

13th Bainbridge Island Environmental Conference


The Future of Trees on Bainbridge Island

*A conference on the importance of trees and tree retention on
Bainbridge Island*

Waterfront Park Community Center, 370 Brien Way
Saturday, November 15th, 2013 1:00 p.m. to 5:00 p.m.,



Co Sponsored by
Sustainable Bainbridge and Islanders for Responsible Development

- 1:00 **Introduction** - Charles Schmid, Association of Bainbridge Communities (ABC)
- 1:10 – ABC Presentation of **Environmentalist of the Year** to Dr. Olaf Ribeiro
by Dale Spoor, President of ABC
- 1:25 **Green Economics: Goods and Services of Community Trees** Dr. Kathleen Wolf
(College of Forest Resources, University of Washington)
- 1:50 **Overview of Loss of Canopy on Bainbridge Island** –
Dr. Olaf Ribeiro (Bainbridge Island Arborist/Consultant)
- 2:10 **Essential Elements of a Tree Ordinance** – Ben Thompson
(Urban Forestry Specialist, Department of Natural Resources)
- 2:35 **Status of Present Tree Ordinances and Update Process**
Jennifer Sutton (Special Project Planner, City of Bainbridge Island)
- 2:45 Questions for Speakers
- 2:50 20 Minute Break 
- 3:10 **Panel Discussion - Experience on the Effectiveness of Tree Ordinances**
Marianne Edain and Steve Erickson (Whidbey Environmental Action Network),
Jon Quitslund (Ad-hoc Bainbridge Island Tree Ordinance Committee), Jennifer
Sutton (AICP, Special Project Planner, City of Bainbridge Island), Debbie Vann
(former City Council and Forestry Committee Member)
- 4:00 **Breakout sessions**
- 1) Important Elements of Tree Ordinances– Jon Quitslund
 - 2) Understanding the Importance of Urban Forests – Kathy Wolf
 - 3) Citizen Views on Retaining Trees versus Tradeoffs – Debbie Vann
- 5:00 Each breakout session writes a summary of their meeting and adjourns



Printed on
recycled paper

SPEAKERS & PANELISTS

Marianne Edain and **Steve Erickson** founded Frosty Hollow Ecological Restoration in 1982 and have worked in that field ever since. They founded Whidbey Environmental Action Network in 1989 to do what they call "preventive restoration." Steve taught himself environmental law and practices before hearings boards and administrative law bodies. Marianne is "brushfire coordinator," working with individuals and groups who find damage happening or being proposed in their neighborhood. This involves monitoring forest practice permits, land use development permits, and unpermitted activities. This often informs Steve's broader scale legal/administrative approach. The foundation of all the work is to bring science and law together to protect the environment which supports us all.

Jon Quitslund grew up on Bainbridge (1945-57), then went off to college and graduate school, returning often in the summers and moving back for good in 2000 when he retired from teaching. He has written extensively about Island affairs, and blogs from time to time on the Sustainable Bainbridge website. He is in his second term on the Planning Commission.

Olaf Ribeiro previously was a research plant pathologist. He is the author & co-author of two plant pathology textbooks presently used in over 80 countries. He has been involved in improving the health of mature trees throughout the US and overseas since 1985. He has helped renovate Juanita Woodlands, Kirkland and with the help of volunteers planted 3,000 trees in the woodlands towards a goal of planting 10,000 trees. Over the past few years he has distributed over 2,000 trees to Bainbridge Islanders and helped volunteers plant 500 trees on either side of Highway 305. His work saving trees was acknowledged on the NBC Today Show, in the *Wall Street Journal* and on Seattle's Channel 5 Evening Magazine. His awards include: Honorary Citizenship in 1972 by the Mayor of Morgantown, West Virginia; certificate for outstanding volunteerism by Washington Governor Booth Gardner in 1988; Education Award by the International Arboricultural society and an award by the Consul General of Japan for saving Cherry trees. Olaf is also featured in the book "*In Praise of Island Stewards*" and is presently the president of the Murden Cove Preservation Association.

Jennifer Sutton joined the City as a Planner in 2004 after completing a master's degree in Environmental Studies with a focus on Planning. As a planner at the City, she has reviewed all kinds of development permits. Jennifer has focused on developing plans and regulations over the past two years.

Ben Thompson is the Urban Forestry Specialist for the Washington State Department of Natural Resources (DNR). He holds a Bachelor's degree in Urban and Community Forestry from Unity College in Maine and a Master's degree in Forest Resources and Conservation from the University of Florida. He is an ISA Certified Arborist and a Qualified Tree Risk Assessor, and has worked in horticulture, academia, land management, and municipal forestry.

Debbie Vann is a retired Social Worker, who specialized in working with child abuse victims, with an emphasis on child sexual abuse. After retiring she became a citizen activist member of the East Bainbridge Island Community Association and ABC. She was elected to the City Council in 2001. She supported the creation of the City's Forestry Commission and was the chair of the Land Use Committee, leading the development of the Critical Areas Ordinance. In 2010, she was appointed to the Forestry Commission and worked for two years on a failed attempt to implement a Tree Retention Ordinance. She strongly supports the efforts of the current Tree Ordinance Committee.

Kathleen Wolf is a research social scientist at the University of Washington and holds a joint appointment with the US Forest Service, Pacific Northwest Research Station. Her studies are about the human dimensions of urban forestry and urban greening. An overview of Kathy's research programs can be found at www.naturewithin.info; additional research findings on Green Cities: Good Health are at www.greenhealth.washington.edu

Benefits of Trees

1. Removes carbon dioxide (CO₂) from the atmosphere during photosynthesis to form carbohydrates used by the plant for structure & function.
2. Shades homes and offices reducing the need for air conditioning by approx. 30%.
3. One tree shading a home in the city will save fossil fuel and cut carbon dioxide buildup. Reduces the "Greenhouse Effect"
4. Planting trees remains one of the cheapest most effective means of removing excess carbon dioxide from the atmosphere. (Carbon sequestration)
5. A single mature tree can absorb carbon dioxide @ 48 lbs/year and release enough oxygen into the atmosphere to support 2 human beings.
6. If every American family planted just one tree, the amount of CO₂ in the atmosphere would be reduced by one billion lbs. annually.
7. Over a 50 year life span, a tree generates \$31,250 worth of oxygen provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil erosion.
8. USDA Forest Service Center for Urban Forest Research has showed that the net worth of a large tree (greater than 40ft. tall) to a community is \$4,440 (these include total benefits/yr.; total costs/year and net benefits/yr; based on a life expectancy of 120 years) compared to a value of \$960 for a medium size tree (20-40 ft. tall) and \$270 for a small tree (less than 25 ft. tall).
9. 100 million additional mature trees could save \$2 billion in energy costs per year.
10. Reduces air pollutants such as sulfur dioxide, ozone and auto emissions.
11. One 12-inch diameter sugar maple along a roadway removes in one growing season, 60 mg cadmium, 140 mg chromium, 820 mg nickel and 5200 mg lead from the environment.
12. Reduces topsoil erosion and prevents pollutants contained in the soil from getting into our waterways. For every 5% of tree cover added to a community, storm water runoff is reduced by approx. 2%.
13. Research by the US Forest Service shows that in a 1 inch rainstorm over 12 hrs. the interception of rain by the canopy of the urban forest reduces runoff by approx. 11.3 million gallons or 17%.
14. A mature tree can take up 300 gallons (or more) of water a day.
15. Extends the life of paved streets.
16. Traffic calming effects. A treeless street enhances the perception of a street being wide and free of hazard, thereby increasing speeds.
17. Reduces driver stress
18. Reduces crime in neighborhoods. Fewer reports of physical violence in homes that have trees outside the buildings.
19. Hospital patients with a view of trees outside their windows recover much faster and with fewer complications than similar patients without such views.
20. Trees help create a feeling of relaxation and well-being.
21. Reduces noise pollution by buffering and absorbing as much as 50% of urban noise.
22. Habitat for wildlife. As many as 100 different life forms can be found on one tree.
23. Reduces the incidence of Type 2 diabetes
24. Recent research in Toronto has demonstrated how mature trees significantly reduce energy use in urban areas.
25. Important part of a supportive, humane environment. Trees provide a safety valve, countering constant tensions imposed by the built environment.
26. Mothers who live in neighborhoods with plenty of grass, trees or other green vegetation are more likely to deliver at full term and their babies are born at higher weights, compared to mothers who live in urban areas that aren't as green, according to a new study.
27. In a recent finding scientists have determined that for most species, the biggest trees increase their growth rates and sequester more carbon as they age.

Summary: *A healthy, growing tree is essentially a pollution-eating device and a mini air-conditioner!*

Provided by Olaf K. Ribeiro, Bainbridge Island, WA



Current Sections of BI Municipal Code

Chapter 15.18 (draft Ordinance 2014-38)

LAND CLEARING:

- 15.18.010 Purpose.
- 15.18.020 Definitions.
- 15.18.030 Applicability.
- 15.18.040 Exemptions.
- 15.18.050 General requirements.
- 15.18.060 Performance bond.
- 15.18.070 Appeals.
- 15.18.080 Violation – Enforcement and penalty

Chapter 16.12

SHORELINE MASTER PROGRAM (New SMP not codified yet, so have to use the Program as adopted by Council)

Chapter 16.20 CRITICAL AREAS

Chapter 16.22 VEGETATION MANAGEMENT

- 16.22.010 Findings and declaration of purpose.
- 16.22.020 Definitions.
- 16.22.030 Applicability.
- 16.22.040 Exemptions.
- 16.22.050 Vegetation management permit.
- 16.22.060 Vegetation management standards.
- 16.22.070 Submittal requirements.
- 16.22.075 Moratorium relief.
- 16.22.080 Release of moratorium.
- 16.22.090 Decision criteria for release of moratorium.
- 16.22.095 Rescission of moratorium.
- 16.22.097 Permit revocation and penalties.
- 16.22.100 Flowchart for timber harvests.
- 16.22.115 Appeals.

Chapter 18.15.010 LANDSCAPING, SCREENING, AND TREE RETENTION, PROTECTION AND REPLACEMENT

A. Purpose.

1. General. The purpose of this section is to preserve the landscape character of the community, link the Island's natural amenities with landscape greenbelts along scenic roads, improve the aesthetic quality of the built environment, promote retention and protection of existing vegetation, reduce the impacts of development on wetlands, streams and the natural environment, enhance the value of current and future development and increase privacy for residential zones, and encourage preservation of significant and heritage trees by:

- a. Retaining existing vegetation, tree stands and significant trees by incorporating them into the site design..
- b. Incorporating native vegetation and drought resistant plant material into new landscape developments.
- c. Providing vegetated screening between different intensities of residential uses.
- d. Providing visual relief of parking areas in the neighborhood service centers, the Winslow Mixed Use Town Center, and the light manufacturing, (water dependent) industrial, High School Road and urban multifamily districts.
- e. Providing vegetated screening between residential and nonresidential areas.

Includes Table 18.15.010-1: Landscape Requirements by Zone District

SPONSORING ORGANIZATIONS

The Association of Bainbridge Communities (ABC) has been working to preserve Bainbridge Island's natural environment since 1978. As dedicated citizens living on a beautiful island, we are interested in learning how we can actively protect and restore a clean and healthy environment. The Association often speaks out on proposed legislation and developments at City Hall. It sends land use applications to neighbors so they are aware of potential impacts. ABC was instrumental in initiating the cleanup of the Wyckoff creosote site (now Pritchard Park) and the Vincent Road Landfill. Along with its neighborhood groups, it successfully helped deny an 800-unit development in South Bainbridge in 1990 which eventually provided land for IslandWood and Blakely Harbor Park. More recently it has been involved in caring for the Waterfront Trail in Winslow. ABC published the book *In Praise of Island Stewards* and for 25 years a newsletter *Scotch Broom*. ABC has cosponsored the Bainbridge Island Environmental Conference for 13 years.

Sustainable Bainbridge was formed to support cooperation and collaboration among a broad-based network of local organizations, businesses, government and individuals to protect and strengthen our community's social, environmental, and economic sustainability for current and future generations. Sustainable Bainbridge supports initiatives in a variety of areas as well as participating in an alliance of organizations working to create a resilient and sustainable community on our island. Our success depends on the active participation of caring people like you. Please contact Sustainable Bainbridge at: info@sustainablebainbridge.org with your ideas and suggestions.

Islanders for Responsible Development (IFRD) Islanders for Responsible Development is a grassroots organization committed to promoting sustainable development consistent with community values. IFRD is grounded in the belief that responsible development is grounded in respect for the environment and for the right of future generation to inherit a planet has not been compromised by short sighted planning.

Ad Hoc Tree Ordinance Committee

The City of **Bainbridge Island Community Forestry Commission** was initiated in 2001 to steward the well-being of the island's trees and forests. The Community Forestry Commission is currently not meeting. The City Council authorized the creation of the **Ad Hoc Tree Ordinance Committee** in early January, 2012 to draft a proposed tree ordinance. An Hoc Committee is a "temporary committee established by City Council to investigate and advise Council on a specific policy or issue for future Council action, or to develop a legislative or policy proposal for Council on a particular topic." The Ad Hoc Committee is comprised of three Council members (Sarah Blossom, Roger Townsend, David Ward) and two Planning Commissioners: (Mack Pearl, Jon Quitslund). Jennifer Sutton is the Lead City Planner assigned to work with the Committee (780-3772) JSutton@bainbridgewa.gov

Public Comment may be provided in writing to the Planning Commission and City Council at any time during the review process. To ensure that comments are received by both reviewing bodies and entered into the official record, comments should be addressed to both the Planning Commission City Council Council@bainbridgewa.gov and to the Planning Commission and City's Department of Planning and Community Development pcd@bainbridgewa.gov. Comments by regular mail should be addressed to 280 Madison Ave. North, BI 98110, The Planning Commission and City Council have discussed the importance of public comment. More information tree and vegetation management will be sent to citizens who leave their email address and following the agenda for meetings by clicking on Calendar at . <http://www.ci.bainbridge-isl.wa.us/>

CITY COUNCIL MEMBERS: Anne Blair, Steve Bonkowski, Sarah Blossom, Wayne Roth, Val Tollefson, Roger Townsend, David Ward. **PLANNING COMMISSION MEMBERS:** Michael Lewars, Maradel Gale, J. Mack Pearl (Chair), Jon Quitslund, Kate Kelly, John Thomas, Julie Kreigh

Previous Environmental Conferences

- 1st (2001) State of the Environment on Bainbridge Island
- 2nd (2002) Environmental Protection on Bainbridge Island
- 3rd (2003) Planting for a Healthy Environment
- 4th (2004) Water and Watersheds
- 5th (2005) The State of the Environment on Bainbridge Island
- 6th (2006) Wildlife and their Island Habitat
- 7th (2007) Aquatic Life and Habitat on Bainbridge Island
- 8th (2008) Positive Energy
- 9th (2009) The Truth about Dirt
- 10th (2010) Protecting Bainbridge Island's Shoreline Environment
- 11th (2011) Protecting Bainbridge Island's Shoreline (II)
- 12th (2012) Downstream – Surprising Connections between our life and the Marine Life of Puget Sound

Silver Cup



PAST RECIPIENTS OF THE ABC ENVIRONMENTAL AWARD

The Silver Cup was originally presented to Jerry and Elane Helmuth (founders of ABC) in 1984

1991 Janet Knox	1998 Dave Davison	2008 Lois and Lew Andrus
1992 Vince Mattson	1999 Road Ends	2009 Jo Schaffer
1993 Linda Schmid	Advisory Committee	2010 Rachel and Robert Smith
1994 Sheila Crofut	2000 Frank Stowell	2011 Wayne Daley
1995 Bainbridge Island Land Trust	2001 Connie Waddington	2012 Bob Burkholder
1996 Leigh Kennel	2003 Van Calvez	
1997 Dale Spoor	2007 Jim Brennan	

Thirteenth Bainbridge Island Environmental Conference 2014

ORGANIZING COMMITTEE

Program Organizers

Charles Schmid Olaf Ribeiro
Tami Meader Debbie Vann

Assisted by

Marge Duncan Richard Packard
Frank Stowell Jane Silberstein



SPONSORS

Association of Bainbridge Communities	biabc2000@yahoo.com	842-6001
Sustainable Bainbridge	www.sustainablebainbridge.net	842-4439
Islanders for Responsible Development	environmentalbainbridge@earthlink.net	

CONFERENCE FUNDING

ABC Conservation/Education Foundation (221 Winslow Way #305)
The Association of Bainbridge Communities (ABC)
Islanders for Responsible Development

LAYOUT and DESIGN

Tami Meader

The 13th Environmental Conference



The Future of Trees on Bainbridge Island

Hosted by Association of Bainbridge Communities

A conference on the importance of trees and tree retention
on Bainbridge Island

Over the past 15 years, we have seen a significant loss of our tree canopy on Bainbridge from both small developments and large, like the recent clearing of the Visconsi shopping mall. This conference will focus on the importance of trees on our lifestyles, what the City of Bainbridge is planning, what is needed as part of a comprehensive tree retention ordinance, what other cities and counties are doing and how Citizens can participate in the process.

- Dr. Kathy Wolf from the *UW School of Forestry*, an internationally recognized expert on the benefits of Urban Forests will present her findings.
- Dr. Olaf Ribeiro an Internationally recognized expert on Tree health issues will present his findings on Historic Tree retention and loss of tree canopy on Bainbridge.
- Ben Thompson Urban Forestry Specialist Department of Natural Resources will discuss Essential Elements of a Tree Ordinance.
- Nolan Rundquist *Seattle City Arborist* will present information on Seattle's efforts to retain trees.

A Panel discussion will include:

- Citizen activists from Whidbey Island
- Jon Quitslund a member of the Bainbridge Island Tree Ordinance Committee
- Ben Thompson: Department of Natural Resources

Break-out sessions will continue the conversation with citizen participants

Date: Saturday, November 15th

Time: 1:00 pm to 5:00 pm

**Waterfront Park Community Center
370 Brien Way, Bainbridge Island**

For more info contact ABC at: biabc2000@yahoo.com

