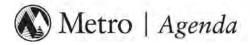
Katy Weil Elaine Stewart



Meeting: Smith and Bybee Wetlands Advisory Committee

Date: Tuesday, January 22nd, 2013

Time: 5:30 p.m. -7:30 p.m.

Avian Botulism and Hazing Report

Place: Metro Regional Center - Room 270

600 NE Grand Ave, Portland Oregon 97232

•	Welcome and introductions	5:30 – 5:35 p.m.	Troy Clark
•	Approve meeting minutes	5:35 – 5:40 p.m.	Troy Clark
•	Trail Update	5:40 to 5:55 p.m.	Jane Hart
•	CNRP Update	5:55 to 6:15 p.m.	Janet Bebb
•	Metro Staffing, Org Chart and SUP Update	6:15to 6:35 p.m.	Dan Moeller
•	Portland Parks and Port of Portland Updates	6:35 to 6:55 p.m.	Lynn Barlow and Carrie Butler

6:55 to 7:25 p.m.



Smith and Bybee Wetlands Advisory Committee

January 22, 2013

Committee members in attendance

Pam Arden*......40 Mile Loop Trust

Patt Opdyke *.....North Portland Neighbors

Troy Clark*Audubon Society of Portland (Chair)

Carrie Butler*Port of Portland (Vice Chair)
Dan Moeller*Metro, Sustainability Center

Sara Henderson*.....St. Johns Neighborhood Association

Dave Helzer*City of Portland, Bureau of Environmental Services

Others in attendance

Committee members not in attendance

Lynn Barlow*	City of Portland, Parks and Recreation
Dale Svart*	Friends of Smith & Bybee Lakes
Bill Briggs*	ORRCO
Eric Tonsager *	Oregon Bass and Panfish Club
Susan Barnes*	Oregon Department of Fish and Wildlife

^{*}Denotes voting Smith and Bybee Wetlands Advisory Committee member.

Welcome

The meeting was called to order at 5:35 p.m.

Approve September 2012 Summary Notes

Patt Opdyke moved that we accept the minutes, Dan Moeller seconded and the minutes were approved.

Avian Botulism at Smith and Bybee Wetlands

Katy discussed the fall 2012 avian botulism outbreak with the group. About 3,800 birds were lost, however about 130 birds were rescued, banded and released. We also estimate that about 35,000 birds were kept away from the lakes during the hazing process. Metro encouraged the Oregon Department of Fish and Wildlife to take the lead on the outbreak. John Vandenberg gave Metro a lot of guidance and we learned a lot about how to respond to this type of crisis. Patt wondered how long after we learned about the severity of the outbreak, did it take before hazing began. Katy said it was just five days. Katy said she learned a lot – that some botulism is normal, some cholera is normal, some disease is normal. Normal is 400 infected birds; more than that is severe. Katy gave credit to the good contract staff at Metro that got things moving quickly (our contract with USDA).

Pam wondered if this type of thing happens other places in Oregon. Katy said that USFWS dealt with this in Malheur, but they only dealt with it in-house. USFWS learned a lot about cooperative partnership and they're interested in hearing how our experience was while working with them.

Katy said that we'll need to consider going out in July and August and treat Ludwigia with a spider hoe because it's blocking water flow. She spoke about the drilling company that helped remove the beaver dams; they did an excellent job. For the first time ever, Katy saw nutria rebuilding dams. Katy said that we trapped and removed 122 nutria in two days, in an effort to keep water moving. A nutria specialist said it was the worst nutria infestation he's ever seen. Staff recalled seeing beaver and muskrat day and night. Pam wondered if we will continue to monitor nutria. Yes, we're monitoring, but do not currently have traps out.

Dave Helzer suggested coming up with a hydrologic regime as the first line of defense in the future. It's good to formalize a BMP around this type of crisis, but water management might be the first thing to do.

Katy wrote a summary of Metro's response to the avian botulism outbreak – attached to these notes. Also attached is a write-up by Trevor Locke, Wildlife Specialist with the US Department of Agriculture.

Willamette Greenway Trail Update

Jane gave an update on the Willamette Greenway Trail proposal. She passed out the attached map, 'Site Plan for Willamette Greenway Trail: Chimney Park to Kelley Point Park' and said that in November and December, we submitted two different grant applications; two different pots of money. We have a decades long project/goal to connect Kelley Point Park with Pier Park. ODOT recommended that we break out our original request out into two phases. Our application has made it thru the first level of cuts. They have moved Segment 1 of the application forward – \$1.5 million to build two miles of trail. Metro Council met and is recommending that ODOT reconsider Segment 1 at \$3 million because the Columbia Blvd. crossing has been redesigned to be a separated grade crossing. Jane said that there is \$100 million available and 94 projects. We are still in the running and will know more after ODOT meets in late February.

The second grant application would cover what we consider 'design and engineering.' It is about \$900,000 and we would get all the permits, etc. then we will be ready to build Segment 1. The design element part of that takes the trail from Chimney Park to a viewpoint on the former landfill (about two miles). Jane mentioned that our grant application asked for design and engineering for the whole project, not just one of the segments, so that we're "shovel ready" for the entire project. For the design and engineering proposal we submitted, there were 155 proposals and 55 are still in the running with \$8 million to grant.

Troy inquired what this might mean for the \$200,000 that the Committee agreed to match last year, since the project cost has gone down. Jane suggested we wait to see if our application gets approved. Someone asked about the North Portland Enhancement Fund and if we are using that. Jane said the Metro Council meets in February to discuss that.

Dave asked when the earliest we could begin trail construction, if everything went great between now and then. Jane said 2018; she said that funding would be available in 2015. Jane also mentioned that she met with Rex Burkholder's successor, Sam Chase, and he's on board and up to speed with the project.

CNRP Update

Janet Bebb wasn't able to attend the meeting to give an update on the CNRP land use application, but she sent the following email to Dan:

In July we received a letter from BDS staff with the items in the land use application that needed additional information. Some of the items were corrections for consistency and some were looking for more detail. We worked on a response and hit some difficulties. To solve these we met with BDS staff, Stacey Castleberry, in November to clarify our response and should be able to submit revisions within 2 weeks. The deadline is January 28, 2013. When we get the application deemed complete – or at least ready to move forward – we'll update you on the timeline and process. We don't anticipate any controversy at the hearing, but it is an

opportunity to testify in support of the land use actions. Just as a reminder the land use actions include the recreation projects, like the landfill trail, along with the technical projects needed on the landfill and by BES and the Port. It's been a while since you've seen them but we are consistent with our last meeting with you on projects.

Dan noted that we asked that the NRMP be kept in place until the CNRP is ratified. There was a timeline attached to that, but Dave Helzer said if the city imposed a deadline and cannot meet that deadline, they will manage that.

Org Chart

As per our Communication's Plan, Dan handed out the Org Chart for Metro's Sustainability Center (attached). Dan also handed out a note card with the primary Metro contacts for Committee members. It was noted that James Davis relocated with the Education Team to the Zoo. His primary responsibilities remain the same, and Smith and Bybee may even see more education programs because of the move.

Discussion

Troy asked that meeting notes get completed and sent out within two weeks. This will give us time to work on things between meetings if we're meeting quarterly.

Troy brought up herbicides and wondered how much more research could be done to move this beyond a philosophical question. Or is this indeed a philosophical question? How many of us really need more information to settle on whether herbicides should or should not be used at Smith and Bybee? Perhaps the question we pose is, "Should herbicides be used to treat plants at Smith and Bybee?"

Troy also asked, as an advisory group, whether we want to advise differently than what Metro is currently doing? If the advisory committee decided to vote that Metro should not use herbicides at Smith and Bybee, It would then go on record that we voted that way.

Dave remembered us framing this in a way where we first have Dale talk with us then decide if we, the committee, would like to make a recommendation to Metro on the use of herbicides to treat invasives. He added that Metro does not have to take our recommendations.

Pam asked "is there actually philosophical question here?" She said that if Metro has determined that it is best to use a certain herbicide because we know that this is the only way to eradicate weeds, then it's more like a policy. Dave said that we might need to determine if the committee wants to make a recommendation that's different than Metro policy.

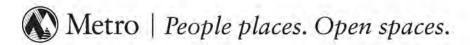
Someone suggested we wait until the Integrated Pest Management Plan (IPM) is ready, and Dan said that IPM won't be ready until June or July at the earliest because we are doing it agency wide; full policy level and operational guidelines. Dan also has said that the IPM likely won't answer any of the questions that committee members have – it's a broad agency overview. Dan agreed we have been talking about herbicides for a long time. If we dedicate a meeting to this issue, can we develop a question before hand? Possibly, "should Metro utilize herbicides or pesticides as a tool to manage the wetlands." Dan says he takes the committee, perspectives and expertise seriously. We should discuss this sooner than summer.

Next meeting

The next meeting will be held on Tuesday April 23, 2013 from 5:30-7:30 in room 270 at Metro

The meeting adjourned at 7:30 p.m. Minutes recorded by Carrie Belding.

600 NE Grand Ave Portland, OR 97232-2736 503-797-1700 503-797-1804 TDD 503-797-1797 fax



Smith and Bybee Avian Botulism 2012 Metro Response

Summary

In the late summer and early fall of 2012, Metro responded to an avian botulism outbreak at the Smith and Bybee Wetlands Natural Area. In collaboration with the Oregon Department of Fish and Wildlife, US Department of Agriculture—Wildlife Services, the Port of Portland, and the Audubon Society of Portland we removed approximately 4,575 dead or dying waterfowl and wading birds, and treated and released approximately 150 recovered individual waterfowl. The lengthy period without rain this summer, combined with warm temperatures, contributed to an unusually high level of the avian botulism toxin within the lake complex. The longer stretch of warm weather helped natural material break down, and fostered an environment which precipitated the ingestion of the toxin by birds. Bird carcasses attracted maggots, which were then eaten by other birds, causing further toxin ingestion. Even healthy, adult birds that would normally survive exposure to this type of botulism were affected.

The Oregon Department of Fish and Wildlife directed management of the botulism outbreak, and Metro lead the response and recovery effort; contracting with USDA--Wildlife Services for technical assistance in hazing efforts. Using noise equipment and pyrotechnics provided by The Port of Portland and USDA-Wildlife Services, Metro diverted healthy birds away from the area over a period of five weeks. Without efforts to move birds off the lakes the consensus was that thousands more would have died, including members of several species of concern. The Port of Portland donated equipment and expertise, as well as crew support for salvage. The Audubon Society of Portland provided many hours of daily veterinary and rehabilitation services.

Upon ODFW recommendation, Metro attempted to reduce the impact of the outbreak by lowering water levels in Smith Lake. This was accomplished by deconstructing, then demolishing with explosives, beaver dams in the channel between Bybee and Smith lakes, preventing outflow to Bybee Lake and the Columbia Slough. Although only modestly successful, these efforts highlighted the importance of maintaining flow control for the future and the important interaction between beavers, nutria, invasive species, and water quality. Until the mid-2000s, Metro had been able to draw down Smith Lake in summer, avoiding the conditions that foster botulism outbreaks in late summer and fall. The beaver dams had additional impacts on wetland health, impounding and killing willow stands, fostering growth of invasive aquatic plants (e.g., parrot feather, water primrose), and providing good habitat conditions for the nutria population to grow.

All of the partners involved had unique expertise and abilities which in combination proved highly successful in managing what could have been an even more substantial loss of wildlife. Furthermore, we established a network to evaluate the impacts of this event, and a planning process for the development of recommended future management practices.

Program

- Bird Removal, Burial, and Transport
 - o ODFW recommendation: remove all dead and sick birds; bury away from water
 - o Bird totals = 4025 waterfowl, 550 shorebirds
 - 75% of all waterfowl were Green-winged teal, remaining 20% equally distributed Mallard,
 N. Shoveler, and Gadwall.
 - 90% of all shorebirds were Western sandpiper, remaining were Least sandpiper and Killdeer.
 - Metro/ODFW/Audubon/COP Staff hours = approximately 400

Hazing

- ODFW recommendation: haze all waterfowl from the wetland, particularly the Cackling Canada geese.
- Estimated numbers of birds successfully hazed from the area = 34, 665 (please note, there were no doubt multiple attempted visits from these birds)
- Port of Portland airport hazing staff trained Metro staff, donated equipment, and stored all necessary pyrotechnics in their approved and permitted storage unit
- USDA Wildlife Services: Metro contracted with USDA to oversee all hazing activities, and install automated equipment to assist with hazing (total contract = \$20,000; only \$5,000 billed to date).
- o Metro
 - Staff effort: Five Metro staff were trained in pyrotechnic use and equipment operation. Two Metro staff worked evening overtime for five weeks. These two staff had the hazing time charged to the Smith and Bybee Fund, all other time was charged to the Metro General Fund.
 - <u>Public outreach</u>: mailing sent to 3,355 neighboring addresses explaining the situation and current actions (printing cost = \$1,270)
 - Safety equipment and pyrotechnics: \$2,440

• Dam disruption

- ODFW recommendation: Lower water level in Smith Lake; remove beaver dam complex and invasive water primrose to allow water movement. Remove nutria which had caused bank damage and were also actively rebuilding dam complex.
- o Beaver dam removal: Metro contracted with McCallum Drilling Services to use 144 pounds of explosives; majority of dam complex reduced. Staff and contract crews removed additional soil and invasive plant material manually. Metro paid a permit fee to the City of Portland Fire Marshall's office of \$500.
- Metro staff and contract hours for channel flow improvement = 356
- o Nutria removal: hours/expense = 25/\$2500; 122 invasive animals removed

Partner contribution and deployment

- <u>ODFW</u>: Veterinary and biology staff provided daily salvage, treatment, and additional services in project guidance
- <u>Port of Portland</u>: donated salvage and manual labor services (\$5,638); hazing staff time and storage of necessary equipment donated as well.
- Audubon Society of Portland: donated over 600 hours of rehabilitation and veterinary services
- <u>Metro St. Johns Landfill Program</u>: provided facility storage, meeting space, equipment, and general support

Benefits

- It is estimated that approximately 20-30,000 birds were prevented from contracting the disease
- The network of regional partners established from this effort will be a benefit to the wetland as we study this outbreak as well as previous ones, and plan for future actions and response.

Lessons learned

- Protocols for future monitoring and response:
 - o It is recommended that we examine weather models as the season approaches, and enlist the help of area users to begin monitoring both Smith and Bybee for any sign of illness among the bird community. We have formed a preliminary access plan for birders to monitor shorebirds in the early onset of fall migration (latter part of July, early August). Improved contact and communication between Metro staff and these bird observers will make it easier to track the site as the season progresses.
 - o In the event of an outbreak, the network of area partners will collaborate early and initiate removal of birds and closure of the area, if necessary.
- <u>Channel maintenance is critical</u>: Early action to keep the channel between Bybee and Smith lakes free flowing will be far easier than attempting to remove invasive plant material, soil, and debris in the middle of a wildlife disease outbreak. Also, it will be important to access the channel with the appropriate equipment to perform sediment removal during the drier periods.

Recommended BMP's

- <u>Vegetation management</u>: Metro science and land management staff met on site 10-26-12 to discuss future vegetation management. Thorough planning is already under way for next season regarding treatment of the invasive water primrose, which served as a serious impediment to channel flow during the 2012 outbreak.
- Additional recommendations for channel flow improvement: this section within the natural area has suffered the most impact from invasive nutria. The soil is heavily impacted, the banks are unstable, and the nutria are rebuilding beaver dams as quickly as we work to dismantle them. Working to remove this species will afford natural bank stabilization over time, and will also improve the habitat for muskrat and other native species. We did observe muskrat on the boat launch side of Smith, and ODFW is very excited about this. They have asked us to do all we can to support this species at Smith and Bybee.
- Regional group meetings for future response preparedness: We have asked ODFW to take a leadership role in bringing together partners such as Metro, the Port of Portland, USDA—Wildlife Services, Audubon Society of Portland, City of Portland Environmental Services, the Columbia Slough Watershed Council, and other concerned stakeholders to meet on a semi-annual basis to plan regional responses to disease outbreaks. The first of these is tentatively scheduled for March of this year.

General Fund Impact

 Staff time (Three staff from Natural Areas Land Management, Two scientists, St. John's Landfill supervisor time)

S & B Fund Impact

- Staff time: Kristina Prosser and Jim Caudell hazing overtime
- Equipment, Materials, and Permit Fee (pyrotechnics, PPE, blasting permit, etc.) = \$3,200
- Contract crews for salvage and channel maintenance = \$12,000
- Blasting contract work for beaver dam complex removal = \$6,500



United States Department of Agriculture

Animal and Plant Health Inspection Service

Wildlife Services 3413Del Web Ave Salem, OR 97301

Ph: 503-326-2346 Fax: 503-399-5613 **Date**: January 18, 2013

To: Katy Weil From: Trevor Lock Subject: Nutria control

In the month of November Wildlife Services Chris Lulay, spent 77 hours between November 2nd and November 20th to remove 122 Nutria. While on site, Wildlife Services observed multiple aquatic species; including Beaver Muskrat and Nutria. Wildlife Services control efforts include the use of a few cage traps with little success and the use of suppressed firearms and spotlight to remove all of the Nutria that were taken.

The environmental damage, observed by WS at the Smith Bybee Lake recreation area, was some of the worst that the Northwest WS district has ever observed. This in turn is very unhealthy and can have a negative impact on native plant species.

Future projects that would be recommended would be for WS to set up bait stations of carrots on rafts around the lakes. WS would use game cameras to get a better idea of how many animals may be on sight. The use of game cameras would assist in conducting more removal projects with the use of a suppressed firearm and spotlight.

Nutria constructs burrows in banks of rivers, sloughs, and ponds, sometimes causing considerable erosion. Burrowing is a commonly reported damage caused by nutria. Burrows can weaken roadbeds, stream banks, dams, and dikes, which may collapse when the soil is saturated by rain or high water. Rain action can wash out and enlarge a collapsed burrow which compounds the damage.

Nutria depredation on crops is also well documented. Crops that have been damaged include corn, sugar and table beets, alfalfa, wheat, barley, oats, various melons, and a variety of vegetables from home gardens and truck farms. Nutria girdle fruit, nut, deciduous and coniferous forest trees, and ornamental shrubs. They dig up lawns when feeding on the tender roots and shoots of sod grasses. In creating dikes and drainage ditches it is often important to consider nutria damage and the maintenance that can be required. Nutria like steeply sloped banks next to relatively deep water for den sites. Dikes and drainage ditches designed with gradual slopes will be much less attractive as den sites and require much less if any nutria damage maintenance

At high densities and under certain adverse environmental conditions, foraging nutria can also significantly impact natural plant communities. Over utilization of emergent marsh plants can damage stands of desirable vegetation used by other wildlife. Nutria are aggressive competitors with the native muskrat which is smaller. Muskrats have been largely eliminated or greatly reduced where nutria have become established

In Oregon, nutria are classified as unprotected Nongame Wildlife (OAR 635-044-0132). As unprotected wildlife nutria may be trapped (cannot be relocated) or shot.

Trevor Lock Wildlife Specialist USDA/APHIS/WS 503-881-9381



Site Plan for Willamette Greenway Trail: Chimney Park to Kelley Point Park



