

2012 Annual Report



PHLUSH welcomed World Toilet Organization Founder Jack Sim to Portland in June

We were honored to host Mr. Jack Sim on a three-day visit to Portland. Since the energetic and spirited Founder of the World Toilet Organization had requested a packed schedule, the PHLUSH team, led by Abby Brown, arranged dozens of speaking engagements, interviews, and meetings.

The Singapore national began his visit at the City's annual Starlight Parade, where he was hosted by the Royal Rosarians. Portland City Commissioner Amanda Fritz welcomed Sim at City Hall, after which he toured the Portland Loos, the innovative, city-patented sidewalk toilets installed throughout downtown.

At Portland State University, Sim toured the laboratory of Dr. Radu Popa, where black soldier flies are used to more efficiently cycle nutrients, transforming organic waste directly into valuable animal feed. Sim then visited New Earth Farm in Hillsboro, Oregon to observe Bokashi fermentation, vermicomposting, and related recycling processes that produce rich soil

amendments. He also attended working lunches hosted by Ken and Kyle Earlywine of Green Flush Technologies and by Dr. Jay Kravitz of the Global Health Center at the Oregon Health Sciences University.

On June 4th, 2012, Representative Earl Blumenauer, the staunchest advocate for international water and sanitation action in the US Congress, introduced Jack Sim to a public audience at Mercy Corps. PHLUSH Co-Founder and former Old Town Chinatown Neighborhood Association Chair Tom Carrollo introduced the Congressman. Carrollo noted that the Old Town Chinatown neighborhood which is home to both Mercy Corps and PHLUSH, was incorporated into Oregon's 3rd District following the 2010 US Census. Congressman Blumenauer has represented District 3 in Washington DC since 1997.

Jack Sim quit a successful business career in 2001 and founded the World Toilet Organization to raise awareness the 2.5 billion people who lack basic sanitation. *A Time Magazine* "Hero of the Environment", Sim is developing market-based Bottom-of-the Pyramid products that use human waste to enhance food security and meet the aspirations of the poorest of the poor. PHLUSH has been a WTO member since 2008.

Jack Sim's visit was made possible through the generosity of Green Flush Technologies, Philanthropy Now, the Paul Rippey Family, Steel Bridge, OHSU Global Health Center, and Water for the Ages.



U.S. Congressman Earl Blumenauer introduced Jack Sim at a speaking engagement at Mercy Corps.

Abby Brown received travel grant to represent PHLUSH at the World Toilet Summit

Thanks to a generous travel grant, PHLUSH Outreach Specialist Abby Brown travelled to Durban, South Africa in early December to attend the World Toilet Summit. Colleagues nominated Brown to represent PHLUSH because of her volunteer contributions and her interest in global

sanitation. Her presentation, "Advocating Sensible Sanitation in North America: What Works", highlighted our efforts in public toilet design, emergency sanitation, and ecological sanitation.

Launched by the World Toilet Organization in 2001, the Summit brings together advocates and technical experts to share knowledge, brainstorm, strategize and plan. PHLUSH members have presented at past Summits in Delhi, Singapore, and

Philadelphia. We are grateful to the World Toilet Organization for covering Brown's flight and accommodations.

Throughout the Summit, the PhD student at University of California Santa Cruz live blogged proceedings. Among the global toilet experts Brown met were Trevor Mulaudzi of South Africa's Clean Shop and Barbara Penner of the Bartlett School of Architecture, University College of London. Both are profiled on the PHLUSH website.



The PHLUSH team exhibited the Twin Bucket Emergency Toilet at a "Reinvent the Toilet" event at Seattle's Pacific Science Center.

Salinas Chinatown PHLUSH is managing a community toilet in California

A new PHLUSH initiative is underway in Salinas Chinatown in California, a sister neighborhood to Portland Old Town Chinatown. In 2008, neighborhood leader and businessman Harold Weiner was invited to Salinas to talk about developments in Portland and in 2011 a group of Salinas community leaders made a return visit to Portland.

Dr. Seth Pollack, of the Service Learning Institute at California State University Monterey Bay, engages students in work in Salinas Chinatown neighborhood, which is home to people without houses living in unofficial encampments. Given shared goals in hygiene and sanitation, the Cal State folks welcomed our suggestion that they launch their own PHLUSH group. The students and homeless people in Salinas Chinatown PHLUSH are learning how communities can successfully manage toilets over the long term.

Following a survey of community needs, the group mobilized three months' funding for a portable toilet, which members are currently managing. Next the group will explore the possibility of building

composting toilets in the community garden, which is a key neighborhood source of fresh produce. We look forward to a rich and mutually beneficial collaboration.

A third PHLUSH group will support our 2013 initiative to bring hygiene and sanitation to Portlanders without houses. PSU PHLUSH is being formed by a talented group of students in Community Development at the School of Urban Studies and Planning at Portland State University.

Through our work in emergency preparedness, we've introduced sustainable sanitation alternatives to people across the Pacific Northwest

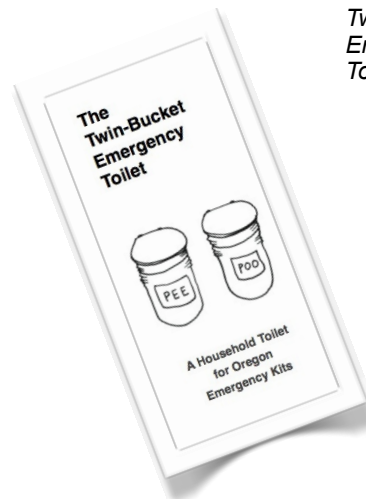
Emergency sanitation was a key focus in 2012 as experts urged households and neighborhoods to prepare for a Cascadia Subduction Zone quake, which would interrupt water and sewer service.

The City of Portland's Office of Emergency Management endorsed the Twin Bucket Emergency Toilet, our adaptation of the system used in post-earthquake Christchurch, New Zealand.

We set up emergency toilet exhibits at 22 community events ranging from neighborhood preparedness fairs to multi-day events organized by the National Guard and professional first responders.

The Twin Bucket Emergency Toilet came to the attention of the Bill and Melinda Gates Foundation and we exhibited at a *Reinvent the Toilet* event at Seattle's Pacific Science Center in June.

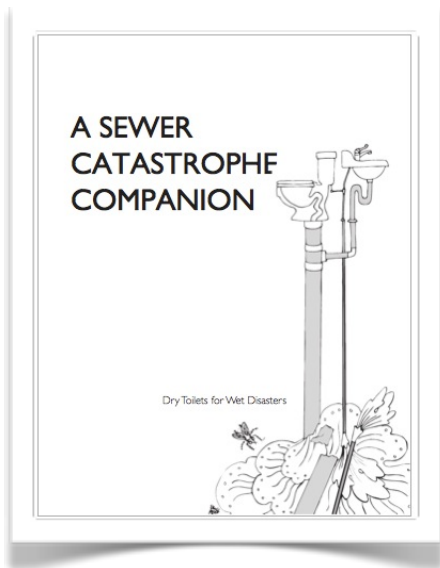
As demand grew for emergency sanitation options, Molly Danielsson and Mathew Lippincott instructed groups in the collection of urine and feces and composting for safe recycling and reuse. For most audiences, emergency sanitation training was their first introduction to closed loop sanitation.



Twin Bucket Emergency Toilet leaflet.

Professional partnerships have led to key publications

Following a semester of teaching and field testing with graduate students in Collaborative Design at the Pacific Northwest College of Arts, Danielsson and Lippincott completed *A Sewer Catastrophe Companion: Dry Toilets for Wet Disasters*. The profusely illustrated and meticulously documented guide to waterless sanitation answers the question "what will we do when the toilets don't work?"



A Sewer Catastrophe Companion developed by Molly Danielsson and Mathew Lippincott illustrates how to compost and recycle urine and feces in a longer term emergency.

Covering both emergency sanitation preparation and response, the manual gives information on containers and supplies needed, collection and storage, building a compost pile and testing to ensure pathogens have been eliminated before compost is reused on gardens. *A Sewer Catastrophe Companion* is being used to train professional first responders and citizens alike. It is available on the websites of MDML and the Portland Bureau of Emergency Management.

Carol McCreary co-authored fact sheets published by the Sustainable Sanitation Alliance, a Europe-based international network of which PHLUSH is a member. With K. Gröber, T Panzerbieter, J. Rück and L. Kappauf, she researched and wrote "Public awareness raising and sanitation marketing." With D. Spuhler, M. Fogde, and P. Jenssen she co-authored "Capacity development for sustainable sanitation." The full *Compilation of 13 Factsheets on Key Sustainable Sanitation Topics* is available online from the Sustainable Sanitation Alliance.

Following her participation in Sustainable Phosphorus Summit at Arizona, Carol McCreary co-authored with Professors Timothy Crews of Prescott College and James Cotner

of the University of Minnesota, "Cultural beliefs, values, and the biogeochemical cycling of P", a chapter in *Phosphorus, Food, and Our Future* (K. Wyant, J. Corman and J. Elser. eds.) forthcoming from Oxford University Press.

Online advocacy and media outreach give PHLUSH all-volunteer efforts global reach

Thanks to support from Lewis Barrett, Electronic Communications Specialist at Neighbors West-Northwest, we enjoy an online presence that includes a website, a blog, a Twitter feed, a Facebook group, a YouTube account and a newsletter. Launched by Co-Editors Poonam Sharma and Abby Brown, *Pee, Poo and You* features PHLUSH news for a national and international audience. Free subscriptions are available on the phlush.org homepage.

PHLUSH members gather at regular monthly meetings in Portland to which the public is invited. Sanitation specialists and citizen advocates from other parts of the US and from abroad, often join our meetings via Google+ and Skype.

Journalists and other individuals continue to make inquiries at info@phlush.org resulting in increased media attention. A front page article in *The Los Angeles Times* entitled "Portland Loo, a public toilet that skips to the head of its class" illustrates the PHLUSH design principles.

Our collection of resources has grown to include mobile exhibits

Library materials for reference and circulation include publications made available through the Sustainable Sanitation Alliance, documents collected at the World Toilet Summit and other events, books on toilet design, videos, DVDs and printouts of specialized studies.

To better respond to requests for emergency sanitation information, we now make available exhibits in

mobile carts. Each includes a Twin Bucket Toilet with lids and seat, carbon additives, gloves, supplies, and Lucite display boxes for handouts. These are sometimes loaned to volunteers from other community groups following a brief orientation at our office.

In January we moved to a new larger office, located in the historic 1872 New Market Theater and generously made available by our friends at Beardsley Building Development.

In 2012, we celebrated three global days of advocacy with local action, strategic email and online campaigns

Sanitation has become a key focus of World Water Day, which is commemorated globally in the third week of March. Here in Portland we exhibited our Twin Bucket Emergency toilet system at the Oregon Museum of Science and Industry. The activity-filled World Water Day featured a walk and a run for water and gave PHLUSHers a chance to chat with local groups committed to water sustainability in the US and overseas.

For Global Handwashing Day on October 16, we tweeted messages with links to scientific research, investigative journalism, educational materials, videos, games and posters. We focused on handwashing as a bulwark against the contagion associated with recent public health scares and the need for restrooms with handwashing facilities.

The goal of our November 19th World Toilet Day campaign was to promote better household and neighborhood-level emergency sanitation instructions in a Cascadia Subduction Zone earthquake, which is likely to compromise water and sewer infrastructure for months or years. Our emailed letters to City Councilors and Country Commissioners in three west coast cities resulted in grateful replies and instructions to staff to follow up using materials available on the PHLUSH website. In response to our advocacy, authorities in Seattle, Washington, and Vancouver, British Columbia have changed their emergency sanitation guidelines.



Thanks to the generosity of Beardsley Building Development, PHLUSH enjoys use of an office in Portland's historic New Market Theater, built in 1872

Research and professional development brings new opportunities for 2013

Late in the year we proposed the project "Sanitation as a Human Right: Toilets for Portlanders without houses to the Community Development Faculty at Portland State University's Toulon School of Urban Studies. Through June 2013, a student team known as PSU PHLUSH will address complex

challenges facing most of North America's large urban areas.

In December 2012, Kate Washington was awarded a nine-month research internship through the Ronald E. McNair Scholars Program to explore whether having more public toilets public toilets would encourage use of public transportation in greater Portland. The results of her research will be presented at an August 15th research symposium for McNair Scholars, a program administered by Portland State University. Jeff

With great sadness...

...we share news that Barbara Lescher, who co-founded PHLUSH and has remained our inspiration, passed away on January 29, 2013. Her Celebration of Life is March 16 at 1 pm at Crossroads Christian Church in Portland. Later this year we'll find a lasting way to honor her indomitable spirit.



Holiman will represent PHLUSH in the Sustainable P Research Coordination Network (RCN). Based at Arizona State University, the P Sustainability RCN will synthesize data, perspectives, and understanding about phosphorus to improve P efficiency in food production and develop robust pathways of P recycling.

Abigail Brown will support Carol McCreary in leading the global working group on Sanitation Awareness of the Sustainable Sanitation Alliance.

PHLUSH believes that toilet availability is a human right and that well-designed sanitation systems restore health to our cities, our waters and our soils. An all-volunteer advocacy group based in Portland, Oregon, PHLUSH collaborates with grassroots organizations, environmental activists, planners, code officials, city managers and emergency responders. We receive support from the Old Town Chinatown Neighborhood Association and Neighbors West-Northwest. PHLUSH is a member of the World Toilet Organization and a partner in the Sustainable Sanitation Alliance.

Public Hygiene Lets Us Stay Human (PHLUSH)

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partner of

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