



REGULAR MEETING OF THE WHITE BEAR LAKE CONSERVATION DISTRICT
7:00 P.M. WHITE BEAR CITY HALL
MINUTES of September 21, 2010

APPROVAL DATE: 10/19/10

1. CALL TO ORDER The September meeting of the White Bear Lake Conservation District was convened by Chair Mike Stawnychy at 7:00pm

2. ROLL CALL Present were: Chair Mike Stawnychy, Vice Chair Luke Michaud, Directors Diane Longville, John Steinworth, George St. Germain, Sue Cernohous, Joe Allaben, Yale Norwick. A quorum was present. Absent was Mike Parenteau (excused). Recording secretary was Julie Yoho.

3. AGENDA

MOTION # 1 (Stawnychy/ Cernohous) Move to approve agenda. All aye, passed

4. APPROVAL OF MINUTES

MOTION # 2 (Michaud/St Germain) Move to approve minutes of August 2010. All aye, passed.

5. PUBLIC COMMENT TIME

Paul Bolstad, Lake Quality Committee member

Would like to provide background info for meeting tonight, some general info on pumping, level of aquifer. The study done in the past had limited information, info just wasn't there. Aquifer and lake level are closely tied. New monitoring wells are going in now to collect data to measure aquifer. Aquifer is a regional resource. (slide show)

Jerry Mahoney, WB Township

Will there be Q & A time?

Stawnychy - yes

6. NEW BUSINESS

SEH presentation of Phase 1 WBL Water Level Augmentation Study Phase 1

Mike Crary, president WBLHOA

Purpose of study was to review the 1998 study, assemble well data within a 5 mile radius, identify high capacity wells in WBL area, and prepare preliminary estimate for a groundwater augmentation well.

(Handout, bound copy for board)

1930's were the maximum pumping years. Would the lake have varied in the past if pumping had continued? Such as through the low period in '80s? What evidence links Jordan aquifer to WBL? There are some contradictions in study from 98. Do new wells and growth have direct correlation to WBL levels? How much rain above average is needed? Many questions, would like to do more study.

SEH Presentation - Doug Klamerus, PE

1998 study summary provided a history of hydrologic cycle, data gathering devices, modeling techniques. Conclusions: augmentation increases lake levels temporarily. Strong correlation between groundwater and lake level. Increase pumping of high capacity wells is resulting in lower groundwater levels.

There are 85 groundwater wells within 5 miles of WBL. Primary uses are for municipal water wells (drinking), golf course irrigation, athletic field irrigation, crop irrigation, commercial building a/c. Most draw from the Jordan aquifer. Largest use is municipal water / drinking accounting for 87% of all water used.

What would an augmentation well look like? Estimate cost at \$550,000 per well. Water level goal would need to be defined then pumping rate would need to be determined.

Options for consideration:

- Do nothing.

- Augment with groundwater.

- Surface water augmentation. (pump water from another surface water source)

- Watershed modifications (ditches diverted, enlarge watershed)

Q&A

Norwick – groundwater drift. Could water be moving in a certain direction through WBL and out, any chance to slow down?

Klamerus – That was looked at in the '90s, could be studied further. Did not look at for this study.

Michaud – With the correlation between aquifer and lake levels, the aquifers are running normal, why isn't lake? How is the aquifer measured?

Klamerus - static head in well, meter.

Stawnychy – how is groundwater flow determined? What is the historical flow?

Klamerus – Would require further study. Flow would typically determine via well levels. Changes seasonally.

St Germain – There are a lot of shallow wells in area. Everyone seems to be able to get water, if levels are down, why is there still water there? Most residents of Dellwood have individual wells, why wouldn't some be drying up?

Klamerus – did not look at shallow wells, only permitted ones. Complex system.

St Germain – the middle of the lake is deeper than wells, would think the shallow wells would have some problems.

Klamerus – Those wells can have recharge areas close to them.

Audience Q & A

Tom Sterling – Question over the amount of lag time when aquifer comes up & lake comes up.

Klamerus – yes, there is lag time. Depending on connectivity, which is not understood real well in this area, it could be a long period of time - years.

Sterling – surprised at amount of concern. Why is this a problem? Why so concerned?

Crary – Homeowners cant put docks out, level is down 5', house values down, impact taxes, lake is a recreational and economic asset. Public launches and beaches closed.

Jack Morgan. Lived here for 50 years. Why not run water from St Croix?

Klamerus – Different elevation of water level to consider. WBL is 919', St Croix river is at 675'. 250+ feet elevation change to pump. Could look at Mississippi.

Crary – zebra mussle containment big problem with either one

Mike Downing, WB Township

Thanks for the meeting and study. After the DNR discussion a few weeks ago I talked with them about augmentation. DNR will fight any change from legislation. No one has asked for exemption to the law. Will need legislative support from state to change.

Crary – We're not advocating augmentation at this point. Just looking at options. Would take amendment to allow.

Chad ___ - DNR was going to do modeling, has it happened? Well index?

Klamerus – yes, used when new wells are put in for communities.

Chuck Mears – what would improvement be if ditches were reconnected? What are levels of Carnelian and Square lakes? If golf courses can take that amount, maybe we can draw during winter.

Crary – all part of further study.

Dan Read - Question over augmentation in Snail Lake, pumping from Sucker Creek, how were they able to do?

Klamerus – Snail lake is surface water augmentation. DNR would oppose groundwater augmentation. Screening devices were instilled for mussels.

McGoldrick – info becomes overwhelming. Is there a point where there is consensus over the level, would it be prudent to have plan in place?

Crary – further study could determine lake level needed, is it 922?

Dale McCain – Curious on what difference the wells made in pumping years.

Stawnychy – DNR said around 16 inches.

Dan – Turtle lake pumping kept it within 2 feet of high and low.

Paul Bolstad – groundwater and evaporation loss? 2 big fluxes, what new analysis can you bring?

Crary – doesn't matter why its low, lake needs water to be a resource

Bolstad – The point is how do you determine what is the best choice if you can't make a connection. Why spend \$ with unknowns? If connection to aquifer exists, you could do more harm than good. Have to know connections. Met Council has the best hydrologists working on this. How do we constrain that variable?

Crary – Paul is talking about a regional system. We're talking about 2 wells in the Jordan aquifer. Could be 0 net loss.

Jim ___ - Has anyone looked at the old wells? What about water from Goose Lake?

Klamerus - No, old wells are sealed. Moving water from Goose would result in ¼ inch gain. Goose water includes all runoff from Kmart area. Kohler runoff goes into Vadnais.

Sue Wolsfeld – if \$550k for one well, where does money come from? Taxes? Individuals? Contributions?

Stawnychy – no one knows, just idea at this point

Jerry Mahoney - Who monitors wells?

Klamerus – Dept of Health

Mahoney – questions about sewer project - who monitors de watering?

Klamerus – there is a pump that lowers water table temporarily to do construction projects Permit are through the Dept of Health, DNR, PCA. WE have record of well for 35E construction.

Stawnychy – pumped a lot for that sewer project, could it have impacted lake?

Klamerus – everything adds up

Steinworth – is it possible water is still flowing outside where project took place?

Is there a way to check?

Klamerus – Met Council typically requires check dams to be installed

Mahoney – stations along way will seal if leak is detected

Crary – still going to look at that

Jim Hoffman – couldn't you use dyes to follow water?

Klamerus – yes, dyes are used. But in sand/gravel aquifer its slow process, also sand cleans it.

Crary – SEH presented 4 options. A Phase 2 study would explore options. HOA recommends everything except do nothing. Will Board accept grant for tax deductible further study?

Stawnychy – straighten ideas and come back next month with proposal. Board will decide about money.

7. UNFINISHED BUSINESS

none

8. Reports/Action Items

8a. Lake Quality Committee

8a1. Lake temp 60 degrees. Lake level 919.61

8a2. 2010 EWM treatment sites are on website now (map). Committee is tracking results to prepare for 2011. McComas study results will be in next month

8b. Lake Utilization Committee

no report

8c. Lake Education Committee

Stawnychy – would like to thank Mr. Danks for all his hard work, he will be missed. Debra Harrod has been appointed to replace Danks by the City of Birchwood.

MOTION # 3 (Stawnychy/Steinworth) Move to appoint Joe Allaben chair to the LEC committee. All Aye, passed.

8d. Treasurers report

8d1. Treasurers report

MOTION #4 (Longville/ St. Germain) Move to accept checks 3999 - 4002 All aye, passed

8e. Board Counsel Report

none

8f. Administrative Staff Report

MOTION # 5 (Michaud/St.Germain) Move to allow City of Birchwood to submit their dock applications late, pass the due date. All aye, passed.

Items included in packet this month:

- Agenda
- August draft minutes
- Finance report
- Letter from City of WBL
- WB Press Letter to the Editor

9. CONSENT AGENDA

MOTION # 6 (Michaud/Cernohous) Move to approve consent agenda. All aye, passed.

10. ANNOUNCEMENTS

Stawnychy – We have received a letter from City of WBL regarding payment structure and indicating what they are going to pay for 2010. We had same issue in '09. City legally has right to not pay bill due to legal matter. Need to have legislation to give us legal rights to charge for slips. They can't pay for what they did not receive. We need legal language in our laws so that when application is filled out they pay for what is applied for. If more questions direct to Kantrud.

Norwick – What about other people?

Stawnychy – law only applies to government entities

Norwick – does that make it right?

Stawnychy – unknown

Norwick – should apply same rule to all

Stawnychy – Trying to get language fixed, will be similar to LMCD. Then we'll be able to charge them for amount of slips on paper.

11. ADJOURNMENT

MOTION # 7 (Michaud/St Germain) Move to adjourn. All aye, passed.

Meeting adjourned at 9:11pm

ATTEST:

Administrative Secretary

Date

APPROVED:

Board Chairperson

Date