



# Water **and** Land Use in the Pacific Northwest: Integrating Communities and Watersheds

November 4 – 6, 2009  
Skamania Lodge • Stevenson, Washington  
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CSREES  
**Pacific Northwest**  
Regional Water Quality Program

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CONFERENCE MANAGEMENT

# Water and Land Use in the Pacific Northwest: Integrating Communities and Watersheds



## About the Conference

Water and land use are explicitly linked through a complex myriad of quantity- and quality-related issues. Historically, development planning and implementation occurred which sought to minimize impacts on water resources. In the world today, water scarcities due to economic growth, ecosystem demands, and climate change are forcing a new paradigm in planning and management. The goal of sustainable development is creating opportunities for creative solutions that look beyond project borders to encompass more holistic watershed approaches. This conference will bring together a unique mix of keynote speakers, panels, posters, and speakers to highlight regional solutions and research being conducted to improve the societal impacts on future expansions. The goals of this year's conference are to:

- » Engage planners and scientists in discussions regarding the needs, constraints and opportunities related to water and land use planning
- » Improve the interaction, collaboration, and communication between scientists, engineers, and planners to improve common objectives related to sustainable development
- » Explore innovative approaches and policies being developed regionally and promote understanding of what planning and science can offer to the process

Join us for the opportunity to learn more about the exciting changes in planning efforts and to interact with colleagues from around the Pacific Northwest. This year's conference promises to be an event worth attending.

## Location

The conference will be held at the Skamania Lodge in Stevenson, Washington. Stevenson is located in the heart of the Columbia River Gorge National Scenic Area, less than an hour's drive from the Vancouver, Washington / Portland, Oregon area. For reservations call **800-221-7117**, press **2 twice** for group reservations, and ask for the Water/Land Conference rate of **\$120** per night. The conference rate is guaranteed until **October 2, 2009**. After this date the Lodge will honor the conference rate only if space is available.

## Featured Speakers



**Robert M. Hirsch** Robert M. Hirsch currently serves as a Research Hydrologist at the US Geological Survey. From 1994 through May 2008, he served as the Chief Hydrologist/ Associate Director of the USGS. Since 2003 he has served as the co-chair of the Subcommittee on Water Availability and Quality of the Committee on Environment and Natural Resources of the National Science and Technology Council.

Hirsch began his USGS career in 1976 as a hydrologist and has conducted research on water supply, water quality, pollutant transport, and flood frequency analysis. He had a leading role in the development of several major USGS programs: the National Water Quality Assessment Program; the National Streamflow Information Program; and the National Water Information System Web. He has also held leadership positions at the USGS. He received degrees from Earlham College (B.A. in Geology, 1971), University of Washington (M.S. in Geology, 1974), and The Johns Hopkins University (Ph.D. in Geography and Environmental Engineering, 1976). He is co-author of the textbook *"Statistical Methods in Water Resources."* Dr. Hirsch is a Fellow of the American Association for the Advancement of Science and an active member of the American Geophysical Union and the American Water Resources Association.



**Gail Achterman** Gail Achterman has served on the Oregon Transportation Commission since 2000 and became chair in December 2007. She is director of the Institute for Natural Resources at Oregon State University. Before joining the Institute for Natural Resources, Achterman served as Executive Director of the Deschutes Resources Conservancy, a non-profit organization dedicated to watershed restoration. She practiced law for 18 years with

Stoel Rives, LLP, and served as Governor Neil Goldschmidt's Assistant for Natural Resources. She serves on the board of the Oregon Wave Energy Trust and on the advisory board of the Klamath Basin Rangeland Trust. Ms. Achterman holds a bachelor of arts in Economics from Stanford University, and both a master's degree in Natural Resources Policy and Management and a JD from the University of Michigan.

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## Poster Session & Reception

A showcase of poster presentations will be displayed on **November 5, 2009** from **5:00 pm to 7:00 pm**. This session will include a student poster competition and networking reception. Poster presenters will be available for discussion during this time. Applications for poster presentations will be accepted through **September 30**. For further information, please visit the conference web site.

## Conference Scholarships

Scholarships are available and will be awarded as a \$100 refund on two-day registrations only. For further information, please visit the conference web site.

## Exhibitors And Sponsors

Exhibitors and sponsors are invited to reserve exhibit space at the conference. Each exhibitor and sponsor will receive conference materials, a display table, and at least one conference registration. To reserve an exhibitor table at the conference, complete the exhibitor registration form on the conference web site. For more information, contact Conference Management at **(800) 942-4979** or **(509) 335-4194**.

## Conference Proceedings

The conference proceedings will be available on-line by **January 2010**, at [www.swwrc.wsu.edu/conference2009/](http://www.swwrc.wsu.edu/conference2009/)

## Continuing Education Units

Washington State University is a registered Certification Maintenance provider with APA. We are in the process of applying for AICP CM credits for this conference.

If you need a certificate of attendance for any other certification, please request one at the conference registration desk.

## Conference Sponsors

- » USDA Cooperative State Research, Education, and Extension Service (CSREES)
- » U.S. Environmental Protection Agency Region 10
- » Institute for Water and Watersheds, Oregon State University
- » Pacific Northwest Regional Water Quality Program
- » State of Washington Water Research Center
- » Washington Department of Ecology
- » Washington State Department of Transportation



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## Pre-Conference Workshop

### Managing Wet Weather with Green Infrastructure

This workshop runs from **10:00 am** to **5:00 pm** and is intended primarily for municipal governments with wet weather management responsibilities, i.e., stormwater, combined sewer overflows, sanitary sewer overflows and nonpoint source runoff. The workshop will focus on how these programs can be effectively managed using green infrastructure technologies and approaches, while also providing benefits related to climate change, urban heating, energy savings and community liveability. For more information see the conference web site.

## Pre-Conference Field Trip

Join our tour of Low Impact Development installations along the Columbia River. Engineers, designers, and city representatives will join the tour to illustrate incentives, barriers, and lessons learned at each stop. The bus leaves Skamania Lodge at **11:00 am** and returns at **5:00 pm**, traveling to Vancouver and Portland. Box lunches and refreshments provided. Field trip will be limited to 45 registrants. For further information, please visit the conference web site.

## Pre-Conference Film And Reception

*"Water Before Anything"* is a new and engaging film which looks at the possibilities of water conflict as a force to bring people together rather than pushing them apart. As the world faces a future of water scarcity and diminished water quality, this film is a compelling story of one area in the United States and how it is dealing with the issues of water conflict. This unique film engages the audience to show how scarce water resources can be a bridge to get people to work together. We are invited into a small community in Oregon, where over the course of five years residents worked together to find solutions to their water crisis. Filmmaker Sarah Sheldrick interviews a range of stakeholders on the hardships and hopes for their community. Sheldrick's talent as a storyteller successfully integrates these elements with the science of groundwater and the complex steps of a regional task force working through conflict resolution to form policy.

## Dates To Remember

- » **September 30, 2009** Last day to submit abstracts for poster session
- » **October 2, 2009** Last day for guaranteed conference rate at Skamania Lodge
- » **October 16, 2009** Last date to submit Scholarship application
- » **October 16, 2009** Last day to request full refund of conference registration fee
- » **January 2010** Conference proceedings available at:  
[www.swwrc.wsu.edu/conference2009](http://www.swwrc.wsu.edu/conference2009)

## Conference Steering Committee

**Gary Bahr**, Water Quality Section, Idaho State Department of Agriculture

**Mike Barber**, State of Washington Water Research Center, Washington State University

**Dustin Bilhimer**, Water Quality Program, Washington Department of Ecology

**J.R. Cook**, Umatilla County Department of Resources and Development

**Kate Ely**, Confederated Tribes of the Umatilla Indian Reservation

**Anthony Gabriel**, Center for Spatial Information, Central Washington University

**Mike Gamroth**, Department of Animal Sciences, Oregon State University

**Jerry Grondin**, Oregon Water Resources Department

**Bevin Horn**, US Environmental Protection Agency Region 10

**Karen Janowitz**, Washington State University Thurston County Extension

**Megan Kleibacker**, Oregon State University Sea Grant Extension

**Judith Lee**, US Environmental Protection Agency Region 10

**Bob Mahler**, Dept. of Plant, Soil, & Entomological Science, University of Idaho

**Scott W. Reed**, Attorney at Law, Coeur d'Alene

**Jan Seago**, PNW Land Grant Institution Liaison to EPA

**Bob Simmons**, Washington State University Mason County Extension

**Fred Sorensen**, University of Alaska Fairbanks

**Joy Thompson**, Conference Management, Washington State University

**John Tracy**, Idaho Water Resources Research Institute, University of Idaho

**Shiraz Vira**, USDA Natural Resources Conservation Service

**Diane Weber**, State of Washington Water Research Center, Washington State University

## Wednesday, November 4, 2009

- 9:00 AM–7:00 PM      **REGISTRATION DESK OPEN**
- 11:00 AM–5:00 PM    **FIELD TRIP**
- 10:00 AM–5:00 PM    **WORKSHOP**
- 7:00–9:00 PM        **FILM AND OPENING RECEPTION**

## Thursday, November 5, 2009

- 7:00 AM–7:00 PM      **REGISTRATION DESK OPEN**
- 7:00–8:15 AM        **CONTINENTAL BREAKFAST**
- 8:20–8:30 AM        **WELCOME AND INTRODUCTIONS**
- 8:30–9:30 AM        **GENERAL SESSION—KEYNOTE, Robert M. Hirsch**
- 9:30–10:30 AM       **GENERAL SESSION—PANEL DISCUSSION**  
**Climate Change and Water Planning in the Pacific Northwest**
- 10:30–11:00 AM      **BREAK**
- 11:00 AM–12:15 PM   **CONCURRENT SESSIONS 1 & 2**
- 11:00 AM–12:15 PM   **SESSION 1 CARRYING CAPACITY: THE SCIENCE OF PLANNING**  
**Moderator:** *Guy Gregory, Washington Department of Ecology*
  - Integrated Planning Approaches to Water Resource Management  
*Nicole Isle and Jessica Green, Brightworks;*  
*Ellen Southard, Belt Collins*
  - Organizing for Success: The Interaction of Science, Policy, and Implementation in Complex Natural Resource Disputes  
*Jim Waldo and Lara Fowler, Gordon Thomas Honeywell LLP*
  - The Unrealized Potential of the State Shoreline Management Act (SMA) for Protecting and Restoring State Shorelines like Puget Sound, Hood Canal, and the Columbia River  
*Sandra Lange, Washington Department of Ecology*

11:00 AM–12:15 PM

### SESSION 2 INTERSECTION OF ECONOMICS, LAND USE, AND WATER RESOURCES

**Moderator:** *Fred Sorensen, University of Alaska Fairbanks*

- Preparing the Water Systems and Sectors for a Changing Climate  
*Stacy Vynne, Bob Doppelt, and Roger Hamilton, University of Oregon, Institute for a Sustainable Environment*
- Updated Consumptive Use and Irrigation Water Requirement Estimates for Washington  
*R. Troy Peters, Washington State University; Leigh Nelson, USDA-NRCS*
- Washington's Reclaimed Water Program: Evolving from Guidelines to Rule  
*Jim McCauley, Washington Department of Ecology*

12:15–1:15 PM

### LUNCH

1:30–2:45 PM

### CONCURRENT SESSIONS 3 & 4

1:30–2:45 PM

### SESSION 3 PLANNING FOR CHANGE

**Moderator:** *Mike Gamroth, Oregon State University*

- Flow from Flexibility—Continued  
*Gerald Anhorn, Walla Walla Community College; Matt Rajnus, Walla Walla County Watershed Planning Department*
- Evaluating Residential Development Impacts to Drinking Water Quality in the McKenzie River Watershed: Assessing the Threats and Seeking Solutions  
*Karl Morgenstern, Eugene Water and Electric Board*
- Evaluating Residential Development Impacts to Drinking Water Quality in the McKenzie River Watershed: Impacts from Historic Land Use Decisions and Potential Future Development  
*David J. Richey and Bob DenOuden, Lane Council of Governments*

1:30–2:45 PM

### SESSION 4 STORMWATER MITIGATION EFFECTIVENESS

**Moderator:** *Jan Seago, PNW Land Grant Institution Liaison to EPA*

- Sustaining Collaboratives: Assessing the Capacity of Maintaining an Adaptive Management Role  
*Richard Margerum, University of Oregon*
- Upstream Collaborations/Downstream Processes: A Skokomish Watershed Case Study  
*Keith Dublancia, Mason Conservation District, Skokomish Watershed Action Team*

- Crossing Boundaries for Water Management with Teamwork and Economics  
*Christi Falen and Howard Neibling, University of Idaho Extension; Bill Hazen, Nutrient Management Solutions; Mike Telford, Telford Sun Valley Seed*

2:45–3:15 PM

## BREAK

3:15–4:30 PM

## CONCURRENT SESSIONS 5 & 6

3:15–4:30 PM

### SESSION 5 BUILDING CONSENSUS AMONG STAKEHOLDERS

**Moderator:** *Judith Leckrone Lee, U.S. EPA Region 10*

- Public Acceptance and Public Involvement for Water Reuse in Corvallis, Oregon  
*Karen DuBose, Oregon State University*
- Rural Landowner Land Use Stewardship Attitudes and Motivations  
*Robert Simmons and Emily Sanford, Washington State University Mason County Extension; Heidi Keller, Keller Consulting*
- Watershed Education and Outreach Between Youth and Community Leaders in Brownsville, Oregon: Interviews, Map Media, and Lessons Learned  
*Ana Lu Fonseca, Denise Elston, John Klock, Sarah Sheldrick, and Brock Tabor, Oregon State University*

3:15–4:30 PM

### SESSION 6 MODELING IMPACTS OF LAND USE DECISIONS

**Moderator:** *Anthony Gabriel, Central Washington University—Center for Spatial Information*

- Decision Support Tools for Marine Spatial Planning  
*Sarah Kruse, Charles Steinback, Mike Mertens, Astrid Scholz, and Brent Davies, Ecotrust*
- Riparian and Land Use GIS Mapping in the Transboundary Walla Walla Basin  
*Nella Parks, Walla Walla Basin Watershed Council*
- Implications of Increasing Temperatures and Changing Land Uses on Water Consumption: an Empirical Assessment of Portland, Oregon  
*Vivek Shandas, Portland State University, Toulon School of Urban Studies and Planning*

5:00–7:00 PM

## POSTER SESSION, STUDENT COMPETITION, & NETWORKING RECEPTION

7:00–8:30 PM

## BANQUET

# Friday, November 6, 2009

7:00 AM–5:00 PM

## REGISTRATION DESK OPEN

7:00–8:15 AM

## CONTINENTAL BREAKFAST

8:20–8:30 AM

## WELCOME AND INTRODUCTIONS

8:30–9:30 AM

## GENERAL SESSION—KEYNOTE, Gail Achterman

9:30–10:30 AM

## GENERAL SESSION—PANEL DISCUSSION Water and Land Use in the Pacific Northwest

10:30–11:00 AM

## BREAK

11:00 AM–12:15 PM

## CONCURRENT SESSIONS 7 & 8

11:00 AM–12:15 PM

### SESSION 7 LOCAL LEADERSHIP IN ACTION

**Moderator:** *Gary Johnson, University of Idaho*

- Permit-Exempt Wells: Policies and Predictions for Future Management  
*Rachael Paschal Osborn, Center for Environmental Law and Policy*
- From Limbo to Leading Edge: Benton County, Oregon—Groundwater Policy and Planning  
*Adam Stebbins, Benton County Board of Commissioners; Dave Livesay, GSI Water Solutions Inc.*
- New Data, New Strategies: The Emerging Issues for Drinking Water  
*Sheree Stewart, Oregon Department of Environmental Quality*

11:00 AM–12:15 PM

### SESSION 8 STORMWATER MANAGEMENT

**Moderator:** *Bob Simmons, WSU Mason County Extension*

- Incorporating Stormwater Management and Habitat Restoration on Burnt Bridge Creek, Vancouver, Washington  
*Gary Bock, City of Vancouver Watersheds Council*
- Stormwater Solutions for Oregon Communities;  
*Teresa Huntsinger, Oregon Environmental Council; Megan Kleibacker, Oregon State University Extension*
- Oregon's Underground Injection Control Program  
*Barbara Priest, Oregon Department of Environmental Quality*

12:15–1:15 PM

## LUNCH

# Schedule

1:30–2:45 PM

## CONCURRENT SESSIONS 9 & 10

1:30–2:45 PM

### SESSION 9 CO-MANAGEMENT OF LAND AND WATER

**Moderator:** *Dustin Bilhimer, Washington Department of Ecology*

- Creating Great Communities by Engaging Citizens to Advocate for Smart Growth  
*Jeff Aken, Cascade Land Conservancy, Cascade Agenda Cities*
- An Interdisciplinary Evaluation of Idaho's 2009 Eastern Snake Plain Comprehensive Aquifer Management Plan  
*Matt Darrington, Phil Dennis, Yohannes G/Eyesus Getahun, Rick Hartson, Justin Jolley, Joseph Machala, Luke Marchant, Matt Reeves, Kristyn Scott, Mark Solomon, Chau Tran, Jan Boll, Fritz Fiedler, and Timothy Link, and Julia Parker, University of Idaho, Waters of the West*
- Connecting Green: Integrating the Built and Natural Environments in the Portland-Vancouver Metropolitan Region  
*Mike Houck, Urban Greenspaces Institute*

1:30–2:45 PM

### SESSION 10 ECONOMICS OF WATER AND LAND RESOURCES

**Moderator:** *Mike Brady, Washington State University*

- Economic Aspects of Green Infrastructure: Results from the Pacific Northwest  
*Ed MacMullan, Sarah Reich, Mark Buckley, ECONorthwest*
- From Policy to Practice: Implementing Market Mechanisms for Reducing Land Use Impacts on Watersheds  
*Dan Stonington, Cascade Land Conservancy; Dennis Canty, Evergreen Funding Consultants*
- Peak Water Meets Peak Oil: Moving Towards Unitization of Shared Groundwater  
*W. Todd Jarvis, Oregon State University, Institute for Water and Watersheds*

3:00–3:30 PM

### CONCLUDING SESSION & DRAWING FOR DOOR PRIZES

# Water and Land Use in the Pacific Northwest: Integrating Communities and Watersheds



NOVEMBER 4 – 6, 2009 • SKAMANIA LODGE • STEVENSON, WASHINGTON

## Conference Registration Form



**Mail:**  
Washington State University  
Conference Management  
PO Box 645222, Pullman, WA 99164-5222



**Fax:** 509-335-7781



**Phone:** 800-942-4978 or 509-335-3530



**Online:** [capps.wsu.edu/waterland](http://capps.wsu.edu/waterland)

### REGISTRATION INFORMATION (PLEASE PRINT)

Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Organization/Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_

Zip/Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

Daytime Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Do you require vegetarian  or vegan  meals?

### CONFERENCE FEE

The 2-day registration fee includes conference materials, all sessions and receptions, film, two continental breakfasts, two luncheons, the banquet, and coffee breaks. The one-day registration fee includes conference materials, sessions, lunch, and coffee breaks for that day.

### PRE-CONFERENCE FIELD TRIP FEE

The pre-conference field trip fee includes transportation from the Skamania Lodge and box lunch, light snacks, and beverages. Choose sandwich:

Turkey  Roast Beef  Vegetarian

### CONFERENCE WORKSHOP FEE

The pre-conference workshop fee includes materials and a coffee break. Lunch is on your own.

### REGISTRATION

	Postmarked by [10/16/09]	Postmarked after [10/16/09]
Pre-Conference Workshop	<input type="checkbox"/> \$40	<input type="checkbox"/> \$55
Pre-Conference Field Trip	<input type="checkbox"/> \$45	<input type="checkbox"/> \$60
2-day registration	<input type="checkbox"/> \$200	<input type="checkbox"/> \$250
2-day student registration	<input type="checkbox"/> \$100	<input type="checkbox"/> \$150
1-day registration [11/5/09]	<input type="checkbox"/> \$110	<input type="checkbox"/> \$160
1-day registration [11/6/09]	<input type="checkbox"/> \$110	<input type="checkbox"/> \$160
Exhibitor	<input type="checkbox"/> \$400	<input type="checkbox"/> \$450
Additional Banquet Ticket	<input type="checkbox"/> \$25	<input type="checkbox"/> \$40

Total Amount Due \$

### PAYMENT INFORMATION

Payment enclosed (make checks payable to Washington State University)

VISA or MasterCard No.: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ CVV: \_\_\_\_\_

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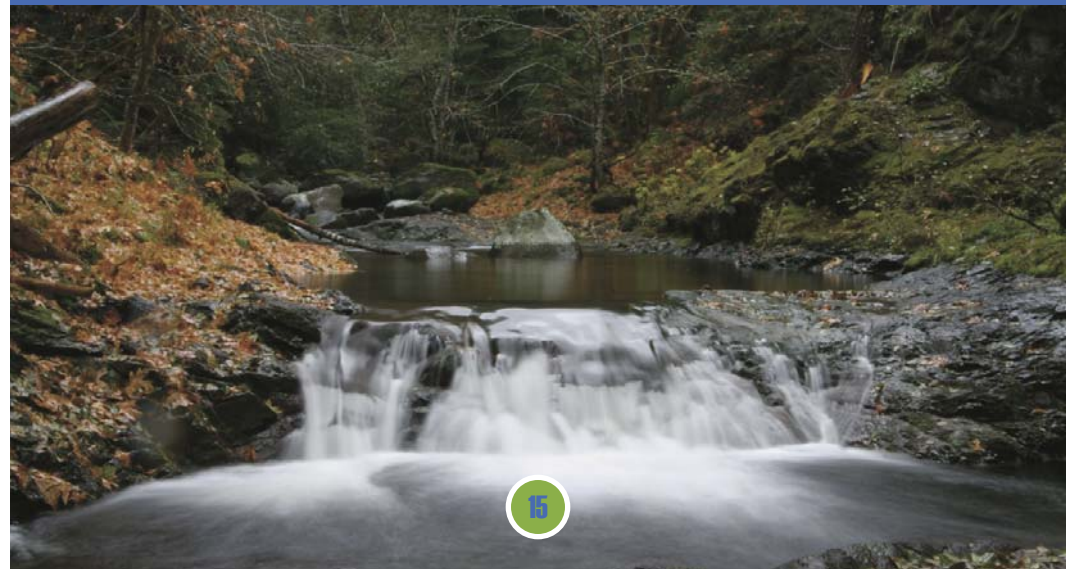


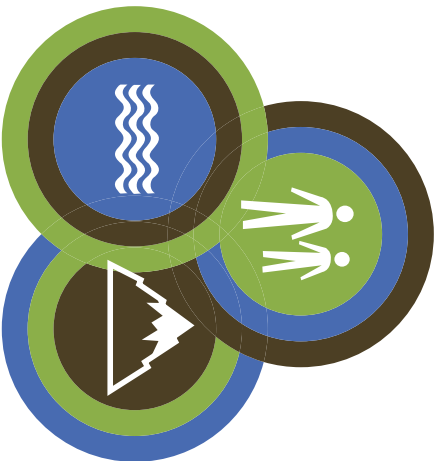
## CANCELLATIONS AND SUBSTITUTIONS

Cancellations and substitutions must be requested in writing to Washington State University Conference Management. Please send request by e-mail to [joythompson@wsu.edu](mailto:joythompson@wsu.edu). Full refunds will be granted through **October 16, 2009**. Cancellations after **October 16** but before **October 30** are subject to a \$50 processing fee. Any cancellations after **October 30** and all no shows are responsible for the full fee. Substitutions can be made at any time. The conference organizers reserve the right to make changes in programs or speakers and to cancel programs if enrollment criteria are not met. The conference organizer's liability is limited to the refund of the registration fees.

## AMERICANS WITH DISABILITIES ACT

Accommodations for individuals who qualify under the Americans with Disabilities Act are available upon request. Please contact Washington State University Conference Management at least ten days in advance at **800-942-4978** or **509-335-3530**.





# **Water and Land Use in the Pacific Northwest:** *Integrating Communities and Watersheds*

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