

HORSESHOE LAKE MANAGEMENT COMMITTEE AGENDA

5:00 P.M. - THURSDAY, JULY 11, 2013

Woodland Council Chambers

100 Davidson Avenue – Woodland, WA 98674

- I. Call to Order
- II. **Minutes for May 9, 2013** (June 13, 2013 Meeting Cancelled)
- III. Continued Business
 - A. Pump Update
 - **Maintenance Log**
 - B. Water Quality and Sampling
 - **Water Quality Tracking**
 - **May 14, 2013 and June 3, 2013 Results**
 - **Phosphorus and E. Coli Graphs**
 - C. Budget
 - Funds Received from Cowlitz County
 - D. Goals & Priorities
- IV. New Business
 - A. Committee Vacancy
- V. Other
 - A. None
- VI. Adjourn - Next Meeting August 8, 2013 at 5:00 P.M.

CITY OF WOODLAND
HORSESHOE LAKE COMMITTEE MINUTES
MAY 9, 2013

The regular meeting of the Horseshoe Lake Management Committee was held on the above date, at the Woodland City Hall, 100 Davidson Avenue Street, Woodland, WA 98674.

Chairman Tom Golik called the meeting to order at approximately 5:00 p.m. Roll call found the following:

COMMITTEE MEMBERS:

Tom Golik, Chairman
Walt Church
Mike Curry
Terry Jones
Francis Patnode
Pat Rychel
Jeff Sullivan
Neil Van Horn (Absent)

MAYOR/COUNCIL:

Scott Perry, Councilmember

STAFF:

Jody Bartkowski, Secretary

MINUTES

The March 14, 2013 minutes were approved as presented. The April 11, 2013 notes were reviewed.

CONTINUED BUSINESS

- A. Lake Pump.** Discussion ensued regarding fluctuations in the gallons pumped, varying River levels, status of the outlet valve (currently closed), water level at the outlet structure (2" above grate) and Lake clarity at 9-10'. Further discussion was held regarding factors affecting water level when the valve is closed and involving the Department of Fish and Wildlife (WDFW) in encouraging the Washington State Department of Transportation (WSDOT) to make changes to the Lake pumping system.
- B. Water Quality & Sampling.** The Committee reviewed new graphs for phosphorus and E. coli tests and discussed phosphorus fluctuations during the fall months, huge variations in E. coli levels, and checking with Addy Lab regarding the ability to differentiate between human and animal E-Coli strains. Bill Dunlap has agreed to use his boat for further testing on Tuesday at 9:00 A.M. Mike Curry and Jeff Sullivan volunteered to help with Tom Golik as an alternate.
- C. Budget.** Staff reported that Clark County paid their water quality testing invoice. The Cowlitz County Board of Commissioners approved their invoice; however, payment has not been received.
- D. Goals & Priorities.**
Milfoil Eradication – Scott Perry reported that he contacted the chemical application company regarding use of their product at other locations, but they were unable to release information due to privacy issues. They did confirm that the product is approved in

Washington State. Scott has pamphlets available for those who are interested.

Discussion ensued regarding grass carp, the lack of visible carp, dead carp along the water line, the need for a count of remaining fish, and the lack of budget for additional carp. The Committee recognized that this is a poor time to request additional funding from Council and the potential need to involve Jim Misner and others at WDFW regarding the transporting of carp being removed from Silver Lake in August. Further discussion was held regarding the potential loss of carp during transfer, decreased effectiveness of older carp, and the enforcement of fishing laws.

Mike Curry stated that he is paddling the Lake about four times a week and reported seeing no visible carp (weed paths appear to have been made by boats), seeing new lily pad growth, that the weeds raked from near his dock have not grown back, that a few osprey are present, and that the eagle and hawk pairs remain.

OTHER

- Newspaper Article. Discussion was held regarding an article in the Columbian titled "Canada Geese Become Nuisance at Park" and problems being caused by geese at Silver Lake in Whatcom County.
- Airport Valve Opening and Closing Procedures. Discussion ensued regarding setting further parameters, lowering the number of turns for each open/close, keeping the Lake full vs. increasing water flow through the Lake, and tracking and documenting additional information such as lake level, valve status, water temperature, etc.

ADJOURNMENT

The meeting was adjourned at approximately 5:55 p.m. The next regular meeting will be held Thursday, June 13, 2013, at 5:00 p.m. at the Woodland City Hall, 100 Davidson Avenue, Woodland WA 98674.

Tom Golik - Chairman

Date

Jody Bartkowski - Secretary

Date

HORSESHOE LAKE TRACKING

Date	River Level	Lake			Valve Status	Comments
		Level	Temp	Visibility		
1-May-13	11.24					
2-May-13	11.16					
3-May-13	10.98					
4-May-13	11.05					
5-May-13	10.72					
6-May-13	10.58					
7-May-13	11.08					
8-May-13	11.15					
9-May-13	11.44					
10-May-13	11.68	Top of outlet	68°	9-10'	Closed	Outlet leaking, weeds cleaned off
11-May-13	12.20				Closed	
12-May-13	13.18				Closed	
13-May-13	13.50				Closed	
14-May-13	13.55				Closed	
15-May-13	13.20				Closed	
16-May-13	13.06				Closed	
17-May-13	13.02				Closed	
18-May-13	12.15				Closed	
19-May-13	12.22				Closed	
20-May-13	12.31				Closed	
21-May-13	12.26				Closed	
22-May-13	11.92	2" above outlet			10	
23-May-13	11.59				10	
24-May-13	11.73				10	
25-May-13	12.04	7" about outlet			10	
26-May-13	12.07				10	
27-May-13	12.88				10	
28-May-13	12.47				10	
29-May-13	13.83				20	
30-May-13	14.26				20	
31-May-13	13.89		71°		30	Outlet grate cleaned

alt 0176

HORSESHOE LAKE TRACKING

Date	River Level	Lake			Valve Status	Comments
		Level	Temp	Visibility		
1-Jun-13	13.90				30	
2-Jun-13	13.07				30	
3-Jun-13	11.60				30	
4-Jun-13	11.54				10	
5-Jun-13	10.78				10	
6-Jun-13	10.66				10	
7-Jun-13	10.78				Closed	River level is average
8-Jun-13	10.78				Closed	River level is average
9-Jun-13	10.78				Closed	River level is average
10-Jun-13	10.90				Closed	
11-Jun-13	10.50				Closed	
12-Jun-13	9.94				Closed	
13-Jun-13	10.70				Closed	
14-Jun-13	10.48				Closed	
15-Jun-13	10.24				Closed	
16-Jun-13	10.51				Closed	
17-Jun-13	10.10				Closed	
18-Jun-13	10.37				Closed	
19-Jun-13	10.96				Closed	
20-Jun-13	10.71				Closed	
21-Jun-13	10.96				Closed	River level is average
22-Jun-13	10.96				Closed	River level is average
23-Jun-13	10.96		69°	10-11'	Closed	River level is average
24-Jun-13	11.20				Closed	
25-Jun-13	11.50				Closed	
26-Jun-13	11.66				Closed	
27-Jun-13	11.79				Closed	
28-Jun-13	11.99				Closed	
29-Jun-13	11.94		70°	10'	Closed	
30-Jun-13	12.00				Closed	
1-Jul-13	13.90		76°		Closed	
2-Jul-13	13.07				Closed	
3-Jul-13	11.60				Closed	
4-Jul-13	11.54				Closed	
5-Jul-13	10.78				Closed	
6-Jul-13	10.18				Closed	
7-Jul-13	10.19				Closed	
8-Jul-13	9.94				Closed	



National Weather Service

Advanced Hydrologic Prediction Service



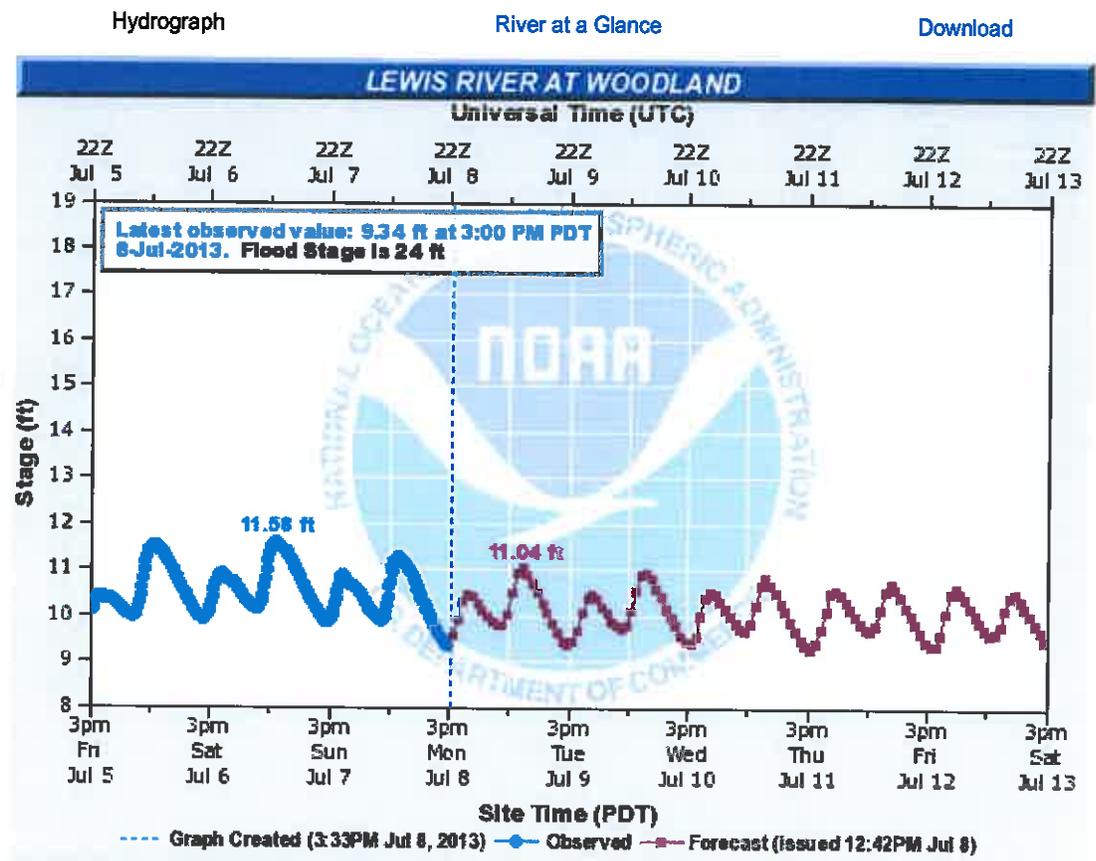
Home News Organization Search for:
NWS All NOAA Go
BOOKMARK

- Local weather forecast by "City, ST" Go
- National Conditions
 - Rivers
 - Satellite
 - Climate
 - Observed Precip

Over 200 USGS real-time streamgages used to support NWS river forecasts and warnings are at risk of being discontinued. [Click here for more information from the USGS...](#)

Weather Forecast Office Portland, OR
Northwest River Forecast Center

- Local Conditions
 - Warnings
 - Weather Forecast Radar
- AHPS Documentation
 - User Guide
 - User Brochure
- What is AHPS?
 - Facts
 - Our Partners
- Feedback/Questions
 - Provide Feedback
 - Ask Questions



LRWW1(plotting HGIRP) "Gage 0" Datum: 0'

- [Printable Image](#)
- [About this graph](#)
- [Tabular Data](#)
- [XML](#)
- [RSS](#)
- Datum: Not Available
- [Metadata](#)

NOTE: Forecasts for the Lewis River at Woodland are issued routinely year-round.

Default Hydrograph

[Return to Area Map](#)

← Upstream Gauge
Downstream Gauge →

Flood Categories (in feet)
Major Flood Stage: 28



AddyLab, LLC
2517 E. Evergreen Blvd.
Vancouver, WA. 98661



Phone: 360-750-0055
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Email: reports@addylab.com

May 28, 2013

Stacie Kelsey
Inland Fish Program
Region 5 WDFW
Stacie.Kelsey@dfw.wa.gov

Dear Ms. Kelsey:

Enclosed are the laboratory reports for the Horseshoe Lake water samples collected 5/14/13. All results are intended to be considered in their entirety and AddyLab, LLC is not responsible for use of less than the complete report. Results apply only to the samples submitted to the laboratory for analysis.

If you have any questions, please give me a call. The reference number for this work is 13AL0772. Thank you for your business.

Sincerely,

A handwritten signature in cursive script that reads "Thomas A. Newman".

Thomas Newman
Quality Manager

AddyLab, LLC
2517 E. Evergreen Blvd.
Vancouver, WA 98661



Phone: 360 750-0055
Fax: 360 750-0057
Email: reports@addylab.com

Analytical Report

Client: City of Woodland Public Works
Project: Horseshoe Lake
Sample ID: 1 - Skatepark
Report Date: 05/28/13

Reference #: 13AL0772
Date Collected: 05/14/13
Date Received: 05/14/13
Collected By: J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403479	E. coli	5.2	^	2.0	SM 9223 B	05/14/13 1110	32-088	JD
L636116-01	Total Phosphorus*	0.0025	mg/L	0.003	EPA 365.1	05/22/13	WG662295	

Definitions:

- mg/L Milligram per Liter
- MRL Method Reporting Limit
- ND Analyte Not Detected at or above the Method Detection Level (MDL).
- J An estimate that is less than the MRL but greater than or equal to the MDL
- N Matrix interference, spike sample recovery not within control limits
- ^ Most Probable Number per 100 mL
- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TM Date: 5/28/13



Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0772
Project:	Horseshoe Lake	Date Collected:	05/14/13
Sample ID:	3 – F Dock	Date Received:	05/14/13
Report Date:	05/28/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403480	E. coli	5.2	^	2.0	SM 9223 B	05/14/13 1110	32-088	JD
L636116-02	Total Phosphorus*	0.010	mg/L	0.003	EPA 365.1	05/22/13	WG662295	-

Definitions:

- mg/L milligram per Liter
- MRL Method Reporting Limit
- ND Analyte Not Detected at or above the Method Detection Level (MDL).
- J An estimate that is less than the MRL but greater than or equal to the MDL
- N Matrix interference, spike sample recovery not within control limits
- ^ Most Probable Number per 100 mL
- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TJW Date: 5/28/13



Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0772
Project:	Horseshoe Lake	Date Collected:	05/14/13
Sample ID:	4 – Left of K	Date Received:	05/14/13
Report Date:	05/28/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403481	E. coli	1.0	^	2.0	SM 9223 B	05/14/13 1110	32-088	JD
L636116-03	Total Phosphorus*	0.012	mg/L	0.003	EPA 365.1	05/22/13	WG662295	

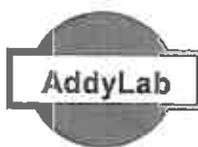
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- J An estimate that is less than the MRL but greater than or equal to the MDL
- N Matrix interference, spike sample recovery not within control limits
- ^ Most Probable Number per 100 mL
- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TAAD Date: 5/28/13

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2517 E. Evergreen Blvd.
Vancouver, WA 98661



Phone: 360 750-0055
Fax: 360 750-0057
Email: reports@addylab.com

Analytical Report

Client: City of Woodland Public Works
Project: Horseshoe Lake
Sample ID: 7 - Raspberry
Report Date: 05/28/13

Reference #: 13AL0772
Date Collected: 05/14/13
Date Received: 05/14/13
Collected By: J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403482	E. coli	21.1	^	2.0	SM 9223 B	05/14/13 1110	32-088	JD
L636116-04	Total Phosphorus*	0.012	mg/L	0.003	EPA 365.1	05/22/13	WG662295	-

Definitions:

- mg/L Milligram per Liter
- MRL Method Reporting Limit
- ND Analyte Not Detected at or above the Method Detection Level (MDL).
- J An estimate that is less than the MRL but greater than or equal to the MDL
- N Matrix interference, spike sample recovery not within control limits
- ^ Most Probable Number per 100 mL
- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TAN Date: 5/28/13

AddyLab, LLC
2517 E. Evergreen Blvd.
Vancouver, WA 98661



Phone: 360 750-0055
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Analytical Report

Client: City of Woodland Public Works **Reference #:** 13AL0772
Project: Horseshoe Lake **Date Collected:** 05/14/13
Sample ID: 9 – Walt Fence **Date Received:** 05/14/13
Report Date: 05/28/13 **Collected By:** J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403483	E. coli	6.2	^	2.0	SM 9223 B	05/14/13 1110	32-088	JD
L636116-05	Total Phosphorus*	0.012	mg/L	0.003	EPA 365.1	05/22/13	WG662295	

Definitions: mg/L Milligram per Liter
MRL Method Reporting Limit
ND Analyte Not Detected at or above the Method Detection Level (MDL).
J An estimate that is less than the MRL but greater than or equal to the MDL
N Matrix interference, spike sample recovery not within control limits
^ Most Probable Number per 100 mL
* Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TMN Date: 5/28/13

2517 E. Evergreen Blvd.
Vancouver, WA. 98661



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Email: info@addylab.com

CHAIN OF CUSTODY REPORT

REF# 13AL0772

TURNDOWN REQUEST in Business Days*

Organic & Inorganic Analyses

7 5 4 3 2 1 <1

STD. Petroleum Hydrocarbon Analyses

5 4 3 2 1 <1

STD. OTHER Please Specify

OTHER

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT / SYSTEM NAME: Stacie Kelsey

REPORT TO: ADDRESS OR EMAIL
Stacie.Kelsey@dfw.wa.gov
bartkowskij@ci.woodland.wa.us

PHONE: (360) 601-1168 / 225-7999 FAX:

INVOICE TO:
Woodland City (Jody Bartkowskij)
Public Works
Woodland, WA

PO NUMBER:

PROJECT NAME: Horseshoe Lake

PROJECT NUMBER: 13AL0321

SAMPLED BY: J. Bartkowskij

REQUESTED ANALYSES									
T Phos.	E. coli	SM 9223B							
↓	↓								

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME
1. Skate Park - 1	5-14-13 9:15
2. F Dock - 3	✓ 9:25
3. left of Kitchen - 4	✓ 9:35
4. Raspberry - 7	✓ 9:50
5. Wall's Fence - 9	✓ 10:00
6.	
7.	
8.	
9.	
10.	

MATRIX (W, S, O)	# OF CONT.	SAMPLE LOCATION / COMMENTS
W		LOW-level T. Phos
↓		

Compliance: WA OR System / PWS ID #: _____ DOH Source / Source ID #: _____ Group (WA Only): A B

Sample Composition: Single Source _____ Blended _____ Composite _____ Distribution Sample _____

Sample Taken: Before Treatment _____ After Treatment _____ No Treatment _____ County _____

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME	TEMP
<u>Jody Bartkowskij</u>	<u>City of Woodland</u>	<u>5/14/13</u>	<u>10:40</u>	<u>Dellin Kaulen</u>		<u>5/14/13</u>	<u>10:40</u>	<u>18°C</u>
<u>County of Pierce</u>	<u>AL</u>							

AddyLab, LLC
2517 E. Evergreen Blvd.
Vancouver, WA. 98661



Phone: 360-750-0055
Fax: 360-750-0057
Email: reports@addylab.com

June 13, 2013

Stacie Kelsey
Inland Fish Program
Region 5 WDFW
Stacie.Kelsey@dfw.wa.gov

Dear Ms. Kelsey:

Enclosed are the laboratory reports for the Horseshoe Lake water samples collected 6/3/13. All results are intended to be considered in their entirety and AddyLab, LLC is not responsible for use of less than the complete report. Results apply only to the samples submitted to the laboratory for analysis.

If you have any questions, please give me a call. The reference number for this work is 13AL0902. Thank you for your business.

Sincerely,

A handwritten signature in cursive script that reads "Thomas A. Newman".

Thomas Newman
Quality Manager

AddyLab, LLC
 2517 E. Evergreen Blvd.
 Vancouver, WA 98661



Phone: 360 750-0055
 Fax: 360 750-0057
 Email: reports@addylab.com

Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0902
Project:	Horseshoe Lake	Date Collected:	06/03/13
Sample ID:	4 - Kitchen	Date Received:	06/03/13
Report Date:	06/13/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403977	E. coli	1	^	2.0	SM 9223 B	06/03/13 1330	32-118	CLA
L639198-01	Total Phosphorus*	0.0041	mg/L	0.003	EPA 365.1	06/12/13	WG665735	-

Definitions:

- mg/L Milligram per Liter
- MRL Method Reporting Limit
- ND Analyte Not Detected at or above the Method Detection Level (MDL).
- J An estimate that is less than the MRL but greater than or equal to the MDL
- N Matrix interference, spike sample recovery not within control limits
- ^ Most Probable Number per 100 mL
- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TAN Date: 6/14/13



Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0902
Project:	Horseshoe Lake	Date Collected:	06/03/13
Sample ID:	1 – Skate Inlet	Date Received:	06/03/13
Report Date:	06/13/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403976	E. coli	1	^	2.0	SM 9223 B	06/03/13 1330	32-118	CLA
L639198-02	Total Phosphorus*	0.0047	mg/L	0.003	EPA 365.1	06/12/13	WG665735	-

Definitions:

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- * Total Phosphorus analyzed at ESC.

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Reviewed By: *TNW* Date: 6/14/13

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 2517 E. Evergreen Blvd.
 Vancouver, WA 98661



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 Fax: 360 750-0057
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Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0902
Project:	Horseshoe Lake	Date Collected:	06/03/13
Sample ID:	3 – Fleischman Dock	Date Received:	06/03/13
Report Date:	06/13/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403978	E. coli	3	^	2.0	SM 9223 B	06/03/13 1330	32-118	CLA
L639198-03	Total Phosphorus*	0.0045	mg/L	0.003	EPA 365.1	06/12/13	WG665735	

Definitions:

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- * Total Phosphorus analyzed at ESC.

Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TDN Date: 6/14/13

AddyLab, LLC
 2517 E. Evergreen Blvd.
 Vancouver, WA 98661



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 Fax: 360 750-0057
 Email: reports@addylab.com

Analytical Report

Client:	City of Woodland Public Works	Reference #:	13AL0902
Project:	Horseshoe Lake	Date Collected:	06/03/13
Sample ID:	9 – Walt's	Date Received:	06/03/13
Report Date:	06/13/13	Collected By:	J. Bartkowski

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14403980	E. coli	2	^	2.0	SM 9223 B	06/03/13 1330	32-118	CLA
L639198-05	Total Phosphorus*	0.0058	mg/L	0.003	EPA 365.1	06/12/13	WG665735	-

Definitions:

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- * Total Phosphorus analyzed at ESC.

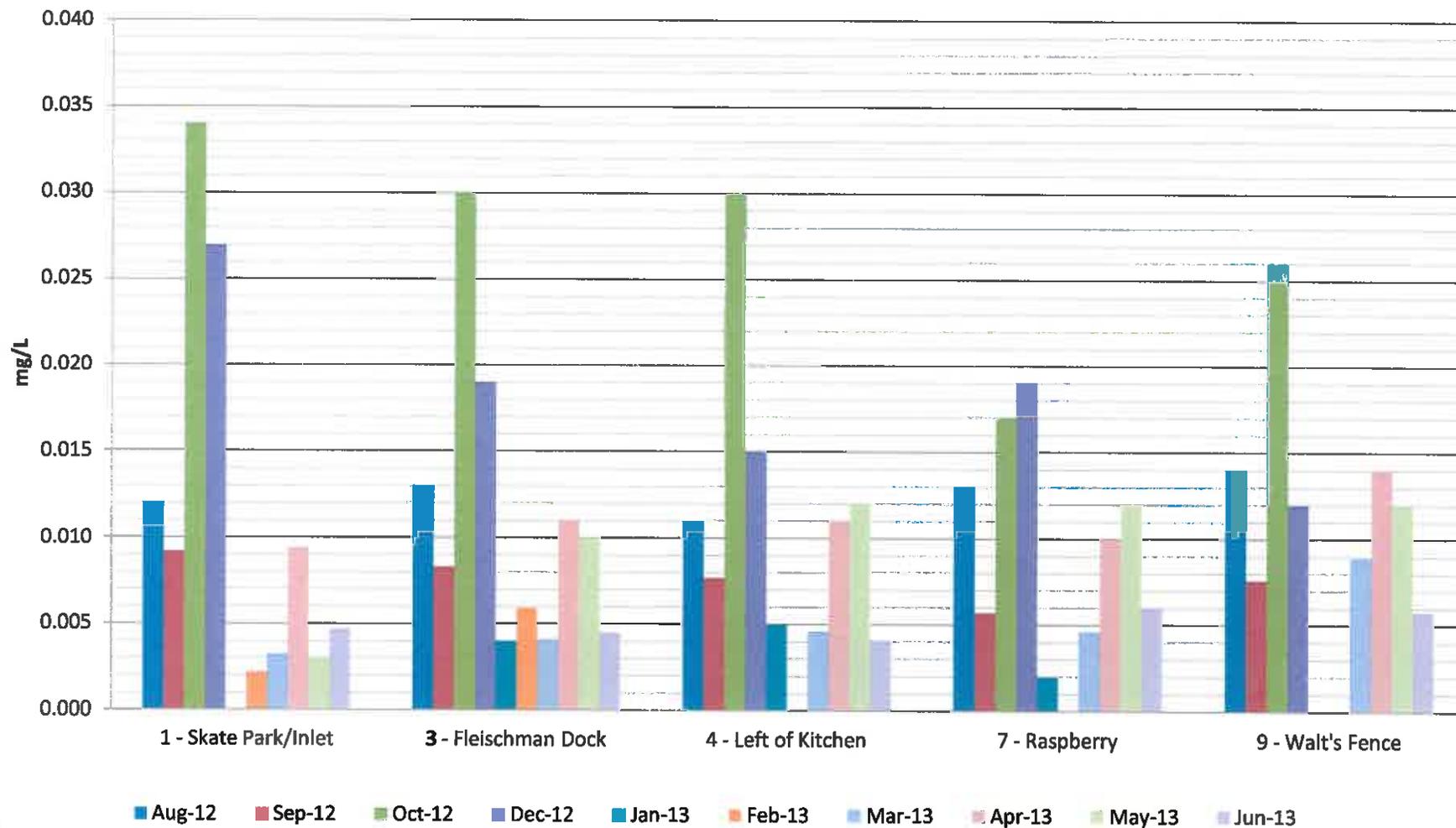
Test results for pH, color, anions except o-phosphorus, E. coli, coliform bacteria, and turbidity conducted by AddyLab meet all the requirements of NELAC, unless otherwise stated in writing, and relate only to these samples. If you have any questions regarding these results contact Thomas Newman, Quality Manager.

Reviewed By: TDW
 AddyLab, LLC

Date: 6/14/13
 Analytical Report
 Page 5 of 5

Version # 2a Sep 30, 2004

Horseshoe Lake Addy Lab Test Results Phosphorus



Horseshoe Lake Addy Lab Test Results E. Coli

