

AGENDA

2014 October 2

Regular Meeting: 6 pm

Lincoln City, Council Chambers

801 SW Hwy 101, 3rd Floor



Devils Lake Water Improvement District

Post Office Box 974, Lincoln City, Oregon 97367

Phone: (541) 994-5330 Fax: (541) 994-6040

www.DLWID.org

Quick Look:

- **Notice Meeting Date Changes:**
 - Oct 2, 2014
 - Nov 20, 2014
- **SOS Outreach**
- **Investment Policy**

I. Roll Call

II. Consent Agenda

- a. Minutes of the Previous Meetings
- b. Financial Report

III. Comments from Citizens Present on Agenda/Non-Agenda Items: *This is an opportunity for members of the audience to bring to the District's attention any item not listed on the agenda for public hearing. Comments are limited to five (5) minutes per citizen, and the Board of Directors may use the light system. Speakers may not yield their times to others, and as a general rule this is not a time for exchange of questions. At the conclusion of this agenda item, a board member may discuss or raise questions regarding an item presented by a citizen. The Chair has the authority to reduce the time allowed for comment in accordance with the number of persons present and signed up to speak.*

IV. Unfinished Business

(Agenda Support Item A)

- a. The Devils Lake Plan
 - i. Septic / Sewer
 - ii. Save our Shoreline
 - iii. Vegetation Management
- b. Communications Report
- c. Safety Report
- d. MidCoast TMDL
- e. East Devils Lake Road
- f. Policy Updates
- g. Harmful Algal Blooms
- h. Water Quality Monitoring
- i. Intern Report
- j. Life Jacket Kiosk (Randy Weldon)

V. New Business

(Agenda Support Item B)

VI. Non-agenda Items

VII. Additional Comments from Citizens Present on Non-Agenda Items: *This is an opportunity for members of the audience to bring to the District's attention any item not listed on the agenda for board discussion. Comments are limited to five (5) minutes per citizen, and the Board of Directors may use the light system. Speakers may not yield their times to others, and as a general rule this is not a time for exchange of questions. At the conclusion of this agenda item, a board member may discuss or raise questions regarding an item presented by a citizen. The Chair has the authority to reduce the time allowed for comment in accordance with the number of persons present and signed up to speak.*

VIII. Board Comments & Announcement

IX. Adjournment

Meetings of DLWID are handicapped accessible under the ADA.

If special accommodations are needed, please contact the District Office at (541) 994-5330 48 hours prior to the meeting.

**Staff Reports 2014-10-02
Robertson & Laszlo**

Consent Agenda:

- Minutes of the Previous Meeting
- Financial Report:

Unfinished Business

Agenda Support Item A

- a. **The Devils Lake Plan:** A watershed based plan adopted by the Board in 2011 that seeks to address the root causes of nuisance aquatic vegetation and/or Harmful Algal blooms which are excessive nutrients.

Executive Summary excerpt:* “Devils Lake is a shallow, 680 acre coastal lake that has long suffered from the effects of inputs of excess nutrients. Most prominent of these effects was the domination of the lake by nuisance aquatic plants in the 1980’s. Aquatic weed infestations largely choked the lake covering over 60% of the surface. Recreation was greatly impacted, and property values were in decline. In 1984, a local government entity, Devils Lake Water Improvement District (DLWID), was formed with the purpose of improving water quality, improving the environment for fish and wildlife, and generally reestablishing beneficial uses, including safe navigation and public access.

“Current concerns in the watershed are ongoing inputs of nitrogen and phosphorus, increasing sedimentation, erosion, stormwater, annual cyanobacteria blooms, and the threat of the return of nuisance aquatic plants to the lake.”

*View the full document online: http://www.dlwid.org/Projects/Devils_Lake_Plan/Devils_Lake_Plan_v2.1.pdf

Projects within the scope of the plan are being worked on simultaneously and are listed on the Agenda and in this staff report as subheadings. Updates to the work on the projects are presented month to month as change happens and are left on the agenda until the project is complete. For a full background and all updates, please refer to previous staff reports and the Projects Page of the District’s Website under these headings: <http://www.dlwid.org/Projects.html>

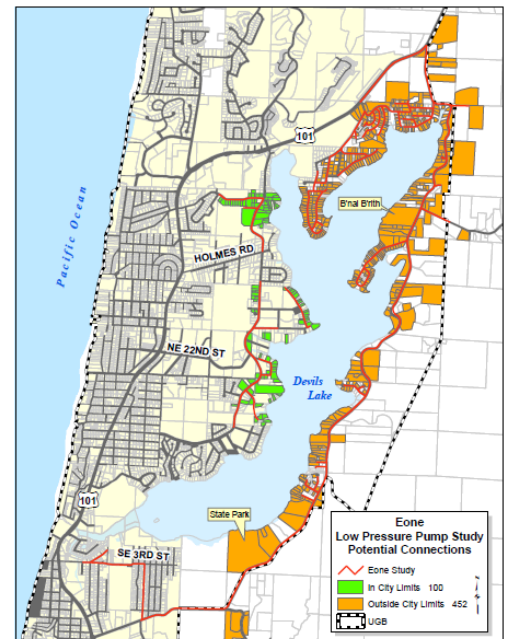
i. Septic / Sewer

- <http://www.dlwid.org/Projects.html#Septics>
- <http://www.dlwid.org/Projects.html#Sewer>

No update since last meeting.

To Do and Pending Items:

- Mandatory Septic System Inspection Ordinance: Lincoln City, goal is by 2014-12-31 per City Manager
- Full buildable lands inventory: Lincoln County - Sent follow up inquiry on 2014-08-06. Spoke with GIS coordinator 2014-09-19 at GIS Symposium by the Sea. Still on the list, just not as high of ranked priority.



- Urban Growth Management Agreement: Lincoln City and Lincoln County, with FY 2014-2015
- Sewer Master Plan Update: Lincoln City – expected by April 2015
- Environmental Review of low pressure sewer backbone: City & DLWID expected by April 2015

Voyage LID: (Chair Green)

Direct Link to Engineer Report:

http://www.dlwid.org/Projects/Sewer/Voyage_LID.pdf

ii. Save our Shoreline (SOS)

- <http://www.dlwid.org/Projects.html#SOS>

We have had one interested party come forward with a potential project. This is a good opportunity for our SOS project as it is basically a conversion from grass to native plantings. The owner contacted me and I did a quick site visit and will connect them with a landscaper to create a project. This might be worth additional funding in my estimation as it is high profile site relative to other neighbors and there is a fair amount of property.

Ava has as you know developed a flier and door hanger about the program which were just printed. She will then soon conduct a door-to-door campaign to promote the program. We have also been sourcing plant material for distribution during the door to door campaign, and acquired additional seeds for seed packets to leave with those not able to plant a live plant or not home.

Kent has offered to assist on this project and Ava has another person for the watershed council to help with this outreach.

iii. Vegetation Management

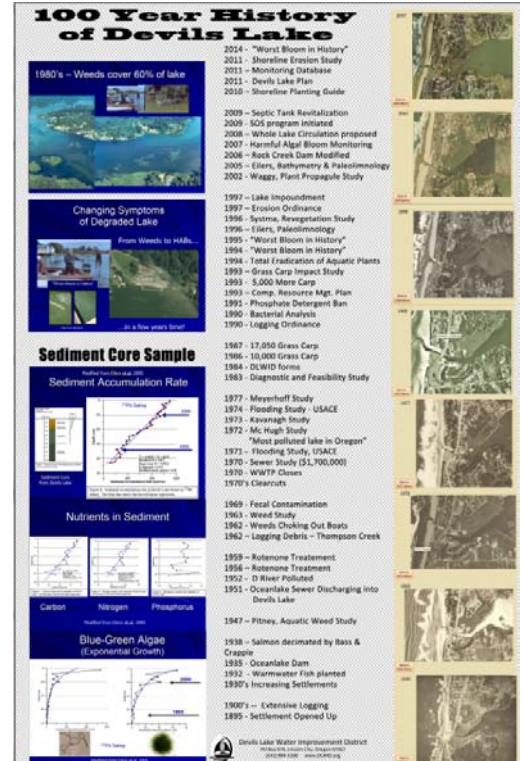
- <http://www.dlwid.org/Projects.html#Vegetation>



Awaiting official word from ODFW staff as to when their review maybe done such that we can get in front of the Commission. No additional updates at this time.

b. Communications Report

- **Internet Streaming:** Meetings the DLWID are now available for live streaming and/or recorded streaming on the internet. The internet feed can be accessed via the City's website: <http://www.lincolncity.org/> by clicking on Agenda, Packets & Video or from the following link: <http://lincolncityor.iqm2.com/citizens/default.aspx>
- **Government Access Channel 4:** The District's monthly meetings continue to be broadcast live and throughout the month repeatedly airs. This channel is available for Charter subscribers.
- **Social Media:** The District uses these social media components to reach the general public periodically.
 - YouTube: <http://www.youtube.com/user/DLWID>
 - Facebook: <https://www.facebook.com/DevilsLake.Oregon>
 - Twitter: https://twitter.com/Devils_Lake
- **KBCH am 1400:** The District has had a standing interview spot on the THIRD Tuesday of the Month from 7:30 – 8:00 am.
- **100 History of Devils Lake:** Available on the web: http://www.dlwid.org/Communications/Know_Your_Lake/100_Year_History.pdf
- **Know Your Lake:** The District, led by Chair Brian Green, has been publishing informational articles in the News Guard. The articles are meant to inform the public on the activities of the District. You can download copies of the articles from our website's Project Page: <http://www.dlwid.org/Projects.html>
- **Devils Lake Radio 1610 am:** Audio updates forth coming.
- **Lincoln City Chamber:** I was the guest speaker at the Tuesday, September 23, 2014 Lunch Forum at Chinook Winds. It was well attended with people from the lake otherwise not normally going to chamber also in the audience.
- **Clearwater E-Newsletter:** Fall issue released in conjunction with autumnal equinox. Click here to see a copy: <http://myemail.constantcontact.com/Clear-Water-Newsletter-Fall-2014.html?soid=1102761961457&aid=ufs-4JHSYvs>
- **Lincoln City Kiwanis:** I have been asked to be the guest speaker at the Thursday, October 23, 2014 Lunch at Surftides.



- **Senior Fair:** The event is Tuesday October 7, 2014 from 9 am to 6 pm at Chinook Winds Casino Resort. We are eligible to use our large tent again in the halls as we debuted last year, as well as can be part of the punch card program they initiated last year which saw hundreds of people come to our exhibit. I would encourage Board Members to schedule time that they might be available to staff the booth as the more the merrier.
- **Oregon Lake Association:** Annual conference is Friday – Sunday, October 10th -12th in Astoria. Registrations available at www.OregonLakes.org for other interested parties.



c. **Safety Report** (Robertson) We recently updated our Safety Policy and have incorporated safety components into the Personnel Policy and Procedures. A formal Safety Manual will be developed in the coming months headed up by our intern. We have had a few preliminary discussions thus far, but will be sitting down in the future to get more clear direction on the needs of the manual. Safety is no accident!

d. **MidCoast TMDL** (Robertson)

- <http://www.dlwid.org/Projects.html#TMDL>

Department of Environmental Quality (DEQ) has begun the planning process for developing an Implementation Ready - Total Maximum Daily Load (IR-TMDL) for 303(d) listed waterbodies in the Oregon Mid-Coast Basin. The initiation of this TMDL process has been a long-time in the works and the process itself will be lengthy stretching over the next 18 - 20 months. Devils Lake is listed for Weeds/Algae, Chlorophyll a and pH and Thompson Creek is listed for fecal coliforms, and thus as a local government we have been invited to participate. Notably, temperature listings are also proposed by EPA for the lake and one of its tributaries. Representatives from local, state and federal government, special districts, Tribal Nations, private industry, forestry, agriculture, conservation, NGOs, watershed councils, landowners, and others were also identified.

- Links to the DEQ's website are posted below.
 - <http://www.deq.state.or.us/WQ/TMDLs/midcoast.htm>
 - <http://www.deq.state.or.us/WQ/TMDLs/midcoastLSAC.htm>

Stakeholder Meeting: No meetings since our last DLWID meeting. View the website for more information.

Bacteria Technical Working Group: No meeting since our September 11, 2014 meeting which we provided an update verbally.

e. **East Devils Lake Road:** No Update.

f. **Policy Updates:** Seeking to review one policy a month. **See Yellow Highlights**

The District has proposed updates and additions to its Policy Manual for the following items: **(BOLDED require further actions)**

- Policy and Procedures Manual (Adopted 2014-02-13)
- **Personnel Policy/Manual (Draft sent 2013-12-31: reviewed, edited, and tabled)**
- Mandatory Reporter Policy (Adopted: May 2013)
- Safety Policy (included in larger update)
- Financial Manual (Adopted 2014-01-09)
- Records Policy (Adopted 2014-01-09)
- Board Duties and Responsibilities (See Policy and Procedures Manual)
- **MSDS (Intern beginning to address the collection of new SDS)**
- Employee Training (Policy added to Personnel Policy - **Safety Manual forthcoming separately**)
- Light Duty Return to Work (included in Personnel Policy)
- **Investment Policy (Draft Sent 2013-12-31: Reviewed, edited and tabled) --- FOR REVIEW 2014-10-02**

Links to these drafts are available on the website:

http://dlwid.org/Board%20Directors.html#Board_Official_Actions

Investment Policy: http://www.dlwid.org/Board/Policy/Drafts/Investment%20Policy_2013-12-31.pdf

Changes made to the original draft were to remove the Treasurer as the person charged with managing a portfolio to the Board of Directors. Staff recommended additional changes include altering the provisions in the reporting section to become pertinent only if the portfolio were to be changed to not be exclusively held in the Local Government Investment Pool and the three local accounts, Saving, Money Market and Checking which exist currently. Effectively the reporting mechanism would only be done if the District was managing its own investment portfolio which is not expected to occur now or any time in the near future.

g. **Harmful Algal Blooms:**

Aeration Project RFP: We are in the process of developing a Request for Proposals for a full lake wide aeration project. This will be released to the growing number of interested parties as well as well advertised through usual channels. Release date expected by the end of October 2014 with the anticipation of reaching out to the vast network at the North American Lake Management Society Conference in early/mid November.

h. **Water Quality Update:**

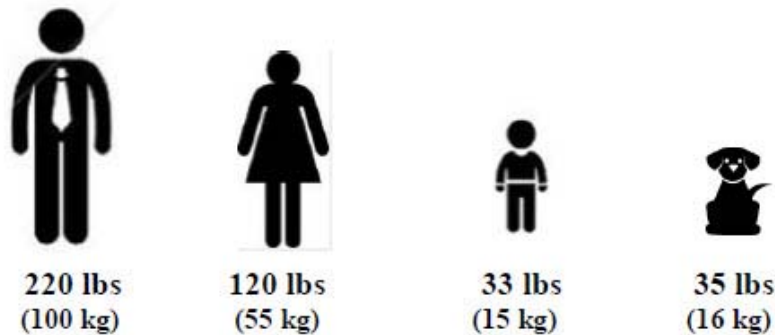
HABS: The District issued a water contact advisory on July 31, 2014 for toxins exceeded the state's guidelines. Given that we have reached the end of the recreational period we have reduced the extent of the bi-weekly monitoring of toxins to include only a limited number of sites to gauge the bloom. Further we have been using the strip test methodology to reduce staff time and analysis costs associated with monitoring the bloom until it is showing significant improvement.

Samples taken on Wednesday 2014-09-24 showed toxins still in excess of the 10 ppb standard. Weather conditions prevented the District from getting broad lake samples, but water flowing out

the D River was one of the samples above the threshold, and ironically looked the clearest of all the four samples sites monitored. With increasing cloud cover and the 2" of rain we may be seeing less growth in the near future. Notably, though Anabaena became very prevalent at some of the shoreline sites a few weeks prior. This was the species that dominant last winter and early spring, showing the changing environment these organisms flourish in.

Provisional Guidance for Microcystin Intake

Based on Oregon Health Authority standards and guidelines



The following are example calculations of tolerable consumption amounts of microcystin-containing water. These are based on an equation utilized by the World Health Organization and using the standards set by the State of Oregon. For purposes of estimation, calculations using a 100 ppb concentration are provided.

Microcystin concentration	220 lb person	120 lb person	33 lb person	35 lb dog
1 ppb (drinking water standard)	16 cups (4L)	9 cups (2.2L)	2.5 cups (0.6L)	3 cups (0.64L)
10 ppb (recreational water standard)	2 cups (0.4L)	1 cup (0.22L)	4 tablespoons (0.06L)	1/4 cup (0.064L)
100 ppb (10x recreational water standard)	3 tablespoons (0.04L)	1.5 tablespoons (0.022L)	1 teaspoon (0.006L)	1 teaspoon (0.0064L)
0.2 ppb (recreational guideline for dogs)	-	-	-	13.5 cups (3.2L)

Disclaimer: The above calculations are only *example numbers* based on using a general equation and parameter values provided by the World Health Organization, using water solely containing microcystin and no other toxins. Lake conditions are highly variable and may contain multiple toxin types. Use your own discretion and exercise caution when partaking in recreational lake activities. Metric units have been converted to English units, and most numbers are rounded to the nearest whole integer value. Talk to a health care professional about your drinking water requirements and safe water consumption amounts. Ingestion rate is based on U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR)'s standard of swallowing 50 ml per hour and based on 2 hours of recreation and based on a 20 kg child, e.g. an average 8 year old. These were calculated under the assumption that 100% of one's microcystin intake would come from contaminated water.

Our intern developed a pictograph of the toxin level guidelines of Microcystin and the amount of water that would have to be consumed to exceed that “safe” level at varying concentrations. There is also a canine only provisional guideline shown for dogs. This has been added to our website and email listserves and is available for development for other signage.

E.coli: The District is seeking to extend the period in which it samples for E. coli. This would be for baseline data collection of multiple sites, some new, some existing and not be part of the Recreation Water Quality Monitoring Program which runs Memorial Day to Labor Day. The information will however be held internally and made available to interested parties upon request.

Storm sampling conducted on 2014-09-24 for E coli did show elevated levels throughout the watershed with values at Thompson Creek and Neotsu Beach Access exceeding the limits of quantification >2419. Recent data are shown below:

Bacteria Sample Results <i>E. coli</i> MPN per 100ml		06	2014-08-13	2014-08-20	2014-08-27	2014-09-03	2014-09-24
Station	New ID						
D River	DR-0	96	150	55	20	1414	
Campground	LZ-1	4	8	6	7	73	
Regatta Grounds	LZ-2	4	<1	7	1	37	
Holmes Road Park	LZ-3	42	15	12	9	365	
Sand Point	LZ-4	21	2	22	144	93	
Neotsu K Street Beach Park	LZ-5	6	19	313	137	> 2419	
Thompson Creek at EDLR	TC-1	192	201	231	228	> 2419	
Brown Bear State Park	LZ-6	12	12	12	3	51	
Rock Creek at EDLR	RC-1	64	194	93		687	

Nutrient Monitoring: We collected and shipped out to OSU a number of stream and lake samples for nutrient analysis from the storm flows on 2014-09-24. As the lake was still pretty hostile that day, we sampled from the docks of Holmes Road, the Campground and East Devils Lake plus all the tributaries. Samples will be analyzed for total phosphorus and total nitrogen similar to the samples from May 2014 to further supplement existing data.

i. Intern: Ava Laszlo

Post Labor Day, we have continued our water quality monitoring for *E. coli*, cyanobacteria, and physical parameters, with reduced frequency in sampling due to the end of the main recreational season. I attended a Lincoln City Chamber of Commerce meeting on Sept. 23rd, where Paul was the guest speaker and spoke of the monitoring that we do in addition to a brief 100 year history of Devils Lake. We also spoke of current lake conditions and projects the District is currently involved with on September 16th on KBCH radio.

To better our knowledge of the current technology and practices of mobile GIS, we attended a GIS symposium on September 19th, put on by the Central Coast GIS Users Group.

On September 23rd, I attended a Tech Team meeting with Salmon Drift Creek Watershed Council and the US Forest Service. The meeting entailed reviewing and discussing future grant applications and projects to be considered. These projects, if completed, would aid in improving water quality in and around the Devils Lake watershed.

I have been working to ensure that our boating equipment and safety gear is up to date, per the Oregon State Marine Board's requirements. A trip to Englund Marine Supply in Newport was taken to replace expired materials and obtain other necessary items.

I have been working with the Salmon Drift Creek Watershed Council's newest hire, a educational outreach and field trip coordinator, to design a lab session and field trip based at Taft High School. The lab and field trip will entail teaching highschool juniors about the importance of and main components of water quality monitoring. This 2-day event will make use of a Vernier computer with probe attachments that the District awarded Taft High School several months ago after a grant application was completed.

The Save Our Shorelines program in-person contact is nearing. We have been in contact with multiple nurseries for live plants, and have obtained seeds, packaging materials, and the fliers & door-hangers that were printed.

j. Life Jacket Kiosk: (Randy Weldon)