



# BLACK LAKE SPECIAL DISTRICT

---

**Black Lake Special District Work Session Meeting**  
**Monday, December 3 • 6:15 pm • 2102 Carriage Drive Bldg E• Olympia**

1. Call to Order

2. Roll Call

3. Approval of Agenda

4. Public Communication

*(Estimated Time: 0-30 Minutes, Sign-up Sheets are provided)*

*During this portion of the meeting, citizens may address the Board for up to 3 minutes regarding items related to Special District business. In the event testimony exceeds 30 minutes, the Commission will allow for additional testimony to be taken at the end of the meeting for those who signed up at the beginning of the meeting and did not get an opportunity to speak during the allotted 30-minutes.*

5. Informational Materials

*Attachments:*

*November 19 Regular Meeting Minutes  
November Financials*

6. Warrant Requests

*Attachments:*

*OrgSupport Invoice # 3033  
Columbus Park Transmittal Letter  
Salmon Shores Letter*

7. Old Business

- a. Future Alum Treatment Finance Committee and Treatment Timeline
- b. HAB Report Review

8. Items from the Floor

9. Continued Public Communication

*(If needed for those who signed up earlier and did not get an opportunity to speak during the allotted 30 minutes.)*

10. Adjournment of Public Meeting

## **Next Meetings:**

Work Session Meeting, January 7, 2019  
Regular Session Meeting, January 21, 2019



# BLACK LAKE SPECIAL DISTRICT

---

**Black Lake Special District Regular Meeting  
Monday, November 19 • 6:15 pm • 2102 Carriage Drive Bldg E• Olympia**

1. Call to Order – **Chair Stintzi called the meeting to order at 6:15 pm.**
2. Roll Call – **Chair Stintzi called roll and established a quorum.**
  - a. Lake Stintzi
  - b. Brian Wilmovski (via phone)
  - c. Vernon Bonfield
3. Approval of Agenda – **It was moved, second, passed unanimously to approve the agenda as presented.**
4. Public Communication – None.
5. Approval of Consent Agenda – **It was moved, second, passed unanimously to approve the Consent Agenda as presented.**

*November 5 Work Session Minutes  
October 15 Regular Meeting Minutes  
October Financials  
Warrant Requests  
OrgSupport Invoice #3026  
Thurston GeoData Invoice #25-1810-203  
Commissioner Stintzi Q3 2018 Reimbursement  
Commissioner Bonfield Q3 2018 Reimbursement  
Commissioner Wilmovsky Q3 2018 Reimbursement*

6. New Business
  - a. 2019 Budget – **It was moved, second, passed unanimously to approve the 2019 budget as presented and distribute the document to the Thurston County Board of Commissioners and the Thurston County Treasurer.** *OrgSupport will move the \$30,944.75 under Non-Recurring Contract Services to Lake Management Testing and Monitoring in the 2018 books.*
  - b. Enclosure for Schumock – Mr. Schumock received a letter last month about rates and charges.
7. Old Business
  - a. Future Alum Treatment Finance Committee and Treatment Timeline – None.
  - b. HAB Report Review – Directors received initial feedback from Harry Gibbons that the HAB assessment of sediment data looks sound. Mr. Gibbons requested additional time to do some check calculations and to inform Commissioners in the relative frequency of future maintenance treatments which may be required and why they may be needed. *OrgSupport will follow-up with Harry Gibbons on Wednesday, November 21 to request the additional information and to ask if he recommends the Special District work with another TetraTech scientist.*
8. Items from the Floor
  - a. The draft transmittal file is submitted to the county. Further data is forthcoming for boater days, swimmer days, etc. *Following receipt of letters from Salmon Shores and Columbus Park the transmittal letter will be updated and presented to Commissioners for signing before final submittal to the Thurston*



# BLACK LAKE SPECIAL DISTRICT

---

*County Treasurer. OrgSupport will request updated boater and swimmer day data from Columbus Park and Salmon Shores each September, beginning with September 1, 2019.*

9. Continued Public Communication – None.
10. Adjournment of Public Meeting – **With no further business Chair Stintzi adjourned the meeting at 6:50 pm.**

**Next Meetings:**

Work Session Meeting, December 3, 2018



**OrgSupport**

120 State Avenue NE, #303  
Olympia, WA 98501

**Invoice**

Date	Invoice #
1/1/2019	3033

<b>Bill To</b>
Black Lake Special District 120 State Avenue NE, #303 Olympia, WA 98501

Description	Qty	Rate	Amount
Contract Services - December	1	2,500.00	2,500.00
Printing B&W	221	0.10	22.10
Printing Color	6	0.25	1.50
Stamps	7	0.50	3.50
Envelopes	3	0.15	0.45
<b>Total</b>			<b>\$2,527.55</b>

**Payment Voucher Transmittal  
Drainage Dist #12 Black Lake**

---

1. OrgSupport 120 State Ave NE #303 Olympia, WA 98501	3033	Contract Service Agreement	\$2,527.55
---	------	----------------------------	------------

Total for document:			<u>\$2,527.55</u>
---------------------	--	--	-------------------

---

I, the undersigned do hereby certify under penalty of perjury, that the materials have been furnished, the services rendered or the labor performed as described herein and that the claim is a just, due and unpaid obligation against Drainage Dist #12 Black Lake , and that I am authorized to authenticate and certify to said claim.

**Examined and Allowed**

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Date

\_\_\_\_\_  
Commissioner

\_\_\_\_\_  
Commissioner

\_\_\_\_\_  
Commissioner

\_\_\_\_\_  
Date



**OrgSupport**

120 State Avenue NE, #303  
Olympia, WA 98501

**Invoice**

Date	Invoice #
1/1/2019	3033

<b>Bill To</b>
Black Lake Special District 120 State Avenue NE, #303 Olympia, WA 98501

Description	Qty	Rate	Amount
Contract Services - December	1	2,500.00	2,500.00
Printing B&W	221	0.10	22.10
Printing Color	6	0.25	1.50
Stamps	7	0.50	3.50
Envelopes	3	0.15	0.45
<b>Total</b>			<b>\$2,527.55</b>



# BLACK LAKE SPECIAL DISTRICT

---

December 3, 2018

Treasurer Jeff Gadman, Thurston County  
Thurston County Courthouse  
2000 Lakeridge Drive SW  
Olympia, WA 98502

Dear Mr. Gadman:

## **2019 Charges for Black Lake Special District**

Please assist us in the collection of our 2019 charges. We request corrections to our previously submitted file, as detailed in the enclosed spreadsheet. After these are applied, our total for 2019 should be \$163078.7957 for 754 parcel records.

Sincerely,

---

Vernon Bonfield  
Board Member

---

Brian Wilmovsky  
Board Member

---

Lake Stintzi  
Board Member

Enclosure

Sheet1

<b>Black Lake Special District</b>			
<b>Corrections to Charges File</b>			
<b>December 3, 2018</b>			
	<u>Parcel</u>	<u>Previous Value</u>	<u>New Value</u>
Columbus Park	42060100000	4757.25	\$3,893.33
Columbus Park	42060200000	4757.25	3,893.34
Total		9514.5	\$7,786.67
Net change (New less Previous)	-1628.83		
Previous charges file total	164806.6249		
New charges file total	163078.7957		



# BLACK LAKE SPECIAL DISTRICT

---

December 3, 2018

Black Lake Properties, LLC  
6918 Jericho LN SW  
Olympia, WA 98512

Dear Sir or Madam:

## **2019 Charges for Black Lake Special District**

We have not received your counts for dwellings, swimmer/fish days and boat launches for 2018. The county treasurer has established submission dates for our 2019 charges. We will therefore use your counts for 2017 for calculating 2019 charges.

If you are able to submit your 2018 counts, we will request the county treasurer to make a last minute change.

Enclosed is another copy of the counts form we mailed in early November.

Sincerely,

Black Lake Special District Board

---

Vernon Bonfield  
Board Member

---

Brian Wilmovsky  
Board Member

---

Lake Stintzi  
Board Member

Assessment for 2019  
Salmon Shores/Black Lake Properties  
Parcel # 12831341400

Assessment Component	Rate	2019		2018	
		Number	Assessment	Number	Assessment
Dwellings	\$41.81	_____		24	971.84
Recreational WF feet	4.2			425.7	1749.63
Habitat WF feet	1.84			47.3	85.14
Swim/Fish days	0.19	_____		60	11.4
Boater Days	1.36	_____		48	64
	Total				\$2,882.01

**From:** Harry Gibbons

**Subject:** RE: Black Lake Documents

The following is a brief summary of my basic recommendations for the Black Lake Special District relative to future management of potential HABs within the lake.

As has been shown at Black Lake, as most other lakes in the PNW, phosphorus enrichment leads to excess availability for algae uptake resulting in cyanobacteria blooms referred to as HABs (harmful algal blooms) due to the potential for cyanotoxin generation. Given Black Lake has already stressed its resiliency relative to over-production of phytoplankton, specially, cyanobacteria, phosphorus reduction through on-going watershed and in-lake action is necessary to maintain its beneficial uses. Unfortunately, external phosphorus reduction alone will not lead to in-lake recovery, but over-time it would reduce the level of effort needed to manage in-lake phosphorus levels to control HAB events. Therefore, phosphorus removal from the water column and inactivation (chemically binding sediment phosphorus so that it is not bioavailable) of sediment phosphorus is necessary. The proven and most successful approach to doing this is through aluminum addition via alum with sodium aluminate as a buffer and aluminum source when dosed properly.

The phase II restoration report by HAB Aquatic Solutions does represent the correct course of action to move forward. The following is why:

- Black Lake has a high concentration of humic and other dissolved organic compounds in its water that interfere with aluminum's ability to bind with phosphorus.
  - The jar tests conducted demonstrate that the dose needed to reduce water column phosphorus is 5 to 8 times higher than the standard water column dose for the Puget Sound lowland lakes; although this high level of water column aluminum demand from humics was shown to be needed in the 1992 underdosing of Phantom Lake with similar humic and color issues.
  - Recommended aluminum dose is  $21.07 \text{ g Al/m}^2$ .
    - This itself is significantly higher than the applied dose used in 2016 treatment.
- The required amount of aluminum needed to inactivate the phosphorus in the deeper sediment is higher than the shallow sediment phosphorus, but both are within the range observed in most eutrophic lakes within this region.
- Adding the sediment inactivation dose to the water column dose is the appropriate approach to treating the lake.
- The uncontrollable variable is the immediate and long-term impact of external phosphorus loading to the lake. With climate change, changes in land-use, and regional wetlands and their relationships to shallow interflow groundwater inputs into the lake, a single one time treatment may not result in the most cost effective long-term approach.
- Hence, it is recommended that option 2 in the report that includes on-going monitoring and adaptive inactivation treatments be pursued.
  - Given the input of organics and humics from surrounding and upstream wetlands the water column dose will remain relatively high, but may be reduced depending upon interval between treatments.
    - Phosphorus removal effectiveness will have to be measured via jar tests to determine the correct water column dose, however, overdosing the column will also increase the effectiveness of the sediment inactivation dose, increasing the time between needed treatments.
  - After the proposed three treatments (4 to 6 year period) there will be a need for periodic water column and sediment inactivation maintenance treatments.
    - This follow-up maintenance treatment will be needed because of continued external loading to the lake of phosphorus including atmospheric sources.
    - This follow-up maintenance treatment will probably require less aluminum than currently required, thus a decrease in dose, and its application frequency will decrease over time due to the depletion of available sediment phosphorus and binding of groundwater phosphorus inputs within the sediment.
    - Depending upon monitoring data after the full dose treatment (4 to 6 years period) the periodic maintenance treatment may be needed every 5 to 15 years depending upon external phosphorus loading over this period of time.

- Point is phosphorus management will be an on-going necessity if the beneficial uses of the lake are to be maintained over time.

As always, questions are welcome.

Thanks,

Harry

**Harry L Gibbons , Ph.D.** | Sr Scientist PM, Lake Restoration Lead.

Direct +1 (206)838-6261 | Business +1 (206) 728-9655 | Fax +1 206.728.9670 | Mobile +1 206.499.5129 |

[Harry.Gibbons@tetrattech.com](mailto:Harry.Gibbons@tetrattech.com)

**Tetra Tech** | Complex World, Clear Solutions™

1420 5th Ave., Suite 650

Seattle, WA 98101 | [tetrattech.com](http://tetrattech.com)