving seepage, recharge facility, subsurface return flows are hard to prove. It is not necessarily easy to prove that the return flows do go right back into the river. Timing is important. Tom Dea hopes that we have been doing this long enough that we are in a “steady state”.

It is Greg's opinion based on observation that ground saturation may affect seepage, as when we started filling the lakes legally. They had been dry for several years. This further reinforces the need to keep our system going and not have intermittent stoppages of water flow.

Exchange potential – if minimum flow rates are not reached we have to shut down the head gates.

How are the stream flows determined? Measure the speed of an object as it flows down the stream. You can calculate with 30 or 40 readings. We need to know the history of this flow. Nathan can do this by taking a similar basin and modify slightly for our basins records. Greg did this exact process at the Mark Oliver culvert near the H2 head gate in creating calibration chart to convert the newly installed Staff gage at the H2 concrete spillway and developing corresponding conversion charts for height v. CFS for the West Tennessee Creek.

Irv gave our thanks to all the professionals – The meeting was adjourned at 3:30.

Next meeting:

December 1, 2018 3:00 Amax Room, Lake County Public Library