



**MINUTES
DEVILS LAKE WATER IMPROVEMENT DISTRICT
REGULAR MEETING**

**COUNCIL CHAMBERS, CITY HALL, 3rd Floor
December 13, 2012
6:00 P.M.**

PRESENT: David Skirvin
Noel Walker
Kip Ward
Randy Weldon
Brian Green

ABSENT: None

AUDIENCE: Don Sell, Miles Schlesinger and Pat Dooling

STAFF: Lake Manager Paul Robertson and Seth Lenaerts, Project Manager

MEDIA: None

Skirvin called the regular DLWID Board of Directors meeting to order at 6:00 P.M.

Consent Agenda

Green moved to approve the October Minutes from the Regular Board Meeting and the Goal Setting Meeting, along with the Financial Reports from October and November and Weldon seconded the motion. Vote Unanimous. Motion carried.

Public Comments

Mitchell Moore. Moore's comments are attached at the end of this report.

Miles Schlesinger, Lives on NE Lake Drive. He said for five months he has been working on this event for a shoulder season slow weekend—a jet ski race that Northwest Jet Sports, an affiliate of the National Jet Ski Association, has agreed to coordinate. Last Thursday, Chinook Winds agreed to sponsor the insurance for the event at a cost of about \$1,800, with two conditions. They want a letter of support from the Devils Lake Water Improvement

District Board and Manager, and they want an application to go to the City this week or Monday for funds to support the event from the Visitor and Convention Bureau. Hopefully, this would become an annual event to start off the season for jet ski racing in the Northwest, finishing in Pacific City's tournament. The project manager for the jet ski association is Roger Harnack, editor of the weekly newspaper in Omak, Washington, who is now completing the application. Schlesinger believes that the Lincoln City Chamber of Commerce will promote the event, although Schlesinger has not yet solicited their support. When the application is turned in, he will approach the Chamber of Commerce. Schlesinger believes the best place to hold the event is at Regatta Grounds and to make it a two-day event. It should generate lots of excitement—perhaps the weekend or two prior to Memorial Day—the 15th to the 19th. It is a shoulder season weekend and is generally pretty good weather. Schlesinger said the VCB has matching funds and could possibly contribute \$4,500 with ambulances on stand-by and prizes and trophies, etc. Participants would also have to pay for insurance and other expenses. This event would give us an opportunity to showcase the lake and talk about the environment. He would like to get the letter of support to the city within the next day or two to get this wrapped up. Schlesinger said he will volunteer to help coordinate the event. He would like to get some sweat shirt vendors and others involved. Weldon asked if the lake would have to be closed off. Schlesinger said just in front of Regatta Grounds while the races are taking place on Saturday and Sunday and possibly Friday while they set up the buoys. He said he would work with Robertson and Lenaerts to see what can be done to make this happen.

Unfinished Business

The Devils Lake Plan

Septic Tank Revitalization Program

Lenaerts said he attended a meeting with City Manager David Hawker, Ono Husing, Wayne Belmont and Tony Schearer regarding the septic program. It seems the City and the County are working through the process of the role of each. The City will contract with a company to perform inspections and the inspection form will have trigger mechanisms that will send a report to the County, who will follow up with a recommendation. Lenaerts will work with Schearer on finalizing the details.

The program will be started on a phased-in approach and the City Manager would like to begin with properties that are in the city limits since they have jurisdiction over those properties.

With dye testing, there is a possibility that instead of doing a full inspection, they could use a dye test. Or, possibly use dye testing as part of a regular full inspection. Lenaerts believes it is important to do a full inspection.

Weldon asked if dye testing is effective.

Lenaerts said his research shows that it can be effective; however, it can miss a failing system because the system can be failing directly into the ground water.

Skirvin: When will finalized goals be completed?

Lenaerts said they still have a ways to go before finalizing details.

Walker: So, dye testing will cost a lot less; however, it is not necessarily conclusive. And, if it did show a problem, then you would need a full inspection?

Robertson: With a dye test, you would have to return multiple times because it can take weeks to show up or it can just disappear into the soil and the nutrients will still be migrating. Robertson is cautious about using dye testing only. It costs about \$16 per tank; however, if you tested six tanks next to each other, you would need to use six different colors of dyes. People do not want to dig up their back yards to look for a septic system; some of them do not have covers or the tanks could be under a deck.

Green: Have you been able to determine what a reasonably thorough inspection is?

Lenaerts: The distribution box and the drain fields. Some of them you can just look inside; others will need to be pumped. Then the drain field, the soil qualities should be relatively clean. Hopefully, inspections can be similar to the DEQ requirements.

A group of residents in LaPine submitted a petition to change a segment of the DEQ rules. Current rules state that an agent may not authorize the use of an onsite system if it will pollute groundwater, surface water or become a public health hazard. If a standard system is not deemed sufficient by an agent, they will require using an ATT if it will provide adequate treatment. The petition requests changing rules to allow people to put in a standard system, even if DEQ states that the system is inadequate, if the cost of an ATT system is 10% more than the standard system. It appears that there are some problems in LaPine. DEQ is accepting input on this issue until Friday. Lenaerts presented a letter that he would like the Board to approve objecting to the change. It would show that we do not agree with undermining the current DEQ rules—changing a rule making it easier for people to install insufficient systems.

Skirvin moved that the Board approve the letter Lenaerts presented for his signature and Walker seconded the motion. Vote: Unanimous. Motion carried.

Save our Shoreline (SOS)

No issues on this item.

Vegetation Management

Grass Carp: The consultant completed the third draft of this document to be sent to the Wildlife Integrity Review Board. Robertson reviewed the document and made some minor suggestions. Eilers has made a couple of requests that Robertson will take care of. He wanted the Board to add comments so that he can prepare the formal process. Robertson asked that the Board submit any comments to him by December 22 so that he can get them to MaxDepth Aquatics, Inc. He will include the PSU study on not finding any milfoil or Brazilian elodea. After it comes before the commission, public comment, including photos and other documents can be presented. This is the time that the commission looks at the social aspects. Robertson will have the final draft for the Board before the January meeting.

Green said he would like to see the Executive Summary attached to the document along with a reference to the website, rather than focusing initially on just the grass carp.

Sewer

Green said since the last meeting, there have been a couple of new developments. At the November 26 Council Meeting, the engineers' report was presented by the city engineer and

the private engineer. It was approved unanimously by the four members of the Council with a quorum.

This past Monday was for the Council to declare its intent to make the improvements and the method and manner of doing so by resolution. The Resolution was signed and approved at the Monday meeting. The Resolution contains the date for the public hearing on the creation of the LID. It is set for the January 28 City Council meeting. Green urged all those who are in favor of the LID to appear and comment at the meeting. Opponents are few; however, he believes they will be present and they need representatives from the positive side. If it is approved after the public hearing, the rest of it involves the city putting out bids for contractors and then hiring them and making assessments once the job is complete. The most important step is the public hearing on January 28.

Weldon said he noticed that the original letter estimated \$42 per month for ten years or \$4,300 per house. The latest information indicates there are 57 lots participating and it is over 15 years. Are the additional lots being subsidized by the others?

Discussion regarding whether adding some lots increased everybody's costs. Some lots are larger, said Green.

Weldon said it appears the home owner's cost has dropped \$10,000 from the original one. Did they change from requiring the E-1 system?

Green will look into the details of the costs and explain them at the next meeting. He thinks costs are pretty close to the original estimate. At 4% interest, most people will want to pay it over long-term. The engineer holds out some hope that the bids will come in less than the estimates.

Communications Report

On the KBCH Good Morning Wake Up Show on the third Tuesday of the month from 7:30 to 8:00 A.M, Robertson will present.

Erosion and Prevention and Sediment Control Summit. October 25, the Erosion Prevention and Sediment Control Summit was attended by approximately 35 people. There were three vendors and the program was provided by Maria Cahill, Green Girl Land Development.

Internet Streaming. Tonight's meeting is being aired on the internet and archived on the city's website. Future meetings will have this increased level of viewing options. Thanks to the City for developing this technology and sharing this opportunity with the District. The internet feed can be accessed by clicking on <http://www.lincolncity.org/> then clicking on Agenda, Packets and Video. We can set up a link on the website to access the webcam. There are lots of improvements for outreach communications.

Safety Report

Staff purchased some safety vests and cotton gloves for volunteers to participate in the salmon rescue on East Devils Lake Road. There were no other incidents.

MidCoast TMDL

The fourth meeting of this full group was held in Newport. The subgroup that Robertson serves on—the Bacteria Technical Working Group—focused on the Flow Zone Interpretation

Matrix (in a previous report) and the Big Elk Creek, which is the more highly scrutinized watershed that will serve to calibrate the modeling for the other watersheds. Robertson would like to invite the DEQ to come to one of the District's Board meetings and give a presentation—it could be available to everyone in the watershed. It seems that this would be a reasonable use of 20 minutes to a half hour in either January or February; they would be talking about the bacterial side of the TMDL, and they would have a couple of their staff members come down and present how this is working. There is a presence on the web. It is pretty complex. It is an 18-month process. With the new internet feed, it would be a good use of time. Robertson said on the bacteria side, it was a short meeting regarding how to represent the beaches relative to upland sources, activities and other environmental pressures. Most of the TMDL goes up in the hills; however, with bacteria, there is impact on the beaches. It is complicated to communicate impairment of the beaches. Skirvin said he feels January would be okay for their presentation.

East Devils Lake Road

The County has finished their report and it is live on the DLWID.org website—on the Projects Page, scroll down and then go to East Devils Lake Road. The initial study was the feasibility study. The most recent one is the alternative summary analysis that details a \$4 million fix vs. some that were up to \$30 million. This fix would include two 60-foot bridges and widening the road. The County couldn't get any grants and are now considering this approach that they think will last a long time. The goal is to go after grant funds with Salmon Drift Creek Watershed Council. The District invested \$5,000 to help find funds. The idea is to look at a multi-faceted fix that will repair the road and permit salmon access. If the road isn't fixed, there will be issues with salmon crossing the road. Salmon Drift Creek Watershed Council has tried to get volunteers wearing vests and gloves to help rescue the salmon—during daylight hours, after signing a release. Contact Robertson if you are interested.

Lake Level Monitoring

Robertson said he and Lenaerts would now present an hour-long slide show.

Robertson's portion: (See presentation at www.dlwid.org then go to Meetings, December 13, Presentation)

Review of Changes in 2012.

Previously, the lake was impounded to 9.53 feet, beginning as early as April 15 through October 15. In 2012, this was modified to mitigate impacts that impoundment has on the erosion, the shoreline, vegetation, and the fish and wildlife. After two public hearings on the matter, the Board opted to begin impoundment no earlier than June 1, with a target date of June 15, to 9.0 feet.

Considerations for the review were recreational access, fish passage, septic systems, water quality and shoreline vegetation.

Recreational Access: Boat Dock Survey of 393 structures of registered and non-registered docks was conducted listing them in categories.

Robertson explained that jurisdictional boat docks are on the lake and non-jurisdictional docks are on private canals.

Water Depths: Methods, Depth Soundings

Measurements: Depths and Lengths

Calculations: Lake Level, optional moorage, mean, median, mode, standard deviation.

Results: Out of 393 structures surveyed, 175 were motor boat structures, 114 were small craft docks (non-jurisdictional), 91 were small craft docks (jurisdictional) and 14 were piers, jurisdictional.

Public Accesses: Fully improved accesses, less developed

Table 1 Dock structures by classification (Conservatively measured).

Table 2 Dock structures by number and percent of structures with less than 3' at calculated depths.

1992 pre-dam and 2009 post-dam aerial shots.

Table 3 Up to 90 structures were built after 1992.

Safe Moorage. The State will permit you to build out to 25% of the width of the stream with caps at 500 feet. Some people go out 100 feet. The County allows 50 feet unless you need more depth, provided you are not blocking navigation and/or your neighbors do not object.

Boat Lifts: 67 boat lifts. Some are older and some are newer.

Sediment Transport, wave action and depth of water. Muck is loose and unconsolidated.

Fish and Wildlife: Devils Lake is home to a genetically distinct line of federally-listed Coho salmon.

Juvenile Coho – Outward Migration from May to mid-July is the concern of the District.

Coho Salmon: Endangered Species List. Threatened.

New Regime:

Other Fish and Wildlife

Sea Run Cutthroat

Pacific Lamprey Migration

Lenaert's portion:

Impact of Lake Level on Septic Systems.

Considerations:

Summary of impacted septic systems.

Septic Systems: Of the 685 septic systems, 295 border the lake; 104 have no record; 64 are over 20 years old. There are 20 sand filters and at least 10 Advanced Treatment Technology.

Tank Material: 74 concrete; 37 steel; 9 other; 165 unknown. Steel corrodes more quickly.

Septic Density: EPA has indicated that more than one septic system per 16 acres has a high potential for groundwater contamination. Devils Lake exceeds that in acres by 5900% or 6 septic systems per acre.

Septic Density: A study by the University of Purdue indicates that one or two septic systems per acre can be accommodated before groundwater is contaminated. We exceed that by 300%.

The damming of Devils Lake and raising lake levels does impact septic systems.

Design standards include depth of septic tank, linear feet of drain field, drain field trench depth, soil characteristics, depth to bedrock or hard pan, depth to groundwater and set backs from property lines, public water ways, utilities and wells.

Effluent Makeup: Bacteria, viruses, organize particles, chemicals.

Groundwater and Soil Characteristics. Summer groundwater level is lower, wintertime it is higher. Soil Suitability is very limited in all areas. Some of the reasons include flooding,

ponding, depth to saturated zone, subsidence, slow water movement, too steep, depth to bedrock, depth to cemented pan and seepage.

Impacts: Septic system characteristics in the watershed raised concerns. Septic systems are intended to be a rural tool to dispose of biological activity, much of it human, from sewer, septic tanks, waste dumps, agriculture and water contamination.

Lenaerts presented maps and charts to clarify his presentation.

Robertson's portion:

A full water quality report was given in September, 2012. Key aspect of the consideration was whether the lake level could be shown to have negatively or positively impacted water quality. What was apparent from the data was that while 2012 was a worse year bloom wise from the two previous, it was better the 2008 and 2009 when the lake was higher and warmer.

Water Quality-Nutrients: Assumed value is that more water creates more dilution and better water quality; actual outcome is more water is more universally solvent; more water dissolves more nutrients.

Water Quality Temperature: It is assumed that more water is more volume or lower temperature. Actual: More water is more surface area that heats up faster.

Can you predict water quality by lake level? Predicting water quality by lake level is quite impossible.

Robertson presented charts to support his information.

HABS 2008, 2009, 2011, 2012

Historic Bloom-Anabaena (1995 was really green)

Naturally dynamic; Adapted to routine inundation; water fluctuation is a natural part of the system.

Wetland and Shoreline Vegetation

One aspect of the decision not to impound as much water as had been done in previous years was the potential impact to the shoreline plant community.

Shoreline and Riparian Vegetation. SOS Program and Erosion Study.

Robertson said there is limited participation from home owners for shoreline restoration-- only six so far.

Shoreline Emergent: Adaptive Plants

Shoreline Vegetation Survey 2012

Early D River and Today photos were shown.

Photo of October 24, 2008 versus current lake level 9.0' and Summer of 9.8' to 10.2'.

Robertson showed a considerable number of slides from previous years compared to current photos.

Vegetation can do better without impoundment.

New Business

Vegetation Survey

The Center for Lakes and Reservoirs at PSU has completed their Aquatic Plant Survey of Devils Lake. A copy can be downloaded from the Research page of the website:

www.dlwid.org/Research/2012

Only four non-native macrophyte species were found—parrotfeather, fragrant waterlily, pond water starwort and tapegrass, occurring in 37% of grab samples. Grass carp were observed in the canals; however, water quality was too poor for them to inhabit these areas. If grass carp numbers decrease, canals and open water sediment seed-bank can serve as a source for plant re-introduction to open water sections of the lake. However, species in the open water will not reflect that of the canals because of differences in wave action, sediment type and depth.

No Brazilian Elodea or Eurasian milfoil was found. Twenty species of plants were found (including the four non-natives). The lake is devoid of macrophytes. There were 14 shoreline species documented (five non-natives). There was less density in the second sample than the first (July 15 and the end of September).

Recommendations:

Additional education and outreach such as brochures and shoreline planting guides, boat ramp signage and interpretive displays for early detection and prevention; eradication of pioneer infestations; ongoing monitoring for early detection; Devils Lake Radio; eradication, such as bottom barriers or diver-assisted suction. We can effectively eradicate plants from a small area, such as Regatta Grounds. Robertson said this could be explored at greater length later. Eilers will include the information from the comprehensive study that there was no Brazilian Elodea or Eurasian milfoil.

Goal Setting Workshop

From the October 13 Goal Setting Minutes, Robertson asked each member of the Board to review the highest ranking priority items listed from the on-line survey and other public comments and provide at least five items, or as many as seven, that they would recommend as priorities for the future. He asked for bullet points and specifics for goals. If they have any other items they would like to prioritize, that should be included. He asked for these items to be sent by January 2.

Water Right: Siletz Point of Diversion

The City of Lincoln City owns a set of senior municipal water rights on Rock Creek, the main tributary of Devils Lake. The water rights are cumulative for 2.5 cfs. The City and the Confederated Tribes of Siletz Indians made a successful application to Oregon Water Resources Department to create a second point of diversion for a small portion of one of these water rights—75 acre feet of water, approximately 15 days of water at the 2.5 cfs. The actual transfer of water is at a maximum rate of .5 cfs and extended over 75 days to reach a volume of 75 acre feet. They started using the water last year, according to Jeff Komer, Chinook Winds Golf Course Superintendent, and they used only 14 acre feet of the 75 acre feet permitted. He said they will probably use less water in subsequent years due to average rainfall.

Based on the water budget for Rock Creek in 1983 (table included on the website), 14 acre feet is approximately 0.56% of the water flowing out of Rock Creek in the summer months of July-September and these numbers are collected on a daily basis. The full 75 acre-feet is about 3% of what is typically flowing in Rock Creek in the summer months. They used 14 cfs—only half of the water coming out of Rock Creek. One benefit is that only a very small percentage of Rock Creek water is extracted for irrigation, after serving in-stream for salmon and the ecosystem. It guarantees a flow of water. Also, Rock Creek is only a portion (about 50-60 % of the water budget for Devils Lake, so the overall effect on the lake is even less. The other issue is nutrient reduction. Robertson said he had a discussion with Jeff Komer, who indicated that they have no record of the amount of fertilizer that was applied in the past. He is committed to monitoring the streams running into the lake from the golf course in an effort to measure the impacts of nutrients coming into the lake. Robertson said their water usage is indiscernible—from 680 acres, using 75 acre feet and if you stretch the need, it would be an inch-and-a-half if they used it all in one shot. He said you are not going to get the runoff of the fertilizer if they know when it is going to rain. A plant is fed only what it requires and if the clippings are not composted, they will not go to ground water. Discussion ensued regarding the amount of fertilizer previously used by the golf course. Robertson said regarding chlorinated water vs. nutrient-rich lake water, chlorinated water dissipates very rapidly. Green asked Robertson to pursue the issue with Jeff Komer of determining the amount of fertilizer they purchased in the past, perhaps checking with their supplier. Robertson will follow up with Komer.

Deleted: Only 3% of the water that is coming out of the system is needed by the golf course.

Non-Agenda Items

Skirvin revisited the issue of jet ski racing activities on the lake. He feels it would be very beneficial to bring Devils Lake into the limelight as a venue for jet skiing activities. He said perhaps some staff time could be provided to assist in getting this event off the ground the first year. Maybe some funds could be provided if other sources of funding are not available—at least for the first year.

Green agreed and said that one of the fundamental issues of their mission is to encourage and enhance recreational activities, and this seems like a great activity. He asked Schlesinger if he could find out if the national jet ski association has any information on economic impact studies.

Schlesinger said the association does track the economic impact, because on previous trips to Lincoln City, Roger Harnack, president of the association, quoted statistics about folks coming for two days and spending money in the community. They come to race their jet skis with a goal of obtaining enough points to qualify for competition in Lake Havasu, Arizona.

Green moved and Skirvin seconded writing a letter of support for the event to Heather Hatton, Director of Public Relations, Chinook Winds Casino. Vote: Unanimous. Motion carried.

Board Comments and Announcements

Walker referred to the steel cutouts of coyotes and a bald eagle at a facility on the way to Salem. He asked if these decoys are effective in warding off unwanted wildlife. Robertson said you can buy plastic owls and he said they probably work on a short-term basis; but it's unclear if the effect is lasting. He said there are people around the lake who have them on their docks.

The meeting adjourned at 9:00 P.M.

The next regularly scheduled Board meeting will be January 10, 2013 at 6:00 P.M.

Respectfully submitted,
Linda Burt

Mitchell Moore
2929 NE Loop Drive
Otis, OR 97368

December 8, 2012

Devils Lake Water Improvement District
820 SE Hwy 101, Suite D
Lincoln City, OR 97367

Dear DLWID Board Member:

I would like to provide some brief comments on issues on this month's agenda. Unfortunately, I will not be able to attend your meeting this month as I will be out of the State for an extended period of time. Therefore here are my thoughts on the material forwarded earlier this week.

COMMUNICATIONS

I wanted to take moment to complement DLWID on a very positive development in the communications area. The addition of streaming video for DLWID meetings is a very welcome improvement. I for instance will be able to watch the upcoming meeting online. That is really great! I hope that out-of-town homeowners will take advantage of this new option. I have sent an email to Mr. Hawker thanking the City for their support of the District in the provision of this service.

LAKE LEVEL MONITORING REPORT

The Lake Level Monitoring Report was posted as part of this month's staff report. It was a substantial report that contains a wealth of information. I look forward to hearing the presentation on the report, (over the new streaming capability). Because of the upcoming holiday I'm going to assume that the gallery in your meeting will be pretty light. This report is directly related to lake level, the topic which has proven to have the highest level of public interest. I would like to suggest that the board request staff create a stand-alone document entitled Lake Level Monitoring Report and post a link to it on the Projects page in the Lake Level section. Furthermore, I would suggest that a presentation of the report tailored for the public be scheduled for a second meeting. This would provide another opportunity away from the winter/holiday season for this important information to be conveyed. I would suggest perhaps the March or April meeting where it could be presented prior to the annual lake level decision; it should be made clear in that meeting that lake level changes are not on the agenda. In order to raise the visibility of the report I have posted it in its entirety on the Navigator without alteration or commentary.

VEGETATION SURVEY

The District should exploit this very thorough study in several ways. Overall I read this to be more positive than negative. We have some life in the lake, mostly native and we now have a baseline to compare changes with over the coming years. The study has already been posted in the research section of the website. I think the District should use the information to educate the public as to what are "good" plants and "bad" plants that actually exist in the lake. Perhaps staff could create a book or website that could easily link to information on each plant? Posters in the Kiosks showing the top "good" and "bad" plants could also be helpful. These are just some

ideas, I leave it to the District to determine how to best disseminate the information. The main point is to suggest that a raised public awareness related to the plants found in the lake could be a positive.

WATER RIGHT: SILETZ POINT OF DIVERSION

The information that was posted as part of this month's staff report on the Siletz Point of Diversion was also very interesting. As with the previous report, this subject is directly related to lake level, with a high level of public interest. I would like to make a similar request, that the board have staff create a stand-alone document entitled Siletz Point of Diversion Annual Report and post a link to it on the Projects page in the Lake Level section. This review should be created next year and on an ongoing basis so that it is clear to all interested parties what impact these activities may or may not have on the lake.

IN CONCLUSION

I appreciate the opportunity to address you. I look forward to watching your discussions at the board meeting live over the Internet. I want to wish all of you a wonderful holiday season and a great start to the New Year.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mitchell Moore", with a long horizontal flourish extending to the right.

Mitchell Moore