

# SLOUGH NEWS

NEWSLETTER OF THE COLUMBIA SLOUGH WATERSHED COUNCIL

Winter 2004 - Volume 5, Issue 1

## Council Honors 2003 Award Winners

by Sarah Murphy, CSWC Program Director

Each year the Columbia Slough Watershed Council presents a limited number of awards to exceptional people and projects that protect, enhance, restore, and revitalize the Columbia Slough Watershed. Leadership Award winners are honored for their long term efforts to improve the Columbia Slough watershed. Achievement Awards recognize exceptional projects and specific activities. The awards will be presented at the 5<sup>th</sup> Annual Columbia Slough Awards Celebration on Friday, January 9, 2004 at the Columbia Edgewater Country Club. The event will include dinner, live music, raffle, entertainment and presentation of the awards. Tickets and table sponsorships are available.

### 2003 Leadership Awards

#### **Kathi Futornick, Environmental Consulting Associates, LLC**

Kathi Futornick is honored for her role in pushing to completion the Columbia Slough Watershed Action Plan completed in 2003. As Principal of Environmental Consulting Associates, Futornick oversaw the task of synthesizing information from hundreds of documents, studies, and activities into a coherent plan which prioritizes projects and activities for the Council and its partners. As numerous 2:00 A.M. emails attest, Futornick worked long and hard and contributed countless volunteer hours to bring the plan to life.

#### **Dave Masunaga, George Middle School**

Dave Masunaga, principal of George Middle School in the St. Johns Neighborhood, is a leader whose vision calls for George MS to be an environmental middle school. Masunaga encourages and supports his teaching staff to use environmental issues as teaching tools. Two George science teachers, Betsy Blair and KD Parman have chosen to use water and watersheds as an integrating context for their science curriculum. Studying one theme in depth in a middle school is a unique approach, as many teachers typically are able to spend only two to six weeks on a particular topic. The Council applauds the encouragement and leadership of this innovative principal in developing a curriculum that connects school content to pertinent, local issues, and in fostering environmental leadership in his students and staff.

#### **Bruce McClelland, Multnomah County Drainage District #1**

Bruce McClelland is honored for his dedication as an educator and advocate for the Columbia Slough. McClelland is an Environmental Specialist for MCDD #1, which manages the system of flood control levees and pump stations along the Columbia River and the Slough. He has led environmental restoration efforts and assisted

*See Awards, Continued on page 4*

## Habitat Restoration at Smith and Bybee Lakes Wildlife Area

by Elaine Stewart, Metro

The Columbia Slough watershed's largest habitat restoration project is under way, after more than 10 years of preparation. Metro and Ducks Unlimited are replacing an earth dam with a new water control structure at Smith and Bybee Lakes Wildlife Area which will enable restoration of more than 1,000 acres of wetland habitat.

The new water control structure will allow the restoration of the natural hydrology to these large wetlands to the maximum extent possible. This water management approach will accomplish several objectives:

- Control of reed canarygrass on the fringes of the wetlands;
- Provision of more than a thousand acres of off-channel rearing and refuge habitat for juvenile salmonids;
- Support of native bottomland hardwood forest - approximately 350 acres of willow forest were lost with the conver-

sion of the wetlands to impounded lakes and will naturally regenerate as the appropriate hydrology is re-instituted;

- Support of native emergent plant communities - hundreds of acres of emergent wetland plants will be restored;
- Provision of wintering habitat for waterfowl;
- Exposure of mudflats for migrating shorebirds in summer;
- Support of the aquatic plant community via control of non-native carp with an annual drawdown; and
- Removal of Smith and Bybee lakes from Oregon DEQ's 303(d) list - parameters such as habitat modification and aquatic weeds are directly related to the earth dam; it should be noted that DEQ will consider the lakes part of the Columbia Slough system when the new structure is in place.

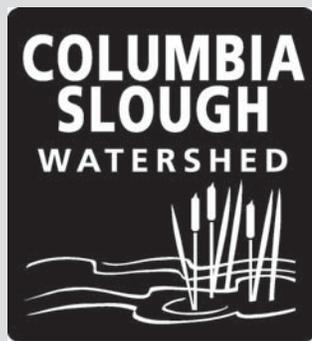
### Why not just remove the existing dam?

Successful ecological restoration depends on restoring underlying ecological processes to the extent possible. In wetland restoration, the key process is hydrology. Historically, the Smith-Bybee wetland complex was seasonally and tidally inundated and featured a mosaic of forested and emergent floodplain wetlands. The historic hydrologic regime was characterized by winter flooding

*See Habitat Restoration, continued on page 5*

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*“To foster action to protect, enhance, restore and revitalize the Slough and its watershed.”*

## Columbia Slough Watershed Council

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## Columbia Slough Watershed Council Goes International

An early October phone call from Langdon Marsh, former director of Oregon’s DEQ has resulted in a new significant international contact for the CSWC. Marsh, now a fellow at the National Policy Consensus Center at PSU is working with other PSU and national staff and local Vietnamese experts on the Tan Hoa- Lo Gom Canal waterway project in Ho Chi Minh City, Vietnam. Their visit to the CSWC was designed to gather Council members’ suggestions, advice and experiences with visitors starting a difficult urban watershed cleanup project.

On October 13, fifteen visitors arrived at Whitaker Ponds for a brainstorming and sharing session. The afternoon started with a tour of the Ponds during which members and staff talked about the evolution of the site and how it focuses community use and knowledge



CSWC staff Rachel Felice, Jay Mower and Sarah Murphy at Whitaker Ponds

about the Slough and the Council’s programs. Macroinvertebrate and water testing exercises provided opportunities for casual sharing and a discussion of the desirability for school programs and community access to the waterway. Discussions later focused on the Council’s startup phase, the difficulties of growing an organization and key success factors (like providing food and fun) and the need to ‘hang in there for the long term’. Council mem-

bers Troy Clark, Linda Robinson and Alice Blatt also answered questions about how regulations drive cleanup- and conversely, how citizen activists drive cleanup action.

Vietnamese representatives included Dr. Lam Minh Triet, Director of the Institute of Environment and Resources who has volunteered to be the group’s facilitator. Other members include People’s Committee members, health experts, environmental scientists and environmental policy experts.

In discussing the project’s funding we learned that

there is another personal connection to the Slough group. Alice Blatt, Wilkes Neighborhood resident and a CSWC founding member, is the mother of Elaine Blatt, the Bangkok based USA-EP official who is partially responsible for funding this effort. Small world!

The afternoon concluded with a visit to Waste Management, Inc. to see low tech, on the ground examples of BMP’s- Best Management Practices - that help protect water quality. Watching workers clean garbage containers and discussing regulations and company policies was a helpful wrap-up.

As Dr. Marcus Ingle, PSU’s director of International Public Service, headed the van back towards downtown Portland, new friends shared ideas and Columbia Slough Regatta T-shirts inside. I thought, “this gives new meaning to the expression “ We all live downstream!”

On behalf of the entire Columbia Slough Watershed Council and staff, thank you for your interest and support over the past year. We wish you Seasons Greetings and a very Happy New Year!

*Written by Jay Mower, CSWC Coordinator and Susan Barthel, BES.*



Visitors from Ho Chi Minh City, Vietnam learn about aquatic macroinvertebrates from Megan Hanson, Environmental Educator from Bureau of Environmental Services, at Whitaker Ponds.



Visitors from Ho Chi Minh City, Vietnam identify fish and macroinvertebrates at Whitaker Ponds with Susan Barthel of BES.

The arrival of September marked the beginning of the 2003-04 academic year. Along with our watershed's elementary, middle and high schools, Slough School is again in session for the year.

Some of the new things happening at Slough School this fall include the addition of a volunteer and two new school-based projects. Education volunteer, Jennifer Ellis has donated her time and energy this season to learn the Slough School material and help in running student field trips. Jennifer has led classes on topics such as macroinvertebrates and water chemistry for middle and high school students. She has also worked with youth from two middle schools during curbside marking projects, drawing attention to the storm drains in the Columbia Slough Watershed and encouraging watershed awareness in our community. Thank you Jennifer for all of your hard work!



Slough School students work to clean debris from a storm drain during a curbside marking project in September.

Another new development this fall is a student project planned to take place at Smith and Bybee Lakes Wildlife Area. Students from De La Salle North Catholic High School have committed to a long-term monitoring and maintenance project in one of the Columbia

### Action Plan Implementation Takes Shape

Now that the Action Plan is a reality, the CSWC has organized an Action Plan Implementation Committee, or APIC, to oversee implementation. It is being co-chaired by Bruce McLelland and Dave Hendricks (Multnomah Drainage District). Also serving on the committee are: Diane Fawcett-Ohlson (Fairview Creek Watershed Council), Elaine Stewart (Smith & Bybee Lakes Wildlife Area, Metro), Greg Geist (DEQ), Gail Shaloum (Parametrix, Inc.), Nancy Hendrickson and Susan Barthel (Bureau of Environmental Services, City of Portland), Dorothy Sperry (Port of Portland), and Sarah Murphy and Jay Mower (CSWC staff). The APIC has reviewed the priority projects from the Action Plan, comparing them with known sources of funding, and has selected the following projects for funding and implementation in 2004:

**Rivergate Wildlife Undercrossing Project :** The south wetland complex in the Port of Portland's Rivergate Industrial District contains a series of ponds and associated open space managed as a natural area for wildlife. This wetland complex forms the western portion of a habitat corridor that connects the Willamette River with the Columbia Slough and Smith and Bybee Lakes. The western painted turtle (*Chrysemys picta belli*), an Oregon sensitive species, inhabits the area. A transportation corridor containing Time Oil Road divides the wetland area. An investigation into use of the area by painted turtles documented mortality of turtles crossing

Sedge meadows at the wildlife area. Elaine Stewart, the Wildlife Area Manager, has welcomed the suggestion to involve youth in the restoration process of the meadow. Students will be maintaining a perimeter around a meadow of Columbia sedge (*Carex aperta*), removing non-native species, planting new sedges and monitoring the success of the meadow. This is a project of interest for our watershed because meadows of this plant species are considered critically imperiled by the Oregon Natural Heritage Information Center; the meadows at Smith-Bybee

may even be globally significant. The sophomore biology students plan to work at the site in small groups on various Saturdays throughout the school year. Their efforts will be led by their teacher, Brother Dan Fenton, with support from Elaine Stewart and Rachel Felice, Slough School Education Director. Plan to hear results of this project later this school year!

For more information about the Slough School program, please contact Education Director Rachel Felice at 503-281-1132 or [rachel.felice@columbiaslough.org](mailto:rachel.felice@columbiaslough.org).

by Jay Mower, CSWC Coordinator

the transportation corridor (Hayes et al. 2002). Traffic volume on Time Oil Road continues to increase as development in the area intensifies and as traffic patterns are altered to accommodate road construction projects. Project goals are: to provide a connection among habitats in the western portion of the corridor; and to provide an undercrossing for wildlife traveling through and living in the area in order to minimize road kill of reptiles, small mammals and amphibians.

**Smith and Bybee Lakes Restoration:** This site at Smith & Bybee Lakes Wildlife Area encompasses an approximately 10-acre reed canarygrass infested area that has proved difficult to restore. This project will provide one full year (three treatments) of maintenance on the existing site and preparation for the interplanting. After additional shrubs and trees are installed, five additional years of maintenance and monitoring will be provided to ensure successful establishment.

**40 Mile Loop Trail Segment:** Lastly, the APIC is working with Portland Parks & Recreation to obtain a grant that would pay for the construction of a missing link of the 40 Mile Loop Trail from Marine Drive into Kelley Point Park, plus build a canoe landing and parking area in the same vicinity. This is another top priority project.

## Awards, continued from Page 1

with project design on Slough projects, including the Bridgeton Slough and Walker Slough restoration projects, the US Army Corps of Engineers 1135 Ecosystem Restoration project, and varied other projects. We also recognize his contributions to the Council's Annual Regatta, workshops, and committees. McClelland is an excellent manager and friend of the Slough, and we applaud his work.

### **Paul Trone, Volunteer Extraordinaire, Columbia Slough Watershed Council**

Paul Trone is recognized for extraordinary volunteer service to the Watershed Council. A Senior Project Geologist with GeoDesign Inc, Paul provides his expert analysis and experience to Council efforts. Trone serves as the Council's Treasurer, and is providing guidance to the Council as it moves through its first year as a non profit with new bookkeeping, budgets, balances, and IRS 501 (c)(3) nonprofit rules. He also serves on the Council's Administrative and Technical committees and provided hours of analysis of the Council's Action Plan. Trone is Scoutmaster of Boy Scout Troop 522 in the Gladstone area, and has involved Scouts in watershed restoration efforts.

### **2003 Achievement Awards**

#### **Wapato Correctional Facility, Multnomah Co. Sheriff's Office**

Multnomah County Sheriff's Office is honored for their efforts in the design and construction of the Wapato Correctional Facility plantings. The facility included environmental plantings that far exceed minimum requirements both in terms of width and the number of trees and shrubs put in the ground. The design includes a six-foot high berm, which further increases the effects of the plantings in screening the building from the adjacent Smith & Bybee Lakes Wildlife Area. The Council applauds the work of the Sheriff's Office in working closely with the Citizen's Working Group, members of Friends of Smith & Bybee Lakes, and various Council members to design a buffer that softens the impact of this facility.

### **New Sanitary Sewer Connection Requirements**

*by Dan Vizzini, Bureau of Environmental Services*

On October 29, 2003, Portland City Council adopted new sanitary sewer connection requirements for developed property. Prior to the Council action, the City relied on existing state environmental rules that require developed properties to connect to available sanitary sewers when private septic systems failed. The new requirements will apply to existing and newly developed properties with available public sewers, and developed properties that will be served by newly constructed public sewers. This will impact hundreds of properties from NE 33rd - 72nd Avenue along the Columbia Slough.

The new requirements include the following basic elements:

- Developed properties must connect to an available public sewer within 3 years of City notice of the sewer connection requirement.
- The three-year period may be extended in recognition of hardships that prevent timely compliance.
- The basis for calculating connection fees and charges will change to increase equity between classes of developed properties.
- The City will provide installment payment loans to finance City sanitary sewer connection fees and charges for property owners.
- The City will provide special connection deferrals and deferred payment loans for low-income homeowners.

#### **Land Donation, Fujitsu Microelectronics, Inc. & Microchip Technology Inc.**

On August 23, 2002 Fujitsu Microelectronics Inc. and Microchip Technology Inc. donated 60 acres of land that includes wetlands and ponds commonly known as "Fujitsu Ponds", to the City of Gresham. Both companies' environmental managers and engineers agreed that the donation to the City would be a long term benefit for the watershed. Gresham will seek public input as it examines potential future uses for the site in terms of public education, recreation, habitat protection and/or water quality improvements. The property's ponds were formerly gravel pits through which Fairview Creek now flows prior to passing between Salish ponds.

#### **Neighborhood Wetland Stewardship, Friends of Blue Heron Wetland**

Friends of Blue Heron Wetland are honored for their efforts to create and strengthen neighborhood stewardship and understanding of their jointly owned private wetland. The Blue Heron Wetland is adjacent to the 104 homes in the Blue Heron Meadows subdivision in the East Columbia neighborhood, and is jointly owned by the subdivision homeowners. They have organized work parties, posted informational signs around the perimeter of the wetland, raised donations, worked with agencies and formed a friends group in order to raise neighborhood awareness about the wetland. The efforts of the Friends of Blue Heron Wetland offer an excellent example of grassroots stewardship.

#### **2003 Portland Urban Forest Canopy Study, Joe Poracsky & Mike Lackner, PSU Geography Department**

This unique study captures and analyses Portland's tree canopy. Professor Joe Poracsky and his student, Mike Lackner undertook an analysis of historic and current canopies using satellite imagery and computer analysis techniques. They calculated changes in the

*See Awards, continued on next page*

City Council adopted the new connection requirements in recognition of the following findings:

- 97% of developed properties are connected to sanitary sewers.
- 2,300 properties have sewers but are not connected.
- 1,600 properties do not have access to a City sewer.
- 51% of unserved properties are located outside of the combined sewer system.
- The average unserved residence is 51 years old; 66% were built before 1946.
- The average household discharges 150 ga. of wastewater per day.
- Federal regulatory efforts are targeting sewage and other threats to groundwater.
- State rules require new development to connect when within 300 feet of sewers.
- City Charter requires all development to connect to sewers within 100 feet or 1/2 block.

*For additional information, please refer to the Bureau of Environmental Services website at <http://www.cleanrivers-pdx.org/index.htm>. Click on "What's New" and follow the link for Mandatory Sewer Connections.*

## Habitat Restoration, continued from page 1

that receded in late winter and early spring. Late spring rains and snowmelt caused water to rise again with the spring freshet. Water levels would drop dramatically in summer with the dry weather, exposing mudflats. Modifications to this hydrologic regime over the past 70 years, due to construction of dams and dikes on major rivers and filling of wetlands, have dramatically changed the frequency and duration of flooding in lower Columbia River wetlands. Simply opening the wetlands to the slough and rivers would not restore the needed hydrology.

Metro will use the new structure to mimic the historic water regime. During some periods of the year, the new structure will retain water within the wetlands for vegetation management. Reed canarygrass is an invasive, cool-season plant that starts growing earlier in the year than the wetlands' native plants. An unmanaged wetland would drain in February, and the subsequent reed canarygrass invasion would effectively outcompete native wetland species, resulting in a monoculture. The spring freshet will be simulated by holding water until late spring and prolonging the recession of floodwaters out of the wetlands. The long drawdown period imitates historic conditions by slowly exposing the shallow areas as mudflats in early summer, during the warming period that favors native plant communities.

The annual management cycle for the wetlands will begin in late fall or winter, with the first heavy rains of the season. The water control structure will be used to hold rising waters in the wetlands. The water will be held as high as possible. The speed with which the wetlands will fill depends on rain-fall and on river management (Columbia and Willamette); it will vary from year to year. A built-in fishway will provide passage for juvenile Chinook and coho salmon in and out of the wetlands.

Water will be held in the lakes through spring until early summer, to provide habitat for waterfowl and juvenile salmonids, and to control reed canarygrass. Beginning in late May or early June, a slow drawdown will occur. The drawdown will continue until July or August, depending on the amount of water in the lakes.

Both wetlands (Smith Lake and Bybee Lake) will be nearly dry by the end of the summer. One part of the water control structure will remain completely open to tidal flow from this time until late fall or winter, when the first heavy rains of the season occur.

This management approach may be adapted as Metro gains experience with the new structure and observes how the wetland system responds. Metro and Ducks Unlimited will actively monitor the response of vegetation, fish and wildlife and will adjust water management as needed.



Site when excavation began in October 2003 to remove old dam.  
Photo by Elaine Stewart



Site after construction of water control structure in December 2003.  
Photo by Elaine Stewart

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tree canopy from 1972, when the first satellite photo of Portland was taken, to 2002, and pinpointed the type of change and the neighborhood in which change occurred. This study is extremely important in measuring the significance of trees in our neighborhoods, their role in watershed health, and in setting Portland's urban tree canopy goals for the future.

### **Multnomah County 'Big Year' Bird Survey, Iain Tomlinson & John Fitchen**

Birders Iain Tomlinson and John Fitchen are recognized for their effort to document the presence of bird species in Multnomah County. Their volunteer effort reflects a passion to see, appreciate and record birds in their natural habitats in our urban area and the region. Their 2002 survey tallied 227 bird species in Multnomah County and provides an excellent baseline of information for naturalists, birders, students, landowners, and visitors. This is the largest number of bird species seen in the county in a single year. Nearly 160 species were seen in the Columbia Slough watershed.

### **Wellhead Protection Guidelines, Business, Industry and City Working Group for Wellhead Protection (B.I.G.)**

The Business, Industry and City Working Group for Wellhead Protection worked with the City of Portland Bureau of Water Works for two years to draft a set of guidelines that will be used by businesses within the recently expanded Columbia South Shore Wellhead protection area to protect the groundwater resource that provides drinking water for the region. Businesses will be required to upgrade their storage and handling of hazardous materials in order to better protect groundwater. The guidelines developed by the "Working Group" exceeded initial City of Portland proposed regulations. The Working Group's willingness to work in partnership has led to the development of regulations that businesses can support and will protect our groundwater.

*For more information about our winners, or to purchase tickets for the Awards Celebration on January 9, 2004, contact Sarah Murphy at 503-281-1132 or [info@columbiaslough.org](mailto:info@columbiaslough.org).*

## Third Annual Columbia Slough 'Corps of Discovery' Paddle *by Jay Mower, CSWC Coordinator*

An intrepid band of 23 people spent the entire day of September 19, 2003, paddling the 18.7-mile length of the Columbia Slough from Fairview Lake dam to the mouth at Kelley Point Park and the Willamette River. This was the third annual Corps of Discovery paddle, nicknamed after the Lewis & Clark "Corps of Discovery" Expedition which spent many months in dugout canoes. The trip was organized by the City of Portland's Bureau of Environmental Services. A trip down the entire slough requires portaging over two levees, over a large sewage pipe (though, with low water, we went under this year), and paddling through two long culverts (NE 122<sup>nd</sup> and 82<sup>nd</sup>).

State Senator Frank Shields, Chair of the Senate Natural Resources Committee during the last Legislative session and whose district includes a large portion of the Columbia Slough watershed, participated in the all-day event. It was his first time paddling the Slough and he very much enjoyed it. Meryl Redisch, the newly hired Executive Director of the Audubon Society of Portland also paddled the Slough for the first time. Metro naturalist, James Davis, was on hand. Late in the day he confirmed Ry Thompson's sighting of a rarely seen coastal bird, the Pectoral Sandpiper, that was busy pecking for food on an exposed mudflat in the lower Columbia Slough. Davis said if bird watchers knew this bird was here they would drive many miles to see it. It was only the second time he had ever seen this species. The Columbia Slough

watershed provides habitat for over 170 bird species and 26 fish species.

Participants were able to see first-hand the successful results of the Section 1135 Ecosystem Restoration Project, a partnership between the U.S. Army Corps of Engineers, the City of Portland, and Multnomah Drainage District #1. The results are improved habitat, flood control, and water quality by digging out a deeper, meandering channel, casting the mud on the alternating sides of the channel, thus creating space for 7.5 miles of new, emergent wetland habitat. The new 15 acres of wetland benches were planted with native plants by the City's watershed revegetation crews.



The 3rd annual Corps of Discovery group poses for a photo at the first portage, the NE 143rd Avenue levee.

Steve Bricker, Natural Area Maintenance Foreman for Portland Parks & Recreation, also made the trip. Members of the Columbia Slough Watershed Council pointed out the need for put-in and take-out landings on either side of the NE 143<sup>rd</sup> Ave. cross levee to make portaging much easier than is currently possible. Two other sites in need of improved access facilities include an old ramp at the St. Johns Landfill bridge, and a muddy landing site near the entrance to Kelley Point Park.

Other participants included staff members from the CSWC, DEQ and the Bureau of Environmental Services who work year round on improving the Columbia Slough watershed.

## Fish Advisory Angler Survey Results

*by Matt Burlin, Bureau of Environmental Services*

This past summer, Portland's Bureau of Environmental Services performed education and outreach to anglers using the Slough. Conducted by students from Portland State University and Mt. Hood Community College, the outreach was designed to identify individuals that eat Slough fish and to educate anglers about ways to reduce health risks from eating contaminated fish. Because previous outreach efforts revealed that many of the anglers are from non English-speaking immigrant communities, the interviewer teams spoke two or more languages. Multi-lingual fish advisory information, including safe ways to prepare fish, were distributed.

From July to September, interviewer teams searched for angling activity along the banks of the Slough at least three times a week, including weekends during morning, afternoon, and early evening hours. In more than 30 trips, there were 21 interviews with 43 anglers. The anglers surveyed fished at varying times throughout the days and months. Although the survey area included access points between Kelley Point Park and NE 185<sup>th</sup> Avenue, there was little evidence of angling activity in the Middle or Upper Slough. Nearly half of the anglers found were fishing at the informal launch point at Kelley Point Park; other popular locations included the St. John's Landfill bridge boat ramp and North Portland Road.

The majority of anglers surveyed were males between the ages of 30 and 50. The anglers were from diverse communities, including recent immigrants from Eastern Europe, Southeast Asia, and Latin America. Others were long-time Portland residents (mostly Caucasians). These groups displayed a varied awareness of the potential hazards in consuming Slough fish. The multilingual skills of the survey teams allowed language barriers to be overcome and resulted in the successful distribution of a large number of non-English surveys.

The surveys show that there are fewer people fishing along the Slough than in years past. The majority of the anglers surveyed were aware of the fish advisory and the hazards of eating Slough fish. Most of those surveyed were eager to learn more about preparation methods that reduce the risks of contaminants in fish tissue. Environmental Services will continue fish advisory education outreach to the communities that fish along the Slough.

*For more information or to schedule fish advisory outreach at your next event, contact Renate Rudolph, BES Fish Advisory Outreach, at 503-823-7753 or RenateR@bes.ci.portland.or.us.*

## Calendar of Events

For information about CSWC Events, call 503-281-1132, email [info@columbiaslough.org](mailto:info@columbiaslough.org) or visit [www.columbiaslough.org](http://www.columbiaslough.org) and sign up for electronic Slough Updates.



### **December**

Sunday, 21 11am-2pm Smith and Bybee Lakes Paddle with Friends of Smith and Bybee Lakes  
*Free. Advance Registration Required. Call Frank Opila at 503-283-6419.*

### **January**

Friday, 9 5:30-9pm CSWC Annual Awards Celebration  
*Please join us to honor the recipients of the Columbia Slough Watershed Council 2003 Leadership and Achievement Awards. RSVP Required.*

Saturday, 10 10am-12pm Winter Birds at Smith and Bybee Lakes with Metro Naturalist James Davis  
*Free. Advance Registration Required. Call 503-797-1850 option 4.*

Sunday, 18 9am-1pm North Portland Wetlands Work Day at Smith and Bybee Lakes with Metro  
*Call 503-797-1850 option 8 for more information.*

Saturday, 24 9am-12pm Johnson Lake Restoration Volunteer Work Party  
*Contact CSWC at 503-281-1132 for more information.*

Saturday, 24 10am-12pm Winter Birds at Smith and Bybee Lakes with Metro Naturalist James Davis  
*Free. Advance Registration Required. Call 503-797-1850 option 4.*

Saturday, 24 1:30-3:30pm Peninsula Crossing Trail Winter Wildlife Walk with Metro Naturalist James Davis  
*Free. Advance Registration Required. Call 503-797-1850 option 4.*

Sunday, 25 12-4pm Smith and Bybee Lakes Paddle with Friends of Smith and Bybee Lakes  
*Free. Advance Registration Required. Call Troy Clark at 503-249-0482.*

Monday, 26 5-8pm CSWC General Meeting  
*Nabisco Biscuit Company, 100 NE Columbia Blvd.*

### **February**

Sunday, 15 12-3:30pm Smith and Bybee Lakes Paddle with Friends of Smith and Bybee Lakes  
*Free. Advance Registration Required. Call Emily Roth at 503-235-4828.*

Sunday, 15 9am-1pm North Portland Wetlands Work Day at Smith and Bybee Lakes with Metro  
*Call 503-797-1850 option 8 for more information.*

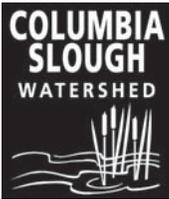
Monday, 23 5-8pm CSWC General Meeting  
*Nabisco Biscuit Company, 100 NE Columbia Blvd.*

### **March**

Saturday, 6 9am-1pm Slough 101 Workshop  
*Join us for a hands-on class that will give you an understanding of the unique character, challenges and opportunities of the Slough and its watershed. Registration required.*

Saturday, 6 10am-12pm Winter Birds at Smith and Bybee Lakes with Metro Naturalist James Davis  
*Free. Advance Registration Required. Call 503-797-1850 option 4.*

Monday, 29 5-8pm CSWC General Meeting  
*Nabisco Biscuit Company, 100 NE Columbia Blvd.*



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Sign up for Slough Updates at [www.columbiaslough.org](http://www.columbiaslough.org)



## The Fifth Annual Columbia Slough Watershed Council Awards Celebration

Friday January 9, 2004

5:30 – 9:00 PM

Columbia Edgewater Country Club  
2220 NE Marine Drive, Portland

For tickets: Call (503) 281-1132  
or email [info@columbiaslough.org](mailto:info@columbiaslough.org)  
RSVP required by January 2, 2004  
Individual tickets are \$25 per person.  
Table sponsorships are \$300 (8 tickets).

**Event Sponsors:**  
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