

2015 Green Gardening Workshop for Landscape Professionals

# Resilient Landscapes for Our Changing Urban Environment



..... "This is an excellent workshop every year." –2014 workshop attendee .....

## Spanish Session / Clase en Español

Learn important techniques and information on tree biology and care.

*Aprende técnicas y información importante sobre la biología y cuidado de los árboles.*

This brochure, and a brochure in Spanish, can be found at [www.seattle.gov/util/LandscapeProfessionals](http://www.seattle.gov/util/LandscapeProfessionals)  
*Se puede encontrar este folleto y un folleto en español: [www.seattle.gov/util/LandscapeProfessionals](http://www.seattle.gov/util/LandscapeProfessionals)*

## WORKSHOP TOPICS INCLUDE:

- Recent extreme weather and what to expect in the future
- Green infrastructure for a changing climate
- Understanding and managing the effects of variable weather on forest landscapes
- Stormwater pollution and solutions to protect salmon
- Stormwater management, a field trip to High Point
- Managing conifer pests and pathogens in a changing environment
- Integrated pest management and plant health care

*Pesticide recertification and continuing education credits requested from/for WSDA, CPH, PLANET, ISA, ecoPRO, Master Gardener, and APLD. LA PDHs offered.*

**GREEN  
GARDENING  
PROGRAM**

Seattle  
**Public  
Utilities**

Local Hazardous Waste  
Management Program  
in King County

*Sponsored by Seattle Public Utilities and funded by the  
Local Hazardous Waste Management Program in King  
County with support from South Seattle College.*

**SOUTH SEATTLE COLLEGE**  
One of the Seattle Colleges

# 2015 Fall Workshop **Resilient Landscapes for Our Changing Urban Environment**

Wednesday, October 21, 2015 7:30 AM to 4:00 PM  
 Brockey Center, South Seattle College  
 6000 16th Ave SW, Seattle, WA 98106-1499



## SCHEDULE

7:30 Sign-in, Refreshments, Visit Exhibitors

### 8:00-12:00 MORNING SESSIONS

8:00 Welcome & Introductions by the Green Gardening Program

*Laura Cacho, Sustainable Landscape Program manager, Seattle Public Utilities; Gwen Vernon, Green Gardening Program manager, Cascadia Consulting Group*

8:20 2015 as 2070: Learning from Recent Extreme Weather

*James Rufo-Hill, Meteorologist and Climate Adaptation Specialist, Seattle Public Utilities*

Atmospheric conditions toward the end of 2013 led to the development of a large pool of anomalously warm water in the northeast Pacific Ocean. The region, known as “The Blob,” persisted, morphed, and partnered with other planetary phenomena to provide a prolonged, seemingly non-stop period of extreme events, record warmth, and drought conditions across the Northwest. According to the latest climate change research, much of this recent extreme weather will be commonplace by mid-century. James will explain how Seattle Public Utilities, provider of regional water supply, urban drainage, and solid waste services, has responded and how lessons learned can be applied to the future.

8:50 Green Infrastructure for a Changing Climate

*Nancy Rottle, Landscape Architect, Professor, Green Futures Lab, University of Washington*

The Pacific Northwest is predicted to experience hotter, drier summers and wetter, warmer winters in the coming decades, conditions that will stress existing landscapes and dictate new ways of designing new urban landscapes. By planning for these conditions, we can maximize chances for success. The resilience of our green spaces contributes to both climate change mitigation and human adaptation to challenging conditions like polluted stormwater and increased impacts of plant pests and disease. Nancy will discuss strategies including integration of green stormwater infrastructure, considerations for habitat connectivity, cultivation of social cohesion in public spaces, and planting species that will adapt to a changing climate.

9:35 Understanding and Managing the Effects of Climatic Variability and Change on Forest Landscapes

*Dave Peterson, Senior Research Biologist, U.S. Forest Service, Pacific Northwest Research Station*

A warmer climate will cause gradual changes in the distribution and abundance of plant species in forests of Washington, but the biggest changes will occur in response to rare disturbance events—drought, wildfire, insects—in conjunction with other stressors. David will discuss our scientific understanding of the effects of climatic variability and change on trees; how these effects can be translated from natural systems to urban, suburban, exurban landscapes; and how proper plant selection can accommodate climate change.

10:05 Panel Discussion

*James Rufo-Hill, Nancy Rottle, David Peterson*

10:35 Stormwater Pollution and Solutions that Protect Juvenile Salmon

*Jenifer McIntyre, Ecotoxicologist, Washington State University Puyallup Research and Extension Center*

In urbanized environments, impervious surfaces create stormwater runoff that usually ends up in the nearest water body. Urban stormwater runoff can be acutely toxic to aquatic animals – particularly salmon. Bioretention approaches to controlling stormwater runoff are promising for preventing these toxic effects. Jenifer summarizes recent research on urban runoff toxicity and the potential benefits of bioretention from an ecotoxicological perspective.

11:15 The Landscape Professional’s Challenge: New Pests in a New Climate

*Sharon J. Collman, Entomologist, Washington State University*

Insect species have crept, flown, or been carried into the Puget Sound region. Native Americans, early explorers, and wagon trains west brought favorite medicinal or food plants; airplanes and ships bring invaders in ballast water, wood dunnage, and containers today. Southern insects, in particular, are finding our warming climate to their liking. Those that survive to become serious pests cost taxpayers billions. You are “the eyes in the

field” and are most likely to spot the unusual insect or damage early. Early detection can prevent damage to the trees you manage, or reduce the spread, costs, and destruction caused by invasive insect species. Sharon will cover recent invaders, including brown marmorated stink bug, lily leaf beetle, Asian longhorn beetle, and European chafer.

## 12:00-1:00 LUNCH

*Waste-free, mostly organic, mostly local*

## 1:00-4:00 AFTERNOON SESSIONS

**Choose one of the following:**

### ■ TRACK A: Stormwater Management: High Point, RainWise and Rain Gardens

*Moderator: Annette Frahm, FrahmComm*

*Presenters: Lorelee Wenger, Owner, Wenger Design and*

*Landscape; David Hymel, Owner, Rain Dog Designs;*

*Teresa Damaske and Jennifer Lathrop, Landscape Architects,*

*SvR Design Company; Zach Chupa, Grounds Supervisor, The Management Trust*

Rain gardens, swales, and other green approaches to managing stormwater have become more common. This track will cover stormwater management from the residential scale to large-scale developments. Lorelee Wenger will describe working with homeowners through Seattle’s RainWise Program, including selecting sites for rain gardens, design considerations, and plant selection. David Hymel will discuss how clustered rain gardens can reduce costs and build community. He will also cover residential rainwater harvesting and reuse and rebate programs for green stormwater infrastructure across Puget Sound. Seattle’s High Point neighborhood is an award-winning development whose design incorporated a range of strategies to reduce runoff and protect Longfellow Creek. Teresa Damaske, Jennifer Lathrop, and Zach Chupa will lead a tour of High Point and share lessons learned in the 10 years since it was developed. The panel will also discuss the different roles of landscape professionals in managing stormwater. This track will take place at the High Point site.

### ■ TRACK B: Managing Urban Conifers in a Changing Environment

*Moderator: Sue Nicol, Horticulturist & Certified Arborist*

*Presenters: Karen Ripley, Forest Health Program Manager;*

*Amy Ramsey, Forest Pathologist, Department of Natural*

*Resources; Paul West, Natural Resources Manager, City of Mercer Island*

The health and vigor of conifers reflects the interactions between tree species, pests and pathogens, and environmental factors such as rainfall and temperature. This track will cover how a changing climate likely affects conifers in the coming decades and offer ideas on management. Karen Ripley will discuss how stresses affect pest activity in urban areas (specifically wood borers and bark beetles), what new insects are likely to show up, and how to report suspicious pest sightings. Amy Ramsey will discuss how climate drives many of our disease issues, signs and symptoms of foliar and root diseases such as Laminated Root Rot and Armillaria, and proactive management ideas for urban trees and forests. Paul West will discuss various approaches the City of Mercer Island has considered to address root diseases, such

as ground inspections, remote sensing, root crown excavation, Trichoderma inoculation, and borax. He will present a tree assessment flow chart that uses visual tree assessment and root crown excavation. This systematic methodology uses the best available science to inform land managers about the levels of assessment they might choose to employ.

### ■ TRACK C: Insect IPM, Plant Health Care, and Planting Right

*Moderator: Gwen Vernon, Cascadia Consulting Group*

*Presenters: Sharon Collman, Washington State University;*

*Ladd Smith, Owner, In Harmony Sustainable Landscapes; Ray*

*Willard, Roadside Maintenance Project Manager, Washington*

*Department of Transportation; and Christina Pfeiffer,*

*Horticulture Consultant & ISA Certified Arborist*

Integrated Pest Management (IPM) is a coordinated decision-making and action process that uses the most appropriate methods and strategies to manage pests. Ladd Smith and Ray Willard will present integrated pest management, vegetative management, and plant health care strategies, including the state’s IPM law, resources for choosing control products, pesticide monitoring and evaluation, and how to create a healthy and sustainable landscape ecosystem. Sharon Collman will share information on detection and management of new pest arrivals, including how pest management strategies change with the season and life cycle. She will lead a small-group invasive species identification exercise where participants design the key elements of an IPM strategy for managing the pest at different life stages. Christina Pfeiffer will address proper site preparation and planting techniques to prevent plant stresses such as root rot and brown rot. You will leave this track with tools to help you develop a system for recording observations and evaluating your sites from one season to the next.

### ■ TRACK D: La biología y cuidado de los árboles – Tree Biology and Care

**(Clase en español / Class conducted in Spanish)**

*Gonzalo Yepes, Owner, Colombian Gardens;*

*Nahum Estrada, Owner, Judas Lion Landscaping*

**Español!**

The objective of the track is to teach sustainable tree care practices. Participants will learn the benefits of trees, tree anatomy, and terminology. This track will cover practices including tree selection, proper planting and establishment, water management, nutrient management, and management of construction impacts. It will teach participants the basics of diagnosing tree disorders. The track includes a short pruning exercise.

*El objetivo de la clase es enseñar cómo sostener efectivamente un árbol. Los participantes aprenderán los beneficios de los árboles, la anatomía y terminología de la arboricultura. La clase presentará las prácticas incluyendo: el seleccionamiento del árbol, la plantación adecuada y establecimiento, el manejo de agua y nutrientes, y el cómo manejar los impactos de la construcción. La clase enseñará a los participantes los conceptos básicos del diagnóstico de enfermedades del árbol. Incluye un ejercicio corto de poda.*

## 4:00 END

**Continuing Education & Pesticide Recertification Credits**



## REGISTRATION

Please submit one registration form per registrant.

*Register early – space is limited. Registration deadline Wednesday, October 7th.*

**Online through Brown Paper Tickets:** <http://bpt.me/1990783>

**Mail:** Mail registration form (below) and check made out to “Cascadia Consulting” to: Cascadia Consulting Group, Attn: Green Gardening Workshop, 1109 First Ave., #400, Seattle, WA 98101.

**Purchase Order:** Fax P.O. and registration form (below) to “Green Gardening Workshop” at fax number 206-343-9819.

**WHO IS YOUR EMPLOYER?** (check one)

- Public sector (i.e. park, school district)
- Private company, 100+ employees
- Private company, 20-100 employees
- Private company, fewer than 20 employees
- Institution (i.e. college, hospital)
- Other: \_\_\_\_\_

**WHAT PRIMARY FIELD DO YOU WORK IN?**

(check all that apply)

- Design
- Installation
- Maintenance
- Other: \_\_\_\_\_

**WHAT IS YOUR ROLE?** (check all that apply)

- Manager or owner
- Employee
- Student
- Other: \_\_\_\_\_

**HOW WOULD YOU LIKE TO RECEIVE THE BROCHURE NEXT YEAR?** (check one)

- Mail Only
- Email Only
- Both Mail and Email

Name Agency	Job Title	Business or
----------------	-----------	-------------

Address	City	State	Zip
---------	------	-------	-----

**PLEASE CHOOSE WHICH YOU WILL ATTEND:**

- Full-day = \$30** (includes morning and afternoon sessions, breakfast, and lunch)
- Half-day = \$15** (includes either morning session with breakfast, or afternoon session with snack; does not include lunch)  
Please specify:  morning only  afternoon only
- Half-day, Spanish-track only = Free**

**FULL-DAY AND AFTERNOON-ONLY ATTENDEES:**

Please choose one track below:

- [A]** Stormwater Management: High Point, RainWise and Rain Gardens
- [B]** Managing Urban Conifers in a Changing Environment
- [C]** Insect IPM, Plant Health Care, and Planting Right
- [D]** In Spanish: Tree Biology and Care  
(La biología y cuidado de los árboles)

**Campus map can be found at: [www.southseattle.edu/campus/map.htm](http://www.southseattle.edu/campus/map.htm)  
Questions? Call 206-449-1158 for more information.**