Executive Session: DLWID Office
Following regular meeting
ORS 192.660 Subsection 2e

Quick Look:

- RFPs – Veg Mgt & Audit
- Meeting Venue
- Water Quality
- Conferences

Devils Lake Water Improvement District

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AGENDA 2011 September 1

Regular Meeting: 6 pm, DLWID Office

I. Consent Agenda 6:00 pm
  a. Minutes of the Previous Meetings
  b. Financial Report

II. Public Comment (Please limit comments to 5 minutes per person or as outlined by Chair)

III. Unfinished Business (Agenda Support Item A)
  a. The Devils Lake Plan
    i. Septic Tank Revitalization Program (Seth Lenaerts)
    ii. Save our Shoreline Campaign (Seth Lenaerts)
    iii. Vegetation Management
    iv. Sewer (Brian Green)
  b. Communications Report
  c. Safety Report
  d. Erosion Study
  e. Intern Report
  f. Neotsu Public Beach – K Street
  g. DNA Bacterial Source Tracking
  h. Meeting Venue (Kip Ward)
  i. Audit RFP

IV. New Business (Agenda Support Item B)
  a. Thompson Creek vs. Canal
  b. Cyano-Watch
  c. SDAO Training - Summary
  d. NALMS Conference
  e. Oregon Lakes Association Annual Meeting

V. Non-agenda Items
VI. Public Comment
VII. Board Comments & Announcements
VIII. Adjournment

Executive Session

Meetings of DLWID are handicapped accessible under the ADA.
If special accommodations are needed, please contact the District Office at (541) 994-5330 prior to the meeting.

Unfinished Business

a. **The Devils Lake Plan**

i. **Septic Tank Revitalization Program** (Seth Lenaerts) I continue to be assured by City staff that this item is not out of their scope. I will have time over the next month to personally contact City Councilors and discuss our concerns with them.

ii. **Save our Shoreline Campaign** (Seth Lenaerts) The rain garden sign has been installed at Regatta Grounds in time for the Devils Lake Revival. Bill customized a structure for it which will serve the District for many years.

The course on the Save our Shoreline program is going to be offered, Saturday, September 17, from 10 am-noon at the District office. The course will be focused on showing the environmental, economic and social value of planting native vegetation around Devils Lake. It will consist of a presentation and a hands-on section where attendees will design their own landscapes.

In addition to the course we will discuss the Save our Shorelines program and the incentives that homeowners can receive to do a native planting.

iii. **Vegetation Management**: RFP to be sent to the board separately.

iv. **Sewer** (Brian Green)

b. **Communications Report**: (Seth Lenaerts) The Devils Lake Revival has taken up the majority of my time over the last month. I will provide an update on the event at the Board meeting.

c. **Safety Report**: No incidents

d. **Erosion Study**: As I understand we are on track for October completion. I will schedule presentation for October or November Meeting based on availability.

e. **Intern Report**: (Lisa Lynch)

<u>Water Sampling and Testing</u>

Water sampling around the lake in littoral zones for e. coli testing, pH, dissolved oxygen, temperature, clarity etc. Turbidity testing. Water sampling from the boat in the pelagic zones.

<u>Outreach and Education Materials</u>

Working on newsletter templates for Fall, Winter and Spring and adding logo to newsletter. Researching and brainstorming ideas for Watershed Webpage.

<u>Devils Lake Revival Planning</u>

Researched purchasing kayak and paddle for festival. Putting together supplies for booth. Worked on Devils Lake invitation cards. Created sign up sheets for festival. Made educational crossword clues for festival activity and coloring activity.

f. **Neotsu Public Beach – K Street**: The sign was installed by the Lake Contractor. The facility is gaining in the public's use, and seemingly has been a nice attribute to the area.

g. **DNA Bacterial Source Tracking**: Nothing to update currently, may have a verbal update at our meeting.

h. **DLWID Regular Meeting Venue**: the District has investigated the costs associated with holding its regular meeting at City Hall. This facility is larger, has greater visibility to the general public as it has televised capacity. To summarize the cost associated please see email from Mr. Hawker, City Manager, below:

Email From David Hawker:

> I am pleased to inform you that the City can offer you the use of the council chambers in City hall for your regular monthly meeting. Because we need to have staff to open and close the building, and some minimal building security, we would need to charge you our cost for one employee. The overtime rates for our two building maintenance employees are $39.30, and $43.34. IN most cases, the lower rate will apply. Should you wish to televise the meetings, the cost per hour is $15.00. Please let Sherrie Correia know your plans. She is cc'd on this.
>
> We would need to give you a quick briefing on control of the lights, location of facilities, etc. We would need to work out your recording. You can use our audio tape system, or if you TV, an MP3 can be extracted.

I clarified with Mr. Hawker relative to the beginning of the overtime. City Hall closes at 5. He offered to split the hour with us charging us from 5:30 until we finish. We would need to be in there by 5:30-5:45 anyways, so I find this to be a generous offer from the city. He also said that if we choose to televise the meeting, that they would re-run them throughout the month. We would reach a lot more people as a result. To hold a 2 hour, televised meeting the cost to the District would be about $129. City Hall would like to know whether we are interested in holding our meeting as soon as possible, so they can get us on the schedule.

i. **Audit**: RFP to be sent to the board separately.

New Business (Agenda Support Item B)

a. **Water Quality Reporting Thompson Creek Vs. Canal:** At our last meeting a proposal was set forth to investigate the water quality in the canal vs. the water quality at the creek's culvert on East Devils Lake Road where we currently test for *E. coli*. The question raised was does it make sense to be posting the Thompson Creek data if no one is actually recreating in that area, and how does the creek data compare to the canal. As a result the District embarked on a limited sampling protocol to investigate the relationship. *E. coli* samples were taken at up to six new sites (depending on accessibility the day they were sampled) with one replicate taken at an existing site (generally Sand Point). These samples were taken in conjunction with the regular bacteria sampling conducted on Mondays. The sampling sites are displayed in the figure below.

Sample Sites

a. PZ-5: East Thumb
b. Canal 1
c. Canal 2
d. Canal 3
e. Canal 4
f. Canal 5
g. TC-0: Mouth ofThompson Creek
h. TC-1: Thompson Creek upstream East Devils Lake Road Culvert

Our current sampling point was chosen as it is in the public right of way, and is accessible from land without prior notice of private landowners. Being in the public right of way also prevents the site from being lost if private ownership changes. The land based access serves the District in that it allows us to collect all of the samples, get them to the lab, and have them processed (18-19 hours later), in time for publication into the News Guard.

The first day of sampling the sampler was able to reach Canal 1, 2, and 3. This is near the endpoint where motor boat traffic more or less can maneuver safely. Further on in the canal it becomes very shallow. Owners of homes further up the canal are limited to lighter craft (paddle boat, kayak) during much if not all of the year. Results from this first day were encouraging as the values were two orders of magnitude less than the sample at the culvert. As a result, subsequent tests were taken with the objective of reaching further up the canal. On the second day the sampler was able to reach Canal 4. On the third day a kayak was used and the sampler was able to reach all sites including TC-0 which is at the mouth of the creek as it enters the canal. David Skirvin, Randy Weldon and Seth Lenaerts all contributed to the sampling. All samples were taken during August 2011, at a time when the stream flow is generally at or near its minimum. Results during other parts of the year - early summer, spring, winter and/or late fall - when the stream is flowing at a higher rate could be different.

Day two's results showed that most of the canal was within the limits of the recreational water use. Water at the culvert continued to be high, in fact exceeding the testing range of the analysis. The third sampling day provided the best look at the system to date. Samples were taken all the way up the canal to the mouth of the creek. The results showed a high level of *E. coli* in the stream, past the mouth of the creek and into the upper part of the canal. The values then quickly dropped in the "Green" range for the bulk of the canal.

Most of the water that reaches canal sites 1, 2, 3 and 4, must passed through what is currently a mud flat. Interaction with the mud likely traps much of the bacteria before heading down the canal. Slow moving, colder water from the stream as it enters the lake plunges as a result of being denser then the warmer canal water. That would increase the contact time with the mudflat which helps filter out the bacteria. Low flows also dictate how far the water can move downstream with any significant force or carrying capacity. The mudflat itself is a testament to the delta formed as the stream reaches the bottom of its slope, thus depositing most of its load (silt, gravel, etc.) upon it. How that mudflat interacts with the streamwater at higher flow and at a higher lake levels is somewhat uncertain, but it is reasonable to assume that the streamwater would reach further down the canal before sinking or fully mixing with the canal waters. One neighbor recently relayed that during any real rain event when the stream is flowing, the water in the canal is all churned up, sending a chocolate brown plume out past the buoy that marks Canal site 1, and into the east thumb of the lake.

	2011-08-08	2011-08-15	2011-08-22
East Thumb	6	2	3
Canal-1	4	11	5
Canal-2	7	145	15
Canal-3	13	124	31
Canal-4	*	81	82
Canal-5	*	*	1300
TC-0 (Mouth)	*	*	1733
TC-1 (Culvert)	1733	>2419	1120

*No Sample taken

Note: All samples were taken at a time when the flows out of the creek are at or near their minimum.

End of report

b. **Cyano-Watch:** In line with the Sampling and Analysis plan, the Devils Lake Water Improvement District conducted a first and later its second round of Microcystin testing. Additionally samples were taken from three parts of the lake for cyanobacteria identification or in the case of one sample a full phytoplankton (all

algae) quantification. This slight change was introduced with our Cyano-Watch program during the last update to best compare the lake to historic sampling methods for the main body of the lake. The results of the Microcystin analysis have all shown results below .75 ppb (parts per billion) which is not only below Oregon's 8ppb recreational water quality guideline, but is below the World Health Organization's (WHO) Drinking water standard of 1 ppb. All very good news for the recreational fitness of the lake. What the first batch of cyanobacteria enumeration has shown is that the dominant cyanobacteria in the lake is *Gloeotrichria*, a weak producer of Microcystin, and not one known to produce other toxins. What are monitoring program doesn't outlay and for which we have a general disclaimer on all of our postings and our website, is the concentration or potential presence of any other cyanotoxins. The state only offers guidance on one other toxin, Anatoxin a, which if present at any detectable level would trigger an advisory. Anatoxin a also must be analyzed before lifting an advisory. Should we have a full fledge advisory I have arranged for a lab equipped to analyze specifically for Anatoxin a, to provide the speediest of analysis.

c. **SDAO Training - Summary:** George Dunkel of Special Districts Association of Oregon conducted a 2 ½ hour training for the board and staff on August 18, 2011. This was the second time he had provided such training to the District, the last time being in January 2010. In attendance were board members, Ward, Skirvin, Weldon and Green. Staff members attending were Lenaerts and Robertson. This training was provided free of charge to the District. We are eligible for up to 8 hours of such training a year, so if there are other trainings the board is interested please let me know.

   Key points of the training included the use of email, and the way some governments and individuals have broken the public meetings law by circulating emails that have led to discussions on public matters. This was highlighted in the "Lessons from Lane County" handout. Other handouts include the Guide for Public Officials from the Oregon Government Ethics Law, pertinent excerpts from publications, and presentation handouts. Other key points included the definition of Potential Conflicts of Interest and Actual Conflicts. In actual conflicts board members (and/or staff, if they are making the decision) must declare the conflict before, and may not discuss the subject, nor vote. Dunkel also presented the distinction between Policy (board responsibility) and Procedures/Operations (staff's responsibility). He explained that if an individual board member vs. the board directs staff to do something outside of the public meeting that leads to some consequence, the individual board member can be held liable, and not be covered by the District's insurance.

   On committees, Dunkel relayed that meeting of committees appointed by the Board must provide meeting notices as a public meeting. Committees that staff organizes are not held to public meeting law. He also clarified some generalities for staff including providing solid introductions for new board members, making accesses to previous minutes, recent board decisions, and policies of the board. He stated the requirement of Staff to be prepared to discuss and answer question on agenda items, and be prepared to bring items back to the board at subsequent meetings as may be necessary. Changes operationally needed for the District may be a review of its current financial policy, an evaluation into how email is archived, and adding signatures to the minutes by the Chair and the Treasurer once approved.

d. **NALMS:** the North American Lake Management Society's is holding its annul conference in Spoke, Washington. The District is a long standing member and has in the past regularly sent its Manager, and at times also one or more board members; last year the District opted out of sending a representative. Typically the event is attended by some 450-650 lake scientist and researchers, agency members and consultants. With its regional proximity, the event promises to turn out a good contingent of local expertise, but national figures are also always in attendance. As an example at the first NALMS conference I attended in Indianapolis, I met the author of my college textbook, Limnology, Dr. Alex Horne. In subsequent years I had the opportunity to discuss lake management issues the District was working on directly with Dr. Horne along with many other individuals. As a result the conference provides a unique opportunity to network with individual, agencies, and the like. This would be a good opportunity to solicit a consultant to fill our

Vegetation Management RFP and is a good opportunity to gain additional training and network with the limnological community.

As early registration is discounted, if the District wants to send a representative, we would want to register as soon as possible. In its FY 2011-2012 Budget, the District budgeted approximately $2500 to send a representative to the NALMS conference. This was based on previous year's expenses.

Diverse and Sustainable Lake Management, NALMS 2011 -Spokane, Washington

Link to the Event: http://www.cvent.com/events/nalms-2011-spokane-washington/event-summary-0819feed2a9549578c4910e8eb46bf0d.aspx

Link to the Program: http://www.cvent.com/events/nalms-2011-spokane-washington/event-summary-0819feed2a9549578c4910e8eb46bf0d.aspx

Selected Topics of Interest

Session H-1: Invasive Species Moderator: Mark Sytsma

Session J-1: Macrophyte Management 1 Moderator: Toni Pennington

Cumulative impacts of lake level drawdown and shore protection to nearshore habitats, Moses Lake, Washington ---Anthony Gabriel

Perceptions by the general public of cyanobacterial blooms and remediation strategies in lakes: what can scientist learn? ---Cindy Adams

The Calculus of Risk: How do we weigh lake recreational benefits against potential exposures to HABs? ---Curtis Cude

Cyanobacteria and Fish: A Toxic Health Threat to Tribal Communities? ---Ellen P. Preece

Stocking the tool box: Understanding lesser known options ---Kenneth Wagner

LID as a Lake Management Tool -- Stanley Miller

A Collaborative Approach to Lake Monitoring and Stewardship -- Kristi Carter & Skye Dunbar

Integrating build-out scenarios with lake and river response models to guide management decisions -- Nancy Turyk

Community-Based Participatory Research (CBPR): A Tool for Developing Partnerships for the Management of Lake Diefenbaker, Saskatchewan. -- Lalita Bharadwaj

The Role of Sediments and Aquatic Plants in the Nutrient Budget of Spirit Lake, WA---Laura Alskog

Soft armoring to improve essential salmonid fish habitat: a drift cell success story ---Judy Dudley

Education and Outreach Needs Assessment for the Coeur d'Alene Lake Management Plan (LMP) --- Glen Rothrock

Oxygen consumption rates for Aphanizomenon flos-aquae are a function of temperature, previous light exposure and dissolved oxygen concentrations -- John Rueter

Modeling bioavailable phosphorus as a function of total phosphorus to estimate watershed soil phosphorus loading-- Scott Groce

From Ambivalent to Engaged: Getting adult audiences to participate in voluntary behavior change

with Beaver LakeSmart --- Jane Maginot

Analysis of Cyanobacterial Toxins from Washington Lakes --- Gabriela Hannach

Ultrasonic Algae Control – How it works --- Kirk Whatley

Water quality improvement in the Oklahoma Pond through use of an innovative submerged air-fed diffuser system --- Daniel Storm

Evaluation of Small-Scale In-Lake Management Techniques for Westtown Lake, a Shallow Impoundment in Chester County, Pennsylvania -- Fred Lubnow

Cost Outlay

October 26-28 with Training or restoration field trip available on the 25th

NALMS Member Registration **$390.00**

- Regular Price $520.00
- Discounted $390.00 Friday, September 16, 2011
- Discounted $440.00 Friday, October 14, 2011

Field Trip: East Spokane County Lake Restoration Tour $25.00
Or
Training: Simple Tools for Lake and Watershed Assessment $175.00

Hotel **$378.40**

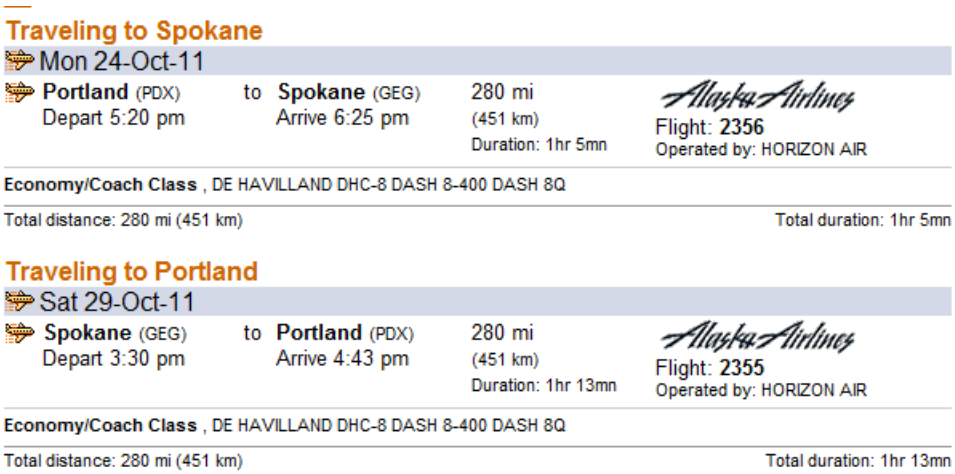
- $86 plus tax * 4 nights = 378.40
  5 Nights = 473.00

Food **$160.00**

- $40 per diem
- 4 or 5 days

Air option (prices subject to change) **$220.00**

- Air to and from Spokane $129.40
- Parking at Airport $10.00 / Day * 4 days = $40.00
- Transfers 25 (est) *2 $50.00



Drive option = **$430.00**
includes two additional days
Accommodations 2 nights @ $ 89 plus tax 10.79 = 99.79
Food $40/day
Fuel $150.00

Results

Start City:	OR, Salem	
End City:	WA, Spokane	
One-Way Trip:	399	Miles
	18.14	Gallons Used
	$67.55	Fuel Cost
Round-Trip:	798	Miles
	36.28	Gallons Used
	$135.10	Fuel Cost

Start Over

La Quinta Inn & Suites Kennewick
1 Room: 1 King Bed w/micro & fridge

1 Night: Oct/23/2011 - Oct/24/2011

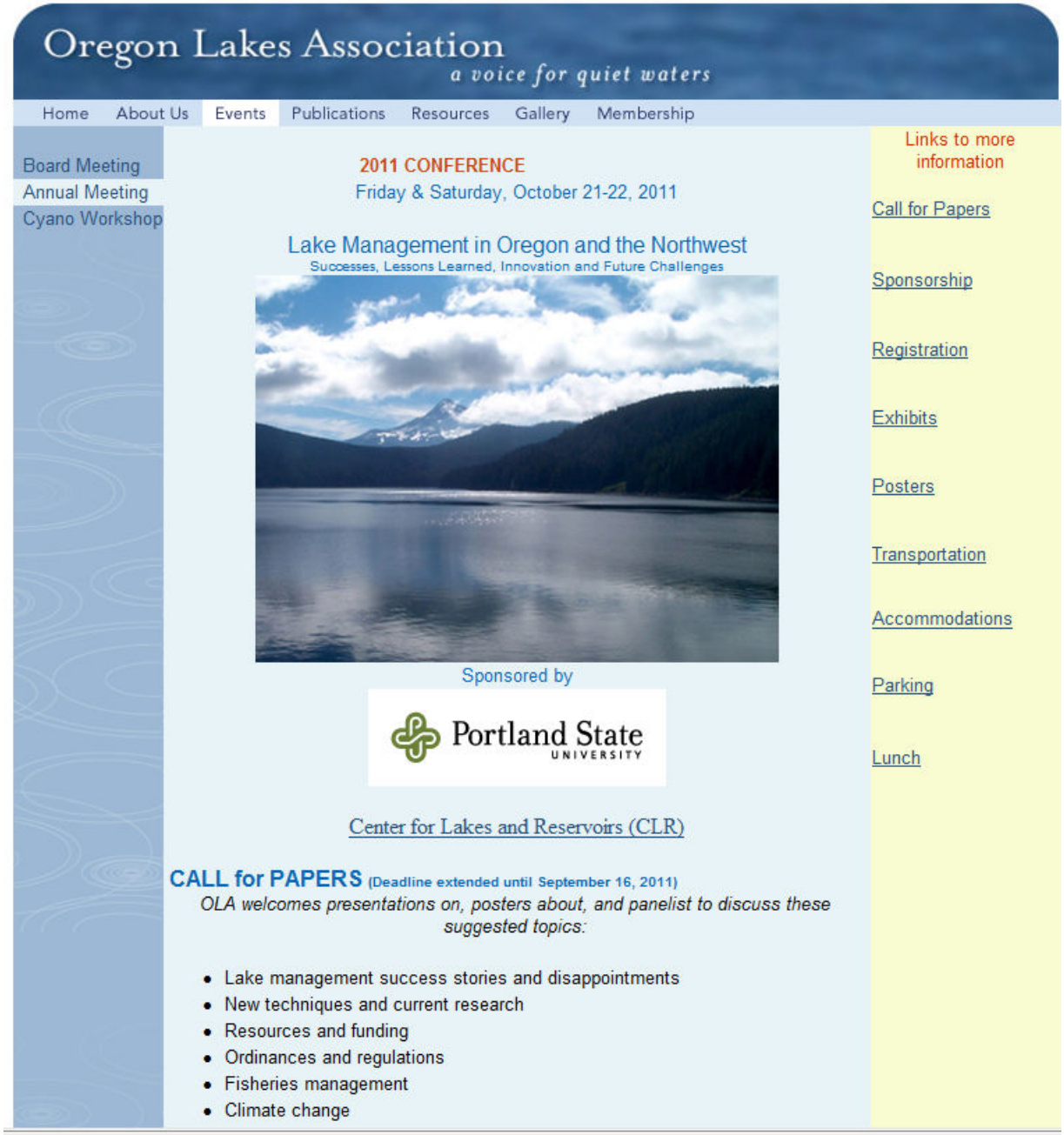
Room 1: 2 Adults	avg./night
1 night	$89.00
Taxes & Fees	$10.79

BEST PRICE GUARANTEE Total: $99.79

Rates are quoted in **US dollars**.

TOTAL $1,148.40 to $1798.00 depending on travel options and training

e. **Oregon Lakes Association**: Running just ahead of NALMS is the OLA annual meeting. DLWID is one of the founding members of the Oregon Lakes Association and its lake managers as is true today have served on its board. I am also currently the webmaster for OLA. The meeting is a much smaller scale with attendance in the 35-45 person range. This meeting is a lot less technical and often can be a good conference for a wider audience. The event covers two days: Friday and Saturday October 21-22, 2011. As was the case last year, I would recommend that DLWID Staff both attend this meeting. Cost would be registration, (2* 50 (est)) transportation (50 fuel), 1 night accommodations per participant (2 *100) food (2* 40) and parking (20). Estimated in total $450 for two participants.



http://www.oregonlakes.org/events/Annual_Conference.html