

HORSESHOE LAKE MANAGEMENT COMMITTEE AGENDA

5:00 P.M. - THURSDAY, APRIL 11, 2013
Woodland Council Chambers
100 Davidson Avenue – Woodland, WA 98674

- I. Call to Order
- II. **Minute Approval - March 14, 2013**
- III. Continued Business
 - A. Pump Update
 - **Maintenance Log**
 - **River Levels**
 - B. Water Quality and Sampling
 - **March 4th Results**
 - C. Budget
 - D. Goals & Priorities
 - Milfoil Eradication
 - Public Education - **Lake Contamination Flyer**
- IV. New Business
 - A. None
- V. Other
 - A. None
- VI. Adjourn - Next Meeting May 9, 2013 at 5:00 P.M.

CITY OF WOODLAND
HORSESHOE LAKE COMMITTEE MINUTES
MARCH 14, 2013

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

Chairman Tom Golik called the meeting to order at approximately 5:04 p.m. Roll call found the following:

COMMITTEE MEMBERS:

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

MAYOR/COUNCIL:

Scott Perry, Councilmember

STAFF:

Jody Bartkowski, Secretary

MINUTES

The February 14, 2013 minutes were approved as presented.

CONTINUED BUSINESS

A. Lake Pump. Chairman Tom Golik read the response letter from the Washington State Department of Transportation (WSDOT) regarding pump output concerns. Discussion ensued regarding the fish exclusion zone, NOAA time frames, the WSDOT response being inadequate, and the Washington Department of Fish & Wildlife (WDFW) investigating further.

Committee Member Van Horn moved to give Stacie Kelsey permission to go forward within her agency for support and then contact WSDOT regarding the Committee's wishes. Mike Curry seconded the motion. Motion carried unanimously.

Further discussion ensued regarding current pumping records, the cleaning of screens, and the Lake outlet. Committee Member Walt Church made the following motion regarding the Horseshoe Lake outlet structure Standard Operating Procedures (SOP):

The following will be the Standard Operating Procedure (SOP) for the Horseshoe Lake structure and related valve:

It is imperative that the Lake be maintained at the highest level, consistent with the elevation at the outlet structure as originally installed. The valve on the Airport side should be closed at all times except when the Lake is overflowing the outlet structure as originally installed or when CDID #1 is required to regulate the flow.

1. *Maximum Lake elevation is necessary to help control the vegetation growth.*
2. *Lesser Lake elevation is not required to retard bank erosion since the passage of "5-MPH no wake" ordinance.*
3. *Solution to pollution is dilution.*
4. *Opening the valve on the airport side before water overflows the structure causes the Lake to lose water through the defective structure.*

Any changes in this SOP must be submitted in writing to the HSLMC.

Committee Member Mike Curry seconded the motion.

Discussion ensued regarding keeping the Lake water high enough to overflow the outlet structure, opening/closing of the airport valve, seepage through the Lake bottom, work done to repair leaks in structure around 2009, the location of various leaks in the structure, dye testing to find leaks, circulation, and action needed to have the valve closed.

Motion approved unanimously.

Council Member Scott Perry will contact Bart Stepp and follow up with Council as necessary. Further discussion was held regarding re-grouting and leakage around the metal parts.

- B. Water Quality & Sampling.** Ms. Kelsey reported that the hand held hydrolab used for temperature testing, etc. is being repaired but should be back in service by the last week of March. She presented raw data from the lab and graphs showing results to date. The March tests result have not been received, testing for E. coli takes longer.

Discussion was held regarding low phosphorous levels in January and February, nitrogen readings being done in the WDFW lab, Department of Ecology (DOE) standards for allowable levels, low E. coli levels, variations in temperature based on the time of year, and oxygen levels being acceptable.

Chairman Golik requested the Committee review the hand-outs and bring comments to the next meeting.

- C. Decoys/Wildlife.** The Committee requested that this item be removed from the agenda.
- D. Budget.** Bart Stepp reported that the City now has a Memorandum of Understanding with Clark County that will allow them to submit payment of requested funds. Discussion was held regarding Ron Wierenga's e-mails about future funding and low E. coli levels. Scott Perry was thanked for his successful efforts in making arrangements to guarantee payment for March's E. coli testing.

- E. Goals & Priorities.** The following items were discussed:

- **Public Education - Lake Contamination Flyer.** Discussion ensued regarding a decision to distribute the flyer with utility bills, stormwater running into the Lake, and a City ordinance regarding oil on the streets. A 4th bullet will be added under Fertilize the Lawn, Not the Lake saying "runoff eventually ends up in a body of water".

- **Milfoil Eradication.** Ms. Kelsey discussed available chemicals and different vendors. Discussion ensued regarding support from WDFW, a required count of grass carp are in the Lake, treating by either carp or chemicals (you cannot do both), how quickly the process works, water contact following treatment, and creation of a test site. The Committee gave permission for Ms. Kelsey to continuing working with the Department of Ecology to make this happen.

NEW BUSINESS

- Mike Curry reported that a special events request for Lewis River Fall Fest was presented at the February Park Board meeting. Due to the inclusion of Duck Boat rides the Board tabled their action and requested a recommendation from the Horseshoe Lake Management Committee.

Discussion ensued regarding the path taken last year, the popularity of the event, and potential paths.

Motion was made to limit Duck Boat trips during Lewis River Fall Fest to use of the north end of the Lake, allowing the boat to go around the buoy just past the welding shop, but no further south. Motion seconded and carried unanimously.

Further discussion ensued regarding this event being a fund raiser for Scott Hill Park & Sports Complex vs. Horseshoe Park and Lake.

Council Member Perry reported that the Mayor and Council are going to be looking at grant funding, the possibility of approaching people for help, charging for the majority of events held in the Park, and increasing park event fees.

OTHER

- **Oxbow Lakes.** Ms. Kelsey reported that she is doing a literature review of oxbow lakes that she will be sharing with the Committee in May. Discussion ensued regarding best management practices and the definition of an oxbow.

ADJOURNMENT

The meeting was adjourned at approximately 6:25 p.m. The next regular meeting will be held Thursday, April 11, 2013, at 5:00 p.m. at the Woodland City Hall, 100 Davidson Avenue, Woodland WA 98674.

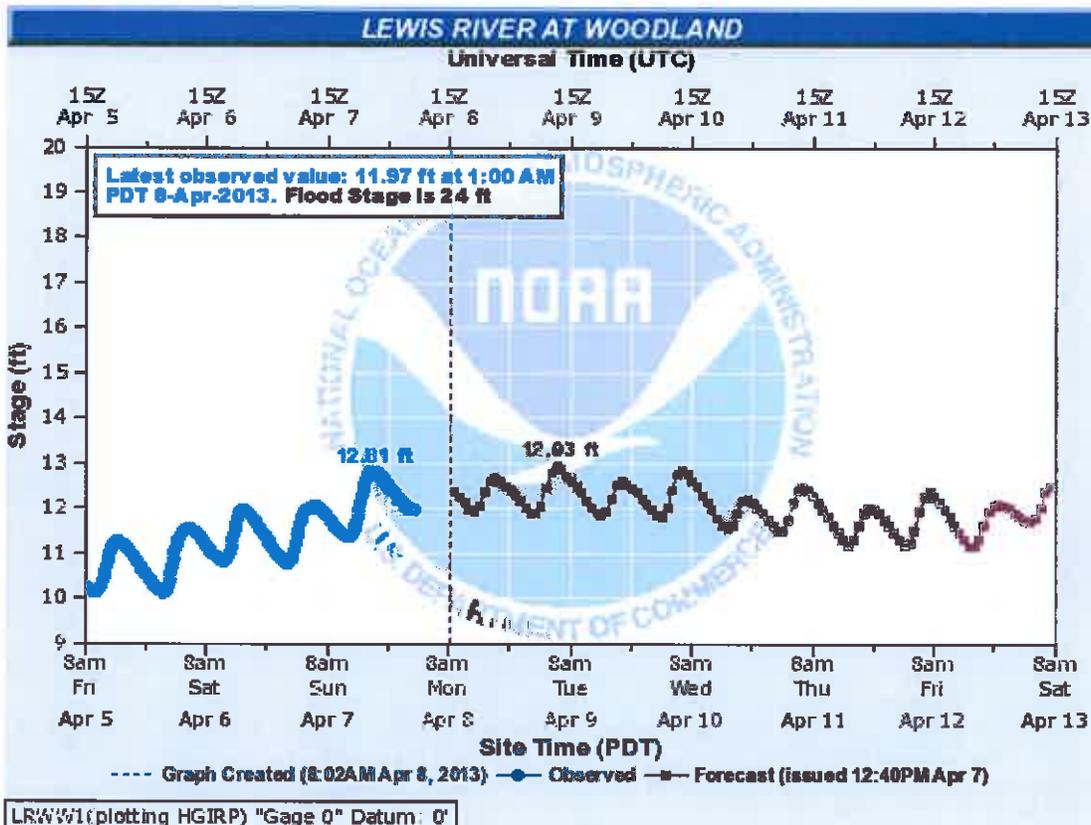
Tom Golik - Chairman

Date

Jody Bartkowski - Secretary

Date

**National Weather Service
Advanced Hydrologic Prediction Service**
water.weather.gov/ahps/



LRW/W1(plotting HGIRP) "Gage 0" Datum: 0'

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

Lewis River Levels - As of 8:00 A.M.

1-Feb-13	11.97	1-Mar-13	10.78	1-Apr-13	9.92
2-Feb-13	13.35	2-Mar-13	10.71	2-Apr-13	9.91
3-Feb-13	13.20	3-Mar-13	10.65	3-Apr-13	10.01
4-Feb-13	12.28	4-Mar-13	10.11	4-Apr-13	10.02
5-Feb-13	10.92	5-Mar-13	10.03	5-Apr-13	10.53
6-Feb-13	10.79	6-Mar-13	10.03	6-Apr-13	10.70
7-Feb-13	12.21	7-Mar-13	10.00	7-Apr-13	10.96
8-Feb-13	12.47	8-Mar-13	9.57	8-Apr-13	11.97
9-Feb-13	12.45	9-Mar-13	8.91	9-Apr-13	
10-Feb-13	12.99	10-Mar-13	8.86	10-Apr-13	
11-Feb-13	11.96	11-Mar-13	8.90	11-Apr-13	
12-Feb-13	11.78	12-Mar-13	8.97	12-Apr-13	
13-Feb-13	12.68	13-Mar-13	8.99	13-Apr-13	
14-Feb-13	10.73	14-Mar-13	8.91	14-Apr-13	
15-Feb-13	10.56	15-Mar-13	8.98	15-Apr-13	
16-Feb-13	10.52	16-Mar-13	8.95	16-Apr-13	
17-Feb-13	10.46	17-Mar-13	9.12	17-Apr-13	
18-Feb-13	12.33	18-Mar-13	8.81	18-Apr-13	
19-Feb-13	11.40	19-Mar-13	8.61	19-Apr-13	
20-Feb-13	10.24	20-Mar-13	9.68	20-Apr-13	
21-Feb-13	10.16	21-Mar-13	10.13	21-Apr-13	
22-Feb-13	10.18	22-Mar-13	8.92	22-Apr-13	
23-Feb-13	10.63	23-Mar-13	8.73	23-Apr-13	
24-Feb-13	10.51	24-Mar-13	8.84	24-Apr-13	
25-Feb-13	10.46	25-Mar-13	8.61	25-Apr-13	
26-Feb-13	10.62	26-Mar-13	8.71	26-Apr-13	
27-Feb-13	10.55	27-Mar-13	8.83	27-Apr-13	
28-Feb-13	10.59	28-Mar-13	8.96	28-Apr-13	
		29-Mar-13	9.06	29-Apr-13	
		30-Mar-13	9.09	30-Apr-13	
		31-Mar-13	9.66		

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



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

March 20, 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 3/4/13. 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 13AL0321. 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 #:** 13AL0321
Project: Horseshoe Lake **Date Collected:** 03/04/13
Sample ID: 3 – F Dock **Date Received:** 03/04/13
Report Date: 03/20/13 **Collected By:** Stacie Kelsey

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14401539	E. Coliform	< 1	^	2.0	SM 9223 B	03/04/13 1300	31-125	CLA
L623256-02	Total Phosphorus*	0.0041	mg/L	0.003	EPA 365.1	03/13/13	WG650409	-

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: *GM* Date: 3/20/13

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 #:	13AL0321
Project:	Horseshoe Lake	Date Collected:	03/04/13
Sample ID:	4 – Left of K	Date Received:	03/04/13
Report Date:	03/20/13	Collected By:	Stacie Kelsey

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14401540	E. Coliform	2.0	^	2.0	SM 9223 B	03/04/13 1300	31-125	CLA
L623256-03	Total Phosphorus*	0.0046	mg/L	0.003	EPA 365.1	03/13/13	WG650409	-

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: CSM Date: 3/20/13

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Phone: 360 750-0055
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Analytical Report

Client: City of Woodland Public Works
Project: Horseshoe Lake
Sample ID: 7 - Raspberry
Report Date: 03/20/13

Reference #: 13AL0321
Date Collected: 03/04/13
Date Received: 03/04/13
Collected By: Stacie Kelsey

Lab #	Analyte	Result	Units	MRL	Method	Date Analyzed	Batch	Analyst
14401541	E. Coliform	1.0	^	2.0	SM 9223 B	03/04/13 1300	31-125	CLA
L623256-04	Total Phosphorus*	0.0046	mg/L	0.003	EPA 365.1	03/13/13	WG650409	-

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: TSN Date: 3/20/13



YOUR LAB OF CHOICE

AddyLab, LLC
Tom Newman
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Vancouver, WA 98661

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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

Quality Assurance Report
Level II

L623256

March 13, 2013

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Phosphorus, Total	< .003	mg/l			WG650409	03/13/13 10:22

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Phosphorus, Total	mg/l	0.00960	0.00320	100.*	20	L623256-01	WG650409

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Phosphorus, Total	mg/l	.04	0.0377	94.3	90-110	WG650409

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Phosphorus, Total	mg/l	0.0383	0.0377	96.0	90-110	1.58	20	WG650409

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Phosphorus, Total	mg/l	0.0580	0.00410	.05	106.	90-110	L623256-02	WG650409

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Phosphorus, Total	mg/l	0.0543	0.0580	100.	90-110	6.59	20	L623256-02	WG650409

Batch number /Run number / Sample number cross reference

WG650409: R2578677: L623256-01 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.'

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Vancouver, WA. 98661



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13AL0321

CHAIN OF CUSTODY REPORT

CLIENT / SYSTEM NAME: **Stacie Kelsey**
 REPORT TO: ADDRESS OR EMAIL
Stacie.kelsey@cdfw.wa.gov
 PHONE: **360 601 1168** FAX: **360 906 7777**

INVOICE TO: **Woodland city
Public Works
Woodland WA**
 PO NUMBER:

REF#

TURNAROUND 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. Please Specify

OTHER _____

*Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES													
		Total P.	e. coli												
1. Skate Park-1	3.4 9:23	X	X												
2. F Dock -3	9:28	X	X												
3. Leafy K -4	9:34	X	X												
4. Raspberry-7	9:41	X	X												
5. WALT Face-9	9:50	X	X												
6.															
7.															
8.															
9.															
10.															

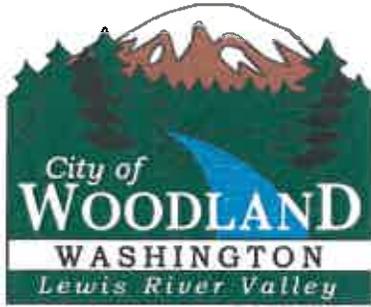
MATRIX (W, S, O)	# OF CONT.	SAMPLE LOCATION / COMMENTS
W		

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.
<i>[Signature]</i>		3.4.13		Dallen Hallum		3/4/13	1105	10°C
<i>Annick Mundy</i>		3/4/13	1145					



HORSESHOE LAKE NEEDS YOU!

EXCESS PHOSPHOROUS & OTHER CONTAMINATES
ADD TO DECLINING WATER QUALITY



You may not live on waterfront property, but if there is a storm drain or ditch nearby, it's just like you do. Storm drains and ditches carry runoff water directly to the lake. Whatever waters leave your property run into the water. That includes fertilizer, grass clippings, pet waste, and even septic liquids from unmaintained septic systems. All of these are sources of phosphorous and other contaminants that carry unwanted nutrients into the lake and turn it green with algae.

In late spring and early fall water temperature and density changes, allowing for what we call "lake turnover". Surface water sinks and mixes with bottom water causing the Lake to look an icky green color. This is not an indication of pollution, but a natural process.

REMOVE LEAVES FROM THE STREET

- Rake leaves, seeds and grass clippings out of the street and gutter.
- Compost on site, bag for collection, or take to waste disposal depository.
- Never dump grass or yard clippings in the lake. Mower should discharge away from the street



FERTILIZE THE LAWN, NOT THE LAKE

- Choose a zero-phosphorous fertilizer. The majority of Horseshoe Lake lawns are naturally high in phosphorous and will remain healthy without adding more.
- Sweep spilled fertilizer off paved surfaces.
- Remember, compost and manure contain phosphorous too.



CLEAN UP AFTER PETS

- Scoop the poop! Pet waste contains phosphorous as well as harmful bacteria.
- DO NOT feed ducks, geese or grass carp!



PREVENT EROSION

- Phosphorous attaches to soil. Keep soil from washing into the street or lake.



WASH YOUR CAR IN DIRT, GRAVEL OR GRASS

- Grass and gravel filter the dirt and soap out of the water and keep dirty runoff out of storm drains and ditches. Soap will not hurt your lawn, but it will hurt fish and water quality.
- You can make your own biodegradable car wash by mixing one cup of liquid dish washing detergent and 3/4 cup of powdered laundry detergent (each should be chlorine and phosphorous free and non-petroleum based) with three gallons of water.



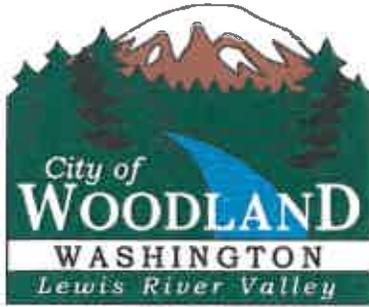
CHECK-FIX-MAINTAIN YOUR SEPTIC SYSTEM

- If you are on a septic system, it is imperative to have it pumped as often as necessary.
- Unmanaged septic systems can leak potentially dangerous substances into the lake that can affect fish, humans and pets. If you assume your septic system is working fine because you haven't had to pump it in years, chances are it is in need of maintenance and may be seeping into the lake.
- For information on how to properly maintain your septic system, contact Cowlitz County Building and Planning at (360) 577-3052 or Clark County Public Health at (360) 397-8000. Free seminars are available on how to properly maintain your septic system.



FOR INFORMATION REGARDING THIS FLYER OR HORSESHOE LAKE - CONTACT WOODLAND PUBLIC WORKS AT (360) 225-7999

See us on the web at www.ci.woodland.wa.us



NO IRRIGATION AT WOODLAND PARKS IN 2013

Due to continued reductions in park revenues, the City of Woodland will not be irrigating city parks this year. This includes Horseshoe Lake, Hoffman, Eagle and Kenneth Bjur Parks. For the last several years, park revenues have declined, forcing reductions in service. In previous years, the city cut three summer staffing positions and reduced maintenance on park structures like picnic tables and garbage cans. In 2012, the city did not water the east field at Horseshoe Lake Park.

Looking at revenue projections beyond 2013, the city expects the reduced funding levels to continue. The Park Board will be discussing possible funding options this year to increase the level of service in the parks for the future. If you are interested in "adopting" a park or volunteering for other duties, please call Bart Stepp, Public Works Director at (360) 225-7999

COMPLETE CITY SURVEY AT WWW.CI.WOODLAND.WA.US

The City is looking for feedback from its citizens regarding several important issues. Please take the time to complete the survey below and mail it back to the city or go to the City's *website* www.ci.woodland.wa.us and complete the survey there.

QUESTION 1: Should Woodland continue to add fluoride to the drinking water?

YES NO Don't Know

QUESTION 2: Would you vote for a tax increase to pay for the irrigation and maintenance of city parks?

YES NO Don't Know

QUESTION 3: Would you vote for a tax increase or car tab increase to fund transportation improvements?

YES NO Don't Know

Completed surveys can be mailed to:
City of Woodland, P.O. Box 9, Woodland, WA 98674
or placed in our payment drop box
located in the public parking lot at 2nd and Davidson.

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