

CITY OF CORVALLIS
WATERSHED MANAGEMENT ADVISORY BOARD AGENDA

5:15 PM, Wednesday, October 26, 2016
Madison Avenue Meeting Room

- I. Community Comments
Opportunity for public input on matters of interest to the Watershed Management Advisory Board..

 - II. September 28, 2016 Minutes Review

 - III. City Council Report

 - IV. Annual Fish Surveys: Discussion

 - V. Staff Reports: Tom Hubbard, Jennifer Ward, Mark Miller

 - VI. Board Member Reports/Requests:
 - a. Working Group Reports
 - b. Nov/Dec Meeting Schedule
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**WATERSHED MANAGEMENT ADVISORY BOARD
MINUTES
September 29, 2016
DRAFT**

Present

Jessica McDonald, Chair
David Hibbs, Vice-Chair
Charlie Bruce
Mark Dolan
Steve Rogers
Joel Hirsch, City Council Liaison

Staff

Jennifer Ward, Public Works
Tom Hubbard, Public Works
Mark Miller, Trout Mountain Forestry

Visitors

Jim Fairchild

Absent

Jacque Schreck
Richard Heggen

SUMMARY OF DISCUSSION

Agenda Item	Information Only	Held for Further Review	Recommendations
I. Call Meeting to Order/Introductions • Election of FY 16-17 Leadership	X		
II. Review of Agenda	X		
III. Review of August 24, 2016 Minutes			Approved with one minor change
IV. Community Comments	None		
V. City Council Report	None		
VI. New Business • Implementation of the Corvallis Forest Stewardship Plan • 2016 Peacock Larkspur Report	X X		
VII. Old Business • None			
VIII. Staff Reports	X		
IX. Board Member Requests and Reports	X		
X. Adjourn	6:40 pm		

CONTENT OF DISCUSSION

I. Call Meeting to Order/Introductions

Chair McDonald called the meeting to order and those present introduced themselves.

Election of FY 16-17 Leadership

David Hibbs was elected Chair and Steve Rogers was elected Vice-Chair. Chair Hibbs took over as chair of this meeting immediately after being elected.

II. Review of Agenda

Ms. Ward circulated two copies of the final Forest Activities Report. The report will be available on the Watershed web page after it has been provided to the City Council on October 18.

III. Review of Minutes

Board Member Bruce moved to approve the August minutes with a single minor change; Board Member Rogers seconded the motion and the minutes were approved unanimously.

IV. Community Comments

None.

V. City Council Report

Councilor Hirsch had nothing to report.

VI. New Business

Implementation of the Corvallis Forest Stewardship Plan

Visitor Jim Fairchild provided his background with the Board and the watershed. Mr. Fairchild expressed concerns that forest thinnings are actually becoming variable retention harvests. Mr. Fairchild questioned the City's willingness to work with neighbors of the watershed and he would like to see that improve. In response to the question of what would he specifically like the City to do, Mr. Fairchild recommended that the City talk to neighbors before taking on management activities, especially when those activities affect the neighbors. Councilor Hirsch, speaking for the Council, apologized for any offence or inconvenience the City may have caused and agreed that the City should do better.

2016 Peacock Larkspur Report

Ms. Ward stated that there are three sub-populations of Peacock Larkspur on the watershed which are inventoried every year when they bloom. She stated that the numbers of Peacock Larkspur are up in all areas from last year, but so are the numbers of other larkspur species which compete and hybridize with Peacock Larkspur. Staff is continuing to remove competitive species of plants to help Peacock Larkspur thrive. Staff is working with the Native Plant Society to establish a pure stand.

VII. Old Business

None.

VIII. Staff Reports

Mr. Hubbard stated that he is still researching the USGS stream monitoring station, as requested by Board Member Heggen at a previous meeting.

Ms. Ward responded to questions from the Board about creating a reserve fund for the watershed. The first question was, excluding harvest costs, what does it cost to run the watershed for a year. She stated that for the current fiscal year, approximately \$111,000 has been budgeted for expenses related to the watershed, plus \$22,000 in grant funds for meadow restoration. Anticipated expenses include the consulting forester, Northern Spotted Owl surveys, stream temperature surveys, fish surveys, education and outreach, Peacock Larkspur management and

augmentation, timber tax, and materials and supplies for the annual tour. The second question was related to budgeting for the Watershed Program Specialist position. Ms. Ward stated that the Watershed Program Specialist is paid from the watershed fund; in addition to the expenses mentioned, \$17,630 has been budgeted for the Watershed Program Specialist. In answer to the third question, the unaudited ending balance from last fiscal year is \$888,761. Ms. Ward stated that the next question asked about projected harvests over the next ten to fifteen years. Mr. Miller stated that the Stewardship Plan does look ahead fifteen years, but exact harvest volumes have not been determined. The plan is to have similar harvest volumes every year, but that the value of those harvests will fluctuate from year to year. The final question regarded the City's procedure for creating a reserve. Ms. Ward said that she asked Finance Director Nancy Brewer, who told her that the Board would need to identify the source of the funds, the use of the reserve, the limitations of the reserve, whether there is a minimum or maximum amount for the reserve, how to create a permanent funding source, and how the sources and uses would be different from current sources and uses. Ms. Ward reported that Ms. Brewer offered to attend a meeting to discuss this with the Board. The Board discussed the next steps for the working group to take and agreed that having Ms. Brewer attend a meeting would be a good idea.

Mr. Miller reported that the bid process for the next two fiscal year's harvests is complete. He stated that three bids were received, with Cross and Crown as the low bidder. Preliminary road work is set to start on Monday, October 3, with logging planned to start near November 1. The contract goes through the end of October 2017, but the contractor plans to have the work completed within the current fiscal year.

IX. Board Member Requests and Reports

Chair Hibbs reported that the Habitat work group took the summer off, so has nothing to report, but he and Board Member Bruce are planning to spend September 29 on the watershed.

X. Adjourn

The meeting was adjourned at 6:40 p.m.

NEXT MEETING: October 26, 2016, 5:15 p.m., Madison Avenue Meeting Room

Use of Snorkeling as a Monitoring Tool

Kim K. Jones

27 September 2016

The abundance of cutthroat trout is difficult to quantify without extensive and intensive sampling effort. The most statistically rigorous methods to estimate abundance of cutthroat trout is with mark-recapture techniques, next with multiple-depletion electrofishing with blocknets technique, and finally with single pass electrofishing. Snorkeling is useful for establishing occupancy of stream reaches.

The importance of using different methods to meet different objectives was illustrated by Rodgers et al. (1992). The study quantified the difference in abundance of coho salmon when using different sampling methods. Coho salmon are the most easily and consistently observed salmonid species in pool habitat. Mark-recapture, depletion, and snorkeling reported 85% (CV = 26%), 67% (CV = 28%), and 40% (CV = 59%) respectively, of the actual number of juvenile coho in pools.

Cutthroat trout, in contrast, has sharply reduced observability in pools (Constable and Suring 2008). During 6 years of sampling in the Smith River basin between 2001 – 2008, the number of cutthroat trout observed by snorkeling ranged from 9 – 48% with an average of 23% compared to electrofishing (Figure 1).

Repeat observations (revisit of same pool) had average R^2 of 0.49, 0.80, and 0.95 for counts of cutthroat, steelhead, and coho respectively (Figure 2). The statistical implication is that it is difficult to repeat the count of cutthroat in a pool. While abundance of coho and steelhead is related to the number observed by snorkeling, there is no relationship between abundance and observations of cutthroat trout. The Western Oregon Rearing Project, initiated in 1998 (R. Constable, ODFW), surveys ~400 sites per year in western Oregon. The staff revisits and snorkel 15% of the sites to annually assess precision of their estimates of abundance and occupancy.

However, snorkeling can be an effective technique to identify occupancy of stream reaches by cutthroat trout. Electrofishing will provide a slightly higher probability of observation (presence/absence) of cutthroat in pools. Constable and Suring (2013) recommend that snorkeling be used to determine site (1,000m reach) occupancy rather than pool occupancy (one channel unit) because cutthroat are not always observed in individual pools when actually present.

The difficulty of observing cutthroat trout, much less accurately or precisely estimate abundance, implies that snorkeling is not an effective tool to monitoring the population or the response of cutthroat to restoration projects or environmental change. Snorkeling can be a useful method to establish the presence or absence of cutthroat trout if sufficient number of pools or length of stream are surveyed.

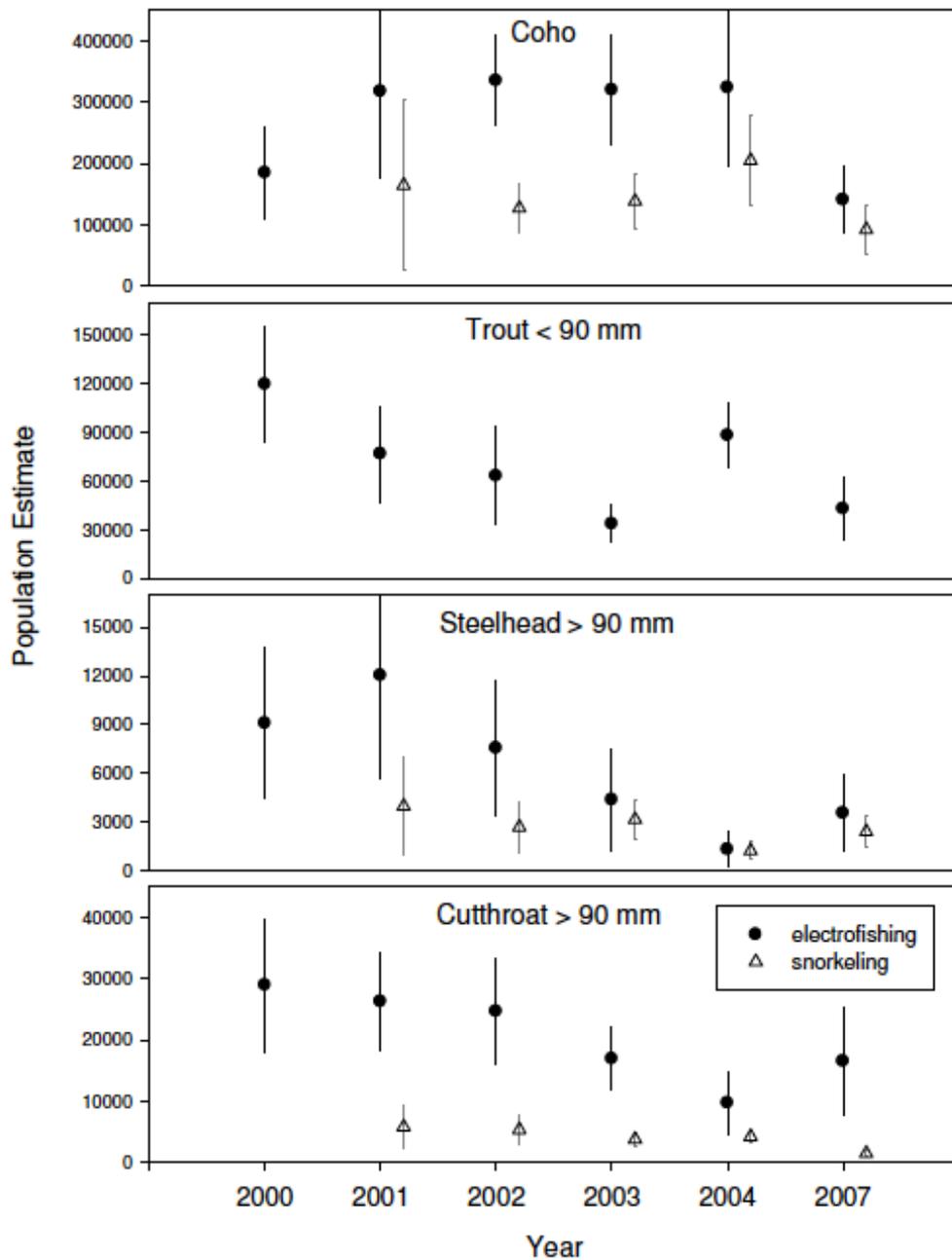


Figure 1. Electrofishing population estimates in wadeable streams and snorkeling population estimates in wadeable and non-wadeable streams, with 95% confidence interval. No sampling occurred in 2005 and 2006, not snorkeled in 2000 (Constable and Suring 2008).

Snorkel Resurveys 2002-2010

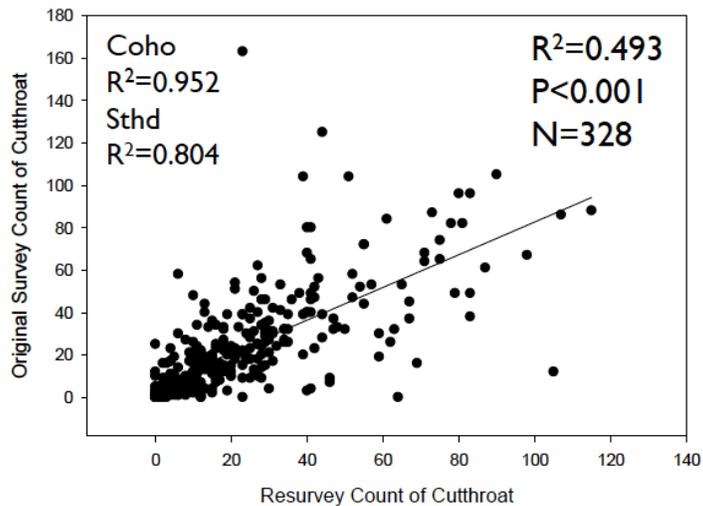


Figure 2. Resurvey of snorkel counts of cutthroat, 2002-2010 (E. Suring, ODFW, personal communication).

Citations

Constable, Jr, R.J. and E. Suring. 2007. Smith River Steelhead and Coho Monitoring Verification Study, 2007. Monitoring Program Report Number OPSW-ODFW-2009-11, Oregon Department of Fish and Wildlife, Salem. Available: <https://nrimp.dfw.state.or.us/CRL/Reports/WORP/SRCS2007.pdf>

Constable, R. J. Jr. and E. Suring. 2013. Juvenile Salmonid Monitoring in Coastal Oregon and Lower Columbia Streams, 2012. Monitoring Program Report Number OPSW-ODFW-2013-1, Oregon Department of Fish and Wildlife, Salem. Available: <https://nrimp.dfw.state.or.us/CRL/reports/WORP/WORP2012AnnualReport.pdf>.

Rodgers, J. D., m. F. Solazzi, S. L. Johnson, and M. A. Buckman. 1992. Comparison of Three Techniques to Estimate Juvenile Coho Salmon Populations in Small Streams/ North American Journal of Fisheries Management 12:79-86.

Financial Questions Regarding Rock Creek Watershed Posed by the WMAB – June 2016

Q: Excluding harvest costs, what does it cost to run the watershed in a year?

A: *Excluding harvest costs, approximately \$111,000 is budgeted for the watershed for fiscal 2016-17.*

Anticipated expenses include:

- *Consulting Forester*
 - *Report and grant preparation*
 - *Outreach*
 - *Contractor supervision*
 - *Meetings*
 - *Forest monitoring and inventory*
- *Northern spotted owl surveys*
- *Stream temperature surveys*
- *Fish surveys*
- *Education and outreach*
- *Peacock larkspur management and augmentation*
- *Timber tax*
- *Materials, supplies and other expenses for the annual tour*

In addition, the City expects to spend \$22,000 in grant funds on restoration of Old Peak Meadow in FY 16-17.

Q: Is the Watershed Program Specialist position paid for out of the Watershed Fund?

A: *Yes. In addition to the \$111,000 and \$22,000 mentioned above, \$17,630 has been budgeted for the Watershed Program Specialist for 2016-17. This includes wages, Social Security, Medicare, and Workers Comp.*

Q: What was the ending Watershed Fund balance for FY 15-16?

A: *Audited number won't be available until November and City Council won't approve them until after the first of the year, but the unaudited ending balance is \$888,761.*

Q: What are the projected harvests for the next 10-15 years?

A: *The Stewardship Plan does look ahead fifteen years, but exact harvest volumes have not been determined. The plan is to have similar harvest volumes every year, but that the value of those harvests will fluctuate from year to year.*

Q: What would be the City procedure for setting up a reserve fund for the watershed?

A: *A fairly complicated one. Among other things, the WMAB would need to identify:*

- *Source of funds to create the reserve*
- *Use of the reserve – limits? Savings for a specific project? If so, what, and when is it anticipated, and how much do we expect to need to save? How is that different from the basic operations of the Timber component?*
- *Is there a maximum amount? Or a minimum the reserve would be expected to hold?*
- *Is this to create a permanent funding source where interest only would be expended?*
- *How would the sources/uses be different than current resources/uses?*