HORSESHOE LAKE MANAGEMENT COMMITTEE AGENDA

5:00 P.M. - THURSDAY, SEPTEMBER 12, 2013
Woodland Council Chambers
100 Davidson Avenue – Woodland, WA 98674

I. Call to Order

II. Minutes for 5/9/13 and Notes for 7/11/13; (6/13/13 & 8/8/13 Cancelled)

III. Continued Business
   A. Pump & Lake Update
      - Pump Trespassing
      - Pump Maintenance Log
      - Lake Tracking Report
   B. Water Quality Testing
      - DOE Visit and Blue-Green Algae Program
      - July 12, 2013 and August 8, 2013 Results
      - Phosphorus and E. Coli Graphs
   C. Budget
      - Expenses to Date
   D. Goals & Priorities

IV. New Business
   A. Committee Vacancy
      - Appointment of Bill Dunlap

V. Other
   A. News Article - Crazy for Carp, Trash Fish

VI. Adjourn - Next Meeting October 10, 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

Jody Bartkowski - Secretary
CITY OF WOODLAND
HORSESHOE LAKE MANAGEMENT COMMITTEE NOTES
JULY 11, 2013

The Horseshoe Lake Management Committee met on the above date, at the Woodland City Hall, 100 Davidson Avenue Street, Woodland, WA 98674. Chairman Tom Golik called the meeting to order 5:08 p.m. Roll call found four of eight Members (Tom Golik, Walt Church, Mike Curry, and Neil Van Horn), Council Representative Scott Perry, and Secretary Jody Bartkowski present.

Due to a lack of quorum the regular meeting was cancelled. Those members present remained and the following items were discussed:

Minutes. Approval of May 9, 2013 minutes postponed until the next regular meeting.

Lake Pumping. Discussed pumping fluctuations, low readings corresponding with low river levels, the Lake losing water with pumping at its maximum, Lake levels at the outlet structure, Lake visibility, and ideas for the new Horseshoe Lake Tracking Form.

Water Quality & Sampling. Discussion ensued regarding increased levels of E. coli near the drain pipe in the bank at Raspberry Park, possible reasons for higher levels in this area, and acceptable contaminate levels.

Budget. Staff reported that Cowlitz County paid their water quality testing invoice. Discussed requests for 2014 and indications that Cowlitz will not participate due to current testing results.

Milfoil Eradication. Discussed the need to get with DFW regarding the transport of carp from Silver Lake.

Other.
• Notice of the Committee vacancy will be published in the reflector and on the City website.
• Walt Church brought up the idea of incorporating rules for the height of retaining walls. Discussion ensued regarding the reasons, previous high water events, and pending updates to the Shoreline Management Plan.
• Discussed a boat seen pulling an inner tube and doing cookies, subsequent calls to the police department, and conversations reminding the boaters of the "no wake" designation. Further discussion included the current location of buoys and possible relocation. A vote was not taken due to the lack of a quorum, but the general feeling is to leave the buoys as is.

Those present adjourned at approximately 5:55 p.m. The next regular meeting will be held Thursday, August 8, 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
Jody Bartkowski

From: Bart Stepp  
Sent: Thursday, August 15, 2013 12:43 PM  
To: London, Mike; Hancock, Chad  
Cc: Jody Bartkowski  
Subject: RE: How much abuse can the pump station take?

It would definitely help.

Bart Stepp, PE  
City of Woodland  
Public Works Director  
PO Box 9; 300 E. Scott Ave.  
Woodland, WA 98674  
(360) 225-7999  
(360) 225-7467 (fax)

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From: London, Mike [mailto:LondonM@wsdot.wa.gov]  
Sent: Thursday, August 15, 2013 12:32 PM  
To: Bart Stepp; Hancock, Chad  
Subject: RE: How much abuse can the pump station take?

I agree. I think we will put “No Trespassing” signs on and around the Platform/Pump shed area. That relieves us of liability, and gives us something we can enforce if problems like litter and such do arise. Do you think this will alleviate the Horseshoe Lake committee’s concerns?

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Mike London

SW Region Bridge Supervisor

From: Bart Stepp [mailto:SteppB@ci.woodland.wa.us]  
Sent: Thursday, August 15, 2013 7:57 AM  
To: London, Mike; Hancock, Chad  
Subject: RE: How much abuse can the pump station take?

This e-mail started from a member of our Horseshoe Lake Committee. The City doesn’t have any authority to limit access to the airport and I’m sure we would get an earful if we did because it is used by lots of fisherman so I don’t think that is an achievable solution. I don’t know if no trespassing signs for just the pump platform would work but they would be something.

Bart Stepp, PE  
City of Woodland  
Public Works Director  
PO Box 9; 300 E. Scott Ave.  
Woodland, WA 98674  
(360) 225-7999  
(360) 225-7467 (fax)

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From: London, Mike [mailto:LondonM@wsdot.wa.gov]  
Sent: Tuesday, August 13, 2013 1:33 PM
To: Bart Stepp; Hancock, Chad  
Subject: RE: How much abuse can the pump station take?

There aren’t any restrictions as of right now. If the City of Woodland wishes to limit people accessing the sight I can pass this up, but it would be more cost effective to put up no trespassing signs around the airport, and have the State Patrol ticket any violators.

Who is the person that generated this thread, and who does he represent? What is the City’s position on limiting access to the airport?

Mike London  
Department of Transportation  
SW Region Bridge Supervisor

From: Bart Stepp [mailto:SteppB@ci.woodland.wa.us]  
Sent: Tuesday, August 13, 2013 1:18 PM  
To: London, Mike; Hancock, Chad  
Subject: RE: How much abuse can the pump station take?

Your pump station is actually outside of City Limits so the police wouldn’t write tickets. Also, I know people fly in and out of that airport just on their own. Are there any legal restrictions to access to that airport since it is a WSDOT facility? That is a pretty big fishing spot in town.

Bart Stepp, PE  
City of Woodland  
Public Works Director  
PO Box 9; 300 E. Scott Ave.  
Woodland, WA 98674  
(360) 225-7999  
(360) 225-7467 (fax)

From: London, Mike [mailto:LondonM@wsdot.wa.gov]  
Sent: Tuesday, August 13, 2013 1:10 PM  
To: Bart Stepp; Hancock, Chad  
Subject: RE: How much abuse can the pump station take?

Thanks Bart,

I will go up there and check it out. Any decision to put a fence around the pump station would have to be confirmed by a couple of people above my position. I will pass this information up. I have seen people fishing from the platform before, as well as people walking their dogs between the river and the run way. It may be more effective and easier to enforce, if the whole airport behind the fenced area is off limits rather than just the pump. That way, anyone seen out there could be ticketed. Do you know if the Woodland Police would be willing to write trespassing violations for any unauthorized people on the airport property?

Thanks,

Mike London  
Department of Transportation  
SW Region Bridge Supervisor

From: Bart Stepp [mailto:SteppB@ci.woodland.wa.us]  
Sent: Monday, August 12, 2013 12:25 PM  
To: Hancock, Chad; London, Mike  
Subject: FW: How much abuse can the pump station take?
FYI,

See the picture below. The Horseshoe Lake Committee has talked several times about people standing out on the stand. There is also a mention of homeless now living under it, not sure if that is true. I'm not sure if you have any plans to secure the lake pump platform or not but wanted to give you the info.

Thanks,

Bart Stepp, PE
City of Woodland
Public Works Director
PO Box 9; 300 E. Scott Ave.
Woodland, WA 98674
(360) 225-7999
(360) 225-7467 (fax)

From: Scott Perry [mailto:ScottPerry@CNI.Net]
Sent: Monday, August 12, 2013 11:10 AM
To: Bart Stepp
Subject: FW: How much abuse can the pump station take?

OK so I did find you on this computer.
Scott

From: Scott Perry [mailto:ScottPerry@CNI.Net]
Sent: Monday, August 12, 2013 9:26 AM
To: Jody Bartkowski; Chief Rob Stephenson
Subject: FW: How much abuse can the pump station take?

Jody –on this computer I don’t have Bart’s e-mail so you might pass on.

1. As critical as this is to the city it might be best they be kept out as there has been wire theft reported.
2. I was also told there was a VERY BAD smell yesterday down by Walt meats – far worse than normal. With some concern they were having a sewer problem.
3. I was also told they are moving back into the area across from the AMPM – I realize that is Clark County but FYI.

By the way my boat is now operational.
Have a GREAT week.
Scott

From: Theodore St Mars [mailto:charlygirl2@gmail.com]
Sent: Saturday, August 10, 2013 10:39 AM
To: Scott Perry
Subject: How much abuse can the pump station take?

I've seen this guy standing up on the electrical box many times. Maybe the city should think about fencing the pump station off with a tall fence and warning signs that "intruders will be shot and survivors will be executed !!" Now that the homeless have moved in under the platform, who knows what's next. Any copper or steel to be stolen?
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<td>72°</td>
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<td>8.31</td>
<td>78.8° Down 3&quot;</td>
<td>73°</td>
<td>8'</td>
<td>Closed</td>
<td>Warm weather.</td>
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<tr>
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<td>9.64</td>
<td>85.1° Down 7&quot;</td>
<td>74°</td>
<td>8' 6&quot;</td>
<td>Closed</td>
<td>Still hot.</td>
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<td>8.84</td>
<td>80.5° Down 9&quot;</td>
<td>73°</td>
<td>8'</td>
<td>Closed</td>
<td>Starting to look ugly.</td>
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<td>7.63</td>
<td>86.7° Down 12&quot;</td>
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<td></td>
<td></td>
<td>Slowest drop during June/July in years!</td>
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<td>75°</td>
<td>8'</td>
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<td>Still ok to swim.</td>
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<td>77.0° Down 17&quot;</td>
<td>74°</td>
<td>6'</td>
<td>Closed</td>
<td>Squirrel swimming in the Lake today!</td>
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<tr>
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<td>8.28</td>
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<td>30-Aug-13</td>
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<td>Valve Status</td>
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<td>70.6&quot;</td>
<td>6.7</td>
<td>8.67</td>
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<tr>
<td>7-Sep-13</td>
<td>7.60</td>
<td>80.1°</td>
<td>Down 22&quot;</td>
<td>73°</td>
<td>7'</td>
<td>Closed</td>
<td>Rain appears to be bringing level up.</td>
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<td>83.4&quot;</td>
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<td>13-Sep-13</td>
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<td>15-Sep-13</td>
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<td>Closed</td>
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</tbody>
</table>
Below is some information on algae testing that Ecology can do for us. Might want to include info in Horseshoe Lake Packet.

Bart Stepp, PE
City of Woodland
Public Works Director
PO Box 9; 300 E. Scott Ave.
Woodland, WA 98674
(360) 225-7999
(360) 225-7467 (fax)

Hi Bart,

I hope things are going well there.

Thanks for the phone message wanting more information about Ecology’s blue-green algae toxicity testing program. Here is a link to some information about the program/service http://www.ecy.wa.gov/programs/wq/plants/algae/index.html You can link to the algae bloom monitoring page on the left. Lizbeth Seebacher is the person to contact regarding collecting and sending a sample in for analysis. Her contact information is on the web page, and I have cc’ed her here. Also her phone number is (360) 407-6938.

I can also write a summary of what we found during our plant survey. When do you need it? I’m still pretty busy with field work, but that should be winding down in the next couple of weeks.

Jenifer

Jenifer Parsons
Aquatic Plant Specialist
Washington Department of Ecology
15 W Yakima Ave, Suite 200
Yakima, WA 98902
509-457-7136
509-834-3868 (cell)
Introduction

In 2005, the Washington State Legislature established funding for an algae control program and asked the Washington Department of Ecology (Ecology) to develop the program. Reducing nutrient input to lakes is the only long-term solution to prevent algae blooms. However, the amount of money available for this program (about $250,000 per year) is not enough to fund comprehensive lake-wide and watershed-wide nutrient reduction projects. Instead the program focuses on providing local governments with the tools they need to manage algae problems. The program targets blue-green algae (also known as cyanobacteria) because these algae pose a health risk to humans, pets, and livestock.

Ecology’s algae program provides for:
- Algae identification.
- Toxicity testing (microcystin, anatoxin-a, cylindrospermopsin, and saxitoxin).
- An on-line database to post the laboratory results.
- Small grants (up to $50,000) for algae or nutrient management projects (see the latest funding list)

Aquatic Algae Control Program Legislative Reports

- Click here to view the 2009-2011 Aquatic Algae Control Program Legislative Report.
- Click here to view the 2007-2009 Freshwater Algae Control Program Legislative Report.
- Click here to view the 2005-2007 Freshwater Algae Control Program Legislative Report.

Ecology began funding small grants to local governments in fall 2007 (see the funding list). The Washington Department of Health (DOH) has developed statewide recreational guidelines for cyanobacterial toxins (microcystin, anatoxin-a, cylindrospermopsin, and saxitoxin) under a grant provided by Ecology. These guidelines will help local governments make decisions about when to post health advisories and when to close waters to recreation. DOH has also developed educational signs and outreach materials about algal blooms.

Join Ecology’s Freshwater Algae Program List Serve

Ecology has set up a list serve for freshwater algae. The Freshwater Algae Program List serve will act as an information exchange and discussion forum about freshwater algae in Washington. A list serve is a program that allows people to send email to one address, which automatically resends that message to all of the other subscribes on the list. If you would like to join the list click here for directions on how to subscribe to the list.

What is an Algae Bloom?

Many Washington lakes and even some rivers have problems with excessive growth of algae. Algae can be smelly and unsightly as well as being toxic to humans, pets, and livestock. Algae grow rapidly when sunlight, temperature, and nutrients are adequate. Within only a few days, a clear lake can become cloudy with algae. When an algal species reproduces rapidly and reaches high concentrations, it is called an algae bloom. The nutrients phosphorus and nitrogen are found in animal and human waste (sewage), in fertilizers, and even in rainwater. Too much phosphorus and nitrogen lead to nutrient rich water bodies. Nutrient-enrichment leads to algae blooms.

There are many types of algae. Most are harmless, some are considered nuisances, and others are important to lake productivity. Blue-green algae are actually bacteria called cyanobacteria. They can create problems when they form blooms. The blooms happen mostly in the summer or fall, but can occur anytime. Blue-green blooms may float to the surface and can be several inches thick near the shoreline. A blue-green algae bloom often looks like green paint floating on the water and is hard to pick up or hold.

Why is Ecology particularly concerned about blue-green algae?

Blue-green algae blooms pose a human health concern and have killed pets and livestock. Although most blue-green blooms are not toxic, some blue-green algae produce nervous system or liver toxins. Toxicity is hard to predict. A single species of algae can have toxic and non-toxic strains. A bloom that tests non-toxic one day can become toxic the next day.

People may become ill after swimming or water skiing in lakes with toxic blue-green algae. Human health effects may include stomach aches, vomiting, diarrhea, skin rashes, and nerve and liver damage. Pets and wildlife have died after exposure to toxic blue-green algae in Washington lakes. Blue-green blooms affect lake recreation creating economic losses.

How can you get more information about the algae program?

Read more about algae, their impacts, grants, and control options by clicking on the navigation links on the left side of the screen. You may also contact the following people directly for more information about the algae program.

Lizbeth Seebacher - (360) 407-6938; lsee461@ecy.wa.gov

Banner photograph courtesy of professional photographer Bruce Andre at http://www.bruceandre.com

Detailed search for your lake

This database contains the most current toxicity data available. Since there is a lag time from the date of sample to the date of analysis, be sure to check the sample date when looking at data or before you use the lake. Remember to use caution and avoid scums. "When in doubt, stay out!"

Your local jurisdiction may have more specific information about your lake. Questions? Contact Lizbeth Seebacher at Department of Ecology.

If a lake is not listed, it has not been tested for toxic algae through the ecology program.

The pins on the map represent the center of small lakes, regardless of where the sample was taken. To find more precise location information, download the toxin data and click the "view scum info" link. That is where specific sampling location information will be if it was provided. On larger lakes, (such as Lake Washington, Moses Lake and Potholes) pins represent the location of the sample if provided.

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<th>MDL (μg/L)</th>
<th>Above State Guideline</th>
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</table>
July 25, 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 7/12/13. 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 13AL1157. Thank you for your business.

Sincerely,

Thomas Newman
Quality Manager
Client: City of Woodland Public Works  Reference #: 13AL1157
Project: Horseshoe Lake  Date Collected: 07/12/13
Sample ID: 9 – Walt’s Fence  Date Received: 07/12/13
Report Date: 07/25/13  Collected By: J. Bartkowski

<table>
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<th>Units</th>
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<td>EPA 365.1</td>
<td>07/20/13</td>
<td>WG872405</td>
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</tr>
</tbody>
</table>

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: [Signature]  Date: 7/25/13
### Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 7 – Raspberry Drain  
**Report Date:** 07/25/13

**Reference #:** 13AL1157  
**Date Collected:** 07/12/13  
**Date Received:** 07/12/13  
**Collected By:** J. Bartkowski

<table>
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<td>L646476-04</td>
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**Definitions:**
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- ^: 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: [Signature]  
Date: 7/25/13
## Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 3 – F Dock  
**Report Date:** 07/25/13

<table>
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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: [Signature]  
Date: 7/25/13
## Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 1 – Skate/Inlet  
**Report Date:** 07/25/13

<table>
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**Definitions:**  
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- **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: [Signature]  
Date: 7/25/13
### Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 4 – Left of Kitchen  
**Report Date:** 07/25/13  
**Reference #:** 13AL1157  
**Date Collected:** 07/12/13  
**Date Received:** 07/12/13  
**Collected By:** J. Bartkowski

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<td>L646476-03</td>
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**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:  
Date: 7/25/13
REPORT OF ANALYSIS

July 22, 2013

ESC Sample #: L646476-04
Site ID:
Project #: 13AL1157

Tom Newman
AddyLab, LLC
2517 East Evergreen Blvd.
Vancouver, WA 98661

Date Received: July 13, 2013
Description: Horseshoe Lake
Sample ID: RASPBERRY DRAIN 7
Collected By: JMB
Collection Date: 07/12/13 09:27

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U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL

Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/22/13 06:08 Printed: 07/22/13 06:09
### Quality Assurance Report

**Level II**

**L646476**

**July 22, 2013**

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**Batch number / Run number / Sample number cross reference**

W6G672405: R27514600: L646476-01 02 03 04 05

- * Calculations are performed prior to rounding of reported values.
- * Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'
# CHAIN OF CUSTODY REPORT

**CLIENT / SYSTEM NAME:** Judy Bartkowski / Stacy Kelsey  
**REPORT TO:** Address or email bartkowskj@ci.woodland.wa.us  
**PHONE:** (360) 225-7999  
**PROJECT NAME:** Horsethief Lake  
**PROJECT NUMBER:** 12140217  
**SAMPLED BY:** Jggg  
**TESTS REQUESTED**

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<th>O</th>
<th># OF CONT.</th>
<th>SAMPLE LOCATION / COMMENTS</th>
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<td>2.Water 2</td>
<td>7/2/13 9:40</td>
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<td>3.Water 3</td>
<td>7/2/13 9:52</td>
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<td>4.Water 4</td>
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</tbody>
</table>

**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  
**RELINQUISHED BY:** Judy Bartkowski  
**COMPANY:** City of Woodland  
**DATE:** 7/2/13  
**TIME:** 11:17  
**RECEIVED BY:** (Signature)  
**COMPANY:**  
**DATE:** 7/2/13  
**TIME:** 11:17  
**TEMP:** 22°C
August 21, 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 08/08/13. 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 13AL1323. Thank you for your business.

Sincerely,

[Signature]

Thomas Newman
Quality Manager
## Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 1 – Skate/Inlet  
**Report Date:** 08/21/13

<table>
<thead>
<tr>
<th>Lab #</th>
<th>Analyte</th>
<th>Result</th>
<th>Units</th>
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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: [Signature]  
Date: 8/21/13
Analytical Report

Client: City of Woodland Public Works
Project: Horseshoe Lake
Sample ID: 3 – F Dock
Report Date: 08/21/13

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- ^: Most Probable Number per 100 mL
- *: Total Phosphorus analyzed at ESC.

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Reviewed By: [Signature]      Date: 8/21/13
Analytical Report

Client: City of Woodland Public Works  
Project: Horseshoe Lake  
Sample ID: 4 – Left of Kitchen  
Report Date: 08/21/13  
Reference #: 13AL1323  
Date Collected: 08/08/13  
Date Received: 08/08/13  
Collected By: JMB

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- *: Total Phosphorus analyzed at ESC.

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Reviewed By: [Signature]  
Date: 8/21/13
Analytical Report

Client: City of Woodland Public Works  Reference #: 13AL1323
Project: Horseshoe Lake  Date Collected: 08/08/13
Sample ID: 7 – Raspberry Drain  Date Received: 08/08/13
Report Date: 08/21/13  Collected By: JMB

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Reviewed By: [Signature]  Date: 8/21/13  Analytical Report
AddyLab, LLC  Page 4 of 5
### Analytical Report

**Client:** City of Woodland Public Works  
**Project:** Horseshoe Lake  
**Sample ID:** 9 – Walt’s Fence  
**Report Date:** 08/21/13  
**Reference #:** 13AL1323  
**Date Collected:** 08/08/13  
**Date Received:** 08/08/13  
**Collected By:** JMB

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**Reviewed By:**  
AddyLab, LLC  
**Date:** 8/2/13  
**Version #:** 2a Sep 30, 2004
# Chain of Custody Report

**Client/System Name:** Judy Bartkowski  
**Report To:** Address or Email  
**Phone:** 360-750-0655  
**Fax:** 360-750-0057  
**PO Number:** 13AL0321  
**Sampled By:** Grnd  
**Requested Analyses:**

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</tr>
<tr>
<td>2. F. Rock</td>
<td>8/18/13 - 9:53</td>
<td>✔</td>
</tr>
<tr>
<td>3. Hillcrest</td>
<td>8/18/13 - 9:49</td>
<td>✔</td>
</tr>
<tr>
<td>4. Raspberry</td>
<td>8/18/13 - 9:32</td>
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<tr>
<td>5. Walts Fence</td>
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**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

**Relinquished By:**  
- **Company:** City of Woodland  
- **Date:** 8/18/13  
- **Time:** 11:21  
- **Received By:** Yelinn Radrier  
- **Date:** 8/18/13  
- **Time:** 11:21  

**Sample Location/Comments:**

Page 1 of 1
August 1, 2013

William R. Dunlap
110 S. Pekin Road
Woodland, WA 98674

Re: Horseshoe Lake Management Committee

Dear Mr. Dunlap,

This letter will confirm your appointment to the City of Woodland Horseshoe Lake Management Committee, effective August 1, 2013 to an open ended term.

The Committee now meets on the second Thursday of each month in the council chambers at City Hall, provided there is business to consider. Please contact Jody Bartkowski at the number below to obtain your agenda and packet prior to the meeting.

If you have any questions, please direct them to Bart Stepp, Public Works Director or Jody Bartkowski, Horseshoe Lake Management Committee Secretary at 225-7999.

Congratulations on this appointment and we appreciate your effort and civic contribution in this important position.

Sincerely,

Grover B. Laske
Mayor

cc: Bart Stepp, Public Works Director
Park Board Secretary
Clerk Treasurer File
Crazy for carp - the 'trash fish' that's taking the angling world by storm

By Shannon L. Cheesman, Multimedia Journalist / Travel & Outdoors Published: Aug 2, 2013 at 8:31 AM PDT

PORTLAND, Ore. - For years, the big-lipped, slimy-looking, bottom-feeding carp has been dubbed a 'trash fish' and snubbed by anglers.

The carp is, after all, on the list of the world's top 100 invasive species. But have they been getting a bad rap?

Some anglers believe that's the case and they're putting aside all their notions to try their hand at catching the lowly carp. And it's becoming one of the latest, coolest angling trends in the United States.

"It's just been blowing up," said John "Montana" Bartlett, author of the Carp on the Fly blog, which has the tongue-in-cheek tag line - "I used to be a respectable angler...now I fly fish for carp." Bartlett, who has been going after carp for 12 years now, said in the past couple of years there has been an explosion of interest in the angling community.

"I think it's mostly the 20 to 35 age range," he said. "They're just looking for something different. The trout rivers are crowded and the steelhead rivers are crowded."

Bartlett recently held a class on fly fishing for carp at the Royal Treatment Fly Fishing shop in West Linn, Ore. About a dozen anglers showed up to glean what they could - shooting questions at him right and left. They were keenly interested in learning the techniques.

Bartlett (pictured) is a self-taught expert on fly fishing for carp. Back in the day, he was one of just a few locals willing to take a ribbing from their fishing pals to try it out.
"When I first started on the Columbia, there really were not many guys doing it," he said. "So there really wasn't much to go on. None of us had really figured out how to do it consistently."

He and other early adopters learned from trial and error. "We'd go out to the river and we'd see a ton of fish and not catch them," he said. "It was frustrating, but fun. We eventually started putting it together and started catching fish."

So what is attracting folks to carp all of a sudden? Well for one, they are a big challenge.

"Carp are way harder to catch," said Bartlett. "It's not even close - steelhead and trout are way easier."

"It's completely different than trout," said Ryan Kidwell, one of the anglers who showed up to hear Bartlett talk. Kidwell has been fly fishing all his life and said he was looking for something different to try. He's already caught a couple of them. "As soon as you hook one you've got to be careful you don't burn your hands on the line, they pull so hard," he said.

There's another reason that fishing for carp is getting popular - there is plenty to go around and there is no limit on how many you can catch.

"But what are you going to do with them?" said Joel La Follette, owner of Royal Treatment Fly Fishing in West Linn, where Bartlett's class was held. That's a good question.

Bartlett said he's a catch and release guy, which of course is the easiest way to solve the problem.

You can eat carp if you like, although some people think that's not such a good idea. Carp can survive in pretty bad water and what is in their bodies could make a person sick. But one fisherman we talked to at the fly shop said as long as the carp comes from clean water, like the Clackamas River or Sandy River, they're fine - and actually tastes pretty good.

Some folks cut them up and use them for crab bait at the coast. We got mixed reviews at the fly shop on whether crabs actually like carp - the general consensus there seemed to be that chicken gizzards work better.

If neither of those options works, you can always use carp in your yard for mulch. There's nothing like fish guts to make your garden grow.
Of course, the one thing you don't want to do with carp (or anything else you fish or hunt for) is leave them to waste. Bartlett said he's seen folks do that.

"I'm not one of these guys who is going to say nobody should be allowed to kill carp," he said. "There's a huge resource of carp out there. If a guy wants to go out and kill 10 carp to use as crab bait or to fertilize his garden, it's not going to hurt the population."

"I just don't believe in wanton killing and leaving waste everywhere," he added. "I have a friend that bow fishes and spear fishes for carp. He kills some and brings home enough to put in his freezer and use as crab bait when he's at the coast. It makes total sense."

Now back to the idea of carp being a 'trash fish' - fishing for carp has generally been looked down upon in angling circles, at least here in the United States. But is that still the case? Yes, there is a stigma there. Kidwell told us he's had a hard time finding fishing buddies to go with him for just that reason. He said that's why he took Bartlett's class - to find some camaraderie in the carp fishing community.

"I had the same prejudice," Bartlett admitted. "I thought they were trash fish too. But the more I learned about them, the more I learned that they are actually smarter than all of the native fish that we revere so much."

"One of the problems people have is that they get carp confused with other species," he added. "They hear about the Asian carp in the Mississippi lakes. That's a totally different species than the type of carp we're talking about in the Columbia River. That species feeds on plankton and it feeds on the base layer, so it can destroy an entire eco-system. These carp don't really do that."

"Honestly, just try it," Bartlett said. "Most of the guys that live in the Pacific Northwest already have the gear they need to catch carp - they've got 6, 7 or 8 weight rods, they've got floating lines, they've got leaders that are 10 to 12 pounds. They might need a few flies, but if they like trout, they probably have flies that will work for carp too. Put your feet in the water and start walking. Throw a fly at a fish and see what happens. That's what I did."

La Follette said it's all about perspective. "Take a bone fish," he said. "People travel thousands of miles and spend thousands of dollars to go to tropical destinations and fish for bone fish. Well, what is a bone fish? A bone fish is a bottom feeding, very bony fish that feeds on clams and shrimp and anything it can get its lips around. It's kind of the same thing."

In Europe, carp are actually a highly prized fish and there's a thriving business market there in the carp world. And here in the U.S., outdoor outfitters (like Orvis) are starting to figure out there's money to be had in carp. We have a call in to Orvis to find out more about the trends they are seeing.
"Orvis is really positioning themselves to be at the forefront of carp fishing," said La Follette. "It's because we have degrading cold water systems around the United States and because carp are finding more and more foothold in habitat - and here's something that they can get more people involved in."

Orvis has *The Orvis Guide to Fly Fishing for Carp*, carp flies, carp fishing line, carp hats and more. You can even buy a [designer carp iPhone case](https://www.orvis.com) from them if you're that crazy for carp.

Orvis also puts on a number of special events, like the [CARP-O-CALYPSE](https://www.orvis.com) that's coming up in August in Kennewick, Wash. And they have a [Carp Central](https://www.orvis.com) page on their website with plenty of tips.

Even small outfitters, like [H&H Outfitters](https://www.hhoutfitters.com) (operated by two brothers out of Forest Grove, Ore.) have been finding success in carp. They told us their line of 'Holy Carp!' merchandise has been selling surprisingly well.

"Bam! The minute we put it up there it just went wild," said co-owner Cobb Hudjohn. He said when they started their small business about a year ago, they focused primarily on trout. But then they noticed the carp trend and decided to get on board.

"We started seeing this surge in carp, so we're like 'you know what - maybe we should try this,'" Hudjohn said.

La Follette, from the fly shop in West Linn, just has one warning about the craze. He doesn't want everyone to get too carried away.

"If we turn people from fly fishing for salmon and steelhead into carp fishermen, then our salmon and steelhead start to lose friends," he said. "And we need as many friends for our salmon, steelhead and trout as possible. We can't turn people to carp and say 'look, we can catch carp and we don't need these (other fish) any more!' And then we forget that we need to work on the habitat, we need to work on native restoration and things like that."

"As long as that message doesn't get lost, I'm fine with carp fishing," he said. "Because it does take some pressure off other fisheries."