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## PRESIDENT'S NOTES



### Change

**Joe Mentor, Jr., President, AWRA Washington Section**

This is my last article as Chapter President. I have struggled with the decision what to write about. This is my last chance, I thought, so I better make it good. We are about to change Chapter officers, and our annual conference is about climate change. In fact, fall generally is a time of transition, which is more pronounced during an election year. So the subject of change seemed to be a natural topic.

Changes are certain to occur in most things. This is the natural order of things. Furthermore, many changes are fairly predictable. Yet we often are unprepared for change, and we rarely do much to proactively to shape its impact.

Some changes are inevitable. Take changes in our State government for example. Governor Locke decided not to seek reelection. Consequently, a change of Administration is an absolute certainty. But with polls showing the two leading candidates in a virtual tie, the outcome of the race is anything but certain. Reflect for a moment on the consequences for you of the outcome. Depending on your perspective, the success of one candidate or another could have a huge impact. One of the truly remarkable things about the American political system is how easy it is for one person to make a difference. I'm continually amazed, however, that so few people actually engage in the political process.

Now let's move on to a larger subject. Climate change too is inevitable. But how we are affected by it is not. Many people think greenhouse gases are the cause of global warming, and that if they are reduced global warming can be prevented. Others are in denial. It is important to note that this is a different question than whether global warming causes climate change and whether global warming is occurring. I think it is long past time for us to accept the fact that climate change occurs, even if we disagree about the reasons. Whether a warmer climate would be dryer, or wetter, is a debatable question. It seems irrefutable to me, however, that that the climate is in fact changing.

I read a book recently called "The Long Summer," by anthropologist Brian Fagan. I heartily recommend it. The book was about how climate change has affected human history since the last Ice Age. Fagan recites abundant evidence to demonstrate significant climate changes during the last several thousand years. Most recently, the so-called Little Ice Age occurred between about 1300 and about 1860. Before that, many parts of the world were much warmer than they are today. Place names like Greenland and Vinland also suggest significant climate changes since the last millennia. Tree rings and glacial evidence confirm folklore.

There also is strong evidence that the climate has been warming since 1860, and that warming trends will continue into the future. The rate of change is anyone's guess. But we need to begin planning for a climate that is warmer than what we are experiencing today. This is true for society as a whole, but especially for water resource professionals in our region.

Climate change is the subject of our upcoming AWRA State Chapter conference. We hope you can attend. This is a fascinating subject that affects us all. How that is depends on our ability to anticipate changes, and our willingness to prepare for them.

Finally, I'd like to talk about change on a personal level, that is, about how we respond to changes in our interpersonal relationships. Personalities change, and of course we all get older. Needs also change. People who have played a significant part in our lives are no longer with us. But there are others with whom new relationships will develop. We will have different friends and colleagues. Our family relationships focus on the younger members as the elder ones pass on. We need to appreciate the relationships we have, while we have the opportunity to do so. Furthermore, it often is hard to accept that new relationships will take the place of the old ones. But we need to be open and responsive to this occurring.

In closing, I'd like to use this as an opportunity to thank all of you for the confidence placed in me to hold this position over the last year. It has been a great experience. There will be a "changing of the guard" in our Chapter leadership. Please join me in offering our new officers and directors our full support. ~~~

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# Puget Sound Salmon Recovery: Creating a Future for People and Fish

## *Watershed Planning Moves into Implementation*

**Jagoda Perich-Anderson, Associate Director, Shared Strategy for Puget Sound**

Fall is shaping up to be a busy time for salmon recovery work in Puget Sound. Until now, the majority of effort and attention for developing recovery plans has appropriately been focused at the local watershed level. Although there is more important work to be done in each watershed, now is the time where we can see how the individual local efforts come together at the regional scale to achieve ESU recovery. At the regional scale, each watershed chapter is like a link in a chain, and this next year is all about forging as strong a chain as possible.

Watershed planning groups up and down the Sound submitted their individual draft recovery chapters at the end of June this year. These separate plans for the 14 watersheds are coming together as part of an overall salmon recovery plan for Puget Sound. In January, a Shared Strategy Salmon Summit will be held in Tacoma that begins to transition from planning to implementation, even as final revisions are made to local watershed chapters and the regional recovery plan is finalized for submission to NOAA-Fisheries in June 2005.

With planning winding down, the focus will shift to getting broad based recovery work going. But there are some big questions on the table. How much will it cost? What would an initial funding program look like? In short, how much can we bite off first? Here's an update on the progress we've made over the past year and what to look forward to as plans now turn into actions.

### **Local Communities are the foundation of the Shared Strategy**

The salmon story in Puget Sound is an inspiring example of what can happen when local communities have the vision -- and the initiative -- to find collaborative solutions to their problems. They understand that stewardship of salmon is an investment in our people, our state and our future. It's an inspiring example of grassroots work that doesn't get a lot of attention.

The wheels were set in motion in 1999 when Puget Sound Chinook, Hood Canal Summer Chum, and Bull Trout were listed as threatened under the federal Endangered Species Act (ESA). An informal consensus grew among regional leaders, led by former Governor Dan Evans, former EPA Administrator Bill Ruckelshaus, and the Northwest Indian Fisheries Commission's Billy Frank, Jr., that a new approach to the ESA response was warranted given the complexity of the salmon listings. The Shared Strategy for Puget Sound (Shared Strategy) emerged from those early discussions.

The premise of the Shared Strategy is simple: involving local stakeholders in decision making from the outset is the only way to write natural resource policies with a realistic chance of being implemented.

The Legislature's adoption of the Salmon Recovery Act established the path we have been on by creating a grassroots, local salmon protection and restoration process to identify both immediate and long-term salmon recovery actions.

After years of hard work, hundreds of people are putting the final touches on a recovery plan for the region that addresses each of the 14 watersheds -- from Nooksack to Nisqually to North Olympic -- that drain into Puget Sound. Instead of federal or state officials issuing salmon recovery edicts, community leaders have been drafting their own plans to care for their lands, rivers, streams and shorelines. The common goal: a regional recovery plan that will do the most good for people and salmon.

### **A Unified Funding Program**

The comprehensive plan -- a Shared Strategy -- will build on these local efforts. Due next June, it will set regional priorities and ensure that independent efforts are well-coordinated. It will also describe a financing strategy for recovery actions. Rather than approach funding for salmon recovery piece meal, we are developing a unified, 10-year investment program.

The funding issue is really important. Meaningful salmon recovery will require a lot of money over a long period of time. And state and federal dollars for discretionary purposes will be scarce over the next few years. In short, it will be very hard to get projects funded on a project-by-project basis. We can make a stronger case for funding to the Legislature and Congress if we are united on a package that covers all Puget Sound recovery efforts -- and we'll need to demonstrate that public investments in salmon recovery will achieve measurable results.

Securing funding will also require that we show how salmon recovery is important to people. I realize I am preaching to the choir when talking about the benefits of salmon recovery in the AWRA newsletter. But we often lose focus on what salmon mean to people in all the jargon of ESA, WRIAs, recovery areas, harvest levels, and targets. It's an understanding that the benefits of salmon recovery go beyond fishing, streams, farming or forests.

The salmon story is our story. Salmon are messengers of our region's overall health and vitality. In the root causes of their decline we are also declining. Rapid growth, poor water quality, urban sprawl, loss of open space, pollution, and resource degradation are problems for both the human and natural environments.

The good news is that by tackling some of our problems through salmon recovery -- no one said it would be easy! -- we are doing more than helping salmon out, we are ensuring future generations will continue to enjoy the prosperity and quality of life we enjoy to-

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day. The health of Puget Sound – for fish and people -- squarely depends on us.

### **Regional Salmon Summit in January**

In January everything will come to together at a Regional Salmon Summit. The Shared Strategy Summit will be an opportunity for elected officials – and others – to affirm their commitment to salmon recovery and launch the implementation phase of the plan. It will also provide an opportunity for us to give public recognition to the people, organizations and companies that have provided leadership and financial support to this process. Look for more information about the Summit as it gets closer.

This is an exciting time for salmon recovery in Puget Sound. Local communities, tribes, and regional leaders have made great strides. The Shared Strategy is a landmark endeavor for our region – through collaboration and hard work we have a good idea of how to make significant progress towards recovery in the first ten years of the plan. It's a strong start. This initiative will provide a legacy for generations of people and salmon to come. ☺

*Jagoda Perich-Anderson is the Associate Director of Shared Strategy for Puget Sound. She can be contacted at: [jagodapa@sharedsalmonstrategy.org](mailto:jagodapa@sharedsalmonstrategy.org)*

## **2nd National Water Resources Policy Dialogue, 14-15 February 2005!!**

**Mark your calendars!** The American Water Resources Association (AWRA) is pleased to announce that its second National Water Resources Policy Dialogue is scheduled for February, 14-15, 2005, at Loews Ventana Canyon Resort, Tucson, AZ. The Dialogue is convened by AWRA and sponsored by 11 Federal water agencies including NRCS, ARS, Forest Service, USGS, Bureau of Reclamation, USFWS, National Weather Service, National Ocean Service, EPA, FEMA, and the US Army Corps of Engineers.

The Dialogue will build upon the results of AWRA's highly successful first National Water Resources Policy Dialogue, held September 14-15, 2002 in Washington, DC. The 267 attendees of the first Dialogue were treated to outstanding keynote presentations, provocateur presentations, and panel discussions on 6 key water resources policy issues. Presenters included Senator Harry Reid, Congressman John Linder, Governor Parris Glendening, and other high-level representatives from government and the private sector. Attendees were provided the opportunity to express their opinions on the issues through participation in group discussions and by voting on identified concerns. One attendee in critiquing the Dialogue wrote: "Great approach - the most participatory group discussion event I have attended."

The 2005 Dialogue will be based on a similar format as that of the 2002 Dialogue and will include 3 keynote addresses and panel discussions on three key issues. These issues are Infrastructure Management; Water Resources Supply and Demand; and Environmental Quality. Presentations and discussions will be structured so that each issue is addressed rigorously and objectively, and that all sides of the issues, including successes and failures, are covered. Senior level speakers and panelists will be drawn from all levels of government, academia, and the private sector including NGO's, industry, and conservation groups. Because the Second Dialogue format includes fewer key issues, it will provide even greater opportunities for in-depth conversations and discussions among all attendees on the critical issues and questions. While the key issues will be national in scope, within each key issue, western concerns will be addressed.

The Second Water Resources Policy Dialogue will be AWRA's 2005 Spring Specialty Conference and will be open to all interested attendees. A preliminary program will be available in September 2004 and other information will be placed on the AWRA website when it becomes available. Questions or suggestions may be addressed to Richard Engberg, AWRA Technical Specialist and Dialogue Steering Committee Chair at (540) 687-8390 or [dick@awra.org](mailto:dick@awra.org).

<http://www.awra.org/meetings/Tucson2005/index.html>

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# Preliminary Hydrodynamic Modeling of Capitol Lake and the Deschutes River Estuary to Support Restoration Feasibility Assessment

**Hedong Liu, et. Al; Batelle Seattle Research Center and Marine Sciences Lab**

Capitol Lake is a 270 acre body of fresh water located in Olympia and Tumwater, Washington. It was formed in 1951 by the construction of a dam and now covers the former Deschutes River estuary. In its present condition, the natural flushing action is limited, resulting in poor water quality and excessive sediment accumulation.

Without sediment removal, the lake will become a freshwater marsh. Eurasian milfoil is present in Capitol Lake and its control has proved to be difficult. Also, the presence of the dam has increased the potential for flooding. Lake volume has decreased in the years since dam construction. Sediment accumulation now occupies 26% of the original 1949 volume. The deposition pattern is such that the channels have filled and the area from -2 to +3 MSL has the greatest net accumulation.

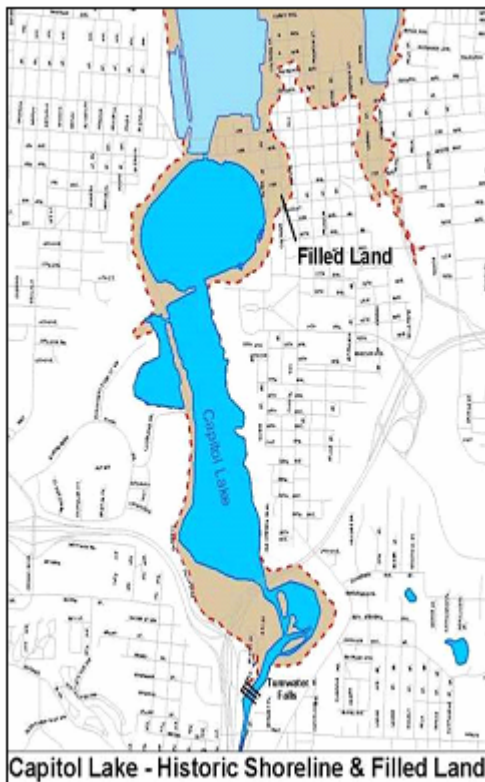
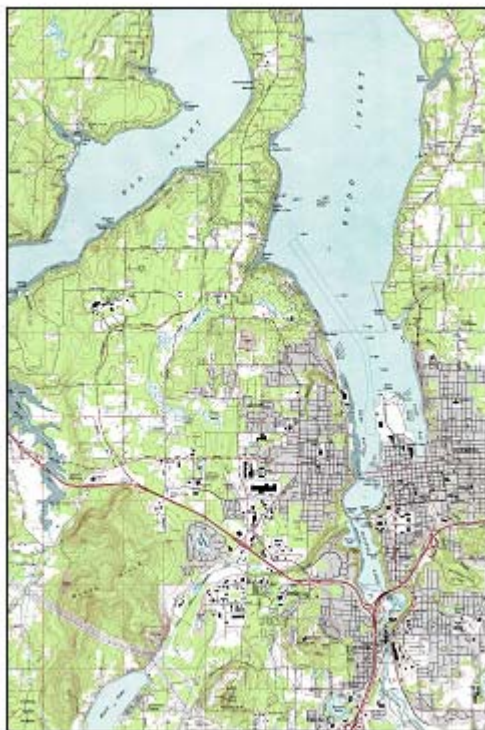
As part of the Capitol Lake Adaptive Management Plan, the stakeholders are assessing the feasibility of restoring estuarine functions to the river through modification of existing infrastructure. The expectation is that a properly functioning estuary would improve water quality, naturally distribute the sediments, provide for aquatic weed management, and return 270 acres to productive estuarine habitat. In this preliminary study, Battelle developed a hydrodynamic model of the Deschutes River Estuary and Capitol Lake to simulate one of the restoration alternatives: removing the current 50 foot dam and constructing a 500 wide river mouth.

## Objectives:

- To establish a hydrodynamic model for Capitol Lake and Deschutes River Estuary restoration feasibility studies.
- To provide a preview of anticipated results following one of the suggested restoration alternative.
- To evaluate the feasibility of restoration plan goals.
- To prepare for a more complete model (include water quality and sediment modules) for the restoration simulation.

**Method:** Modeling studies are based on an application of the Finite Volume method Coastal Ocean Model (FVCOM\*). The complicated solid boundaries are accurately represented by the triangular unstructured grids in horizontal plan and sigma co-ordinate grids in vertical direction. Mass and momentum are strictly conserved by the finite volume method throughout the modeling process. This property of the FVCOM model enables long-term simulation and predictive studies.

**Discussion:** Model simulation results indicate that the flow field within the lake/estuary would experience significant changes and, because the tidal flux

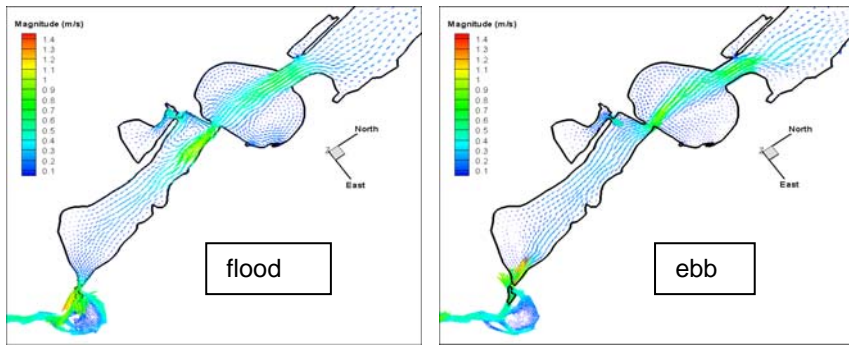


is larger than the river discharge, the existing lake will become a well mixed estuary. The resulting interaction between salt and fresh water would greatly en-

hance the existing flushing process and, consequently, water quality would be improved. Locally, the exchange velocity near the river mouth would increase after the dam is reopened, with maximum velocities up to 1.4 m/s. Higher maximum velocities would also occur near the three deep and narrow connections between the Budd Inlet, Lower, Middle and Upper Lake and in the channel between the Middle Lake and Percival Cove. Overall, the higher velocities would help to solve the Capitol Lake sediment accumulation problem, but in some areas the filled inland would face erosion problems without protective measures, particularly at the four narrow connection channels.

**Summaries and conclusions:**

- An unstructured grid finite volume method coastal ocean model (FVCOM) was setup for the studies of the Capitol Lake and the Deschutes River Estuary.
- Current inside the lake/estuary would be changed significantly after reopening and the exchange and mixing of fresh and salt water will be enhanced.
- With increased flushing in the lake/estuary, water quality would be greatly improved.
- Higher water velocity would reduce the sedimentation problem in lake/estuary, but some areas would be exposed to unwanted erosion without further protection measures.
- The FVCOM model is fully capable of accurately providing these more complex simulation and prediction analyses for this restoration management case.



**FVCOM\***: was developed in SMAST, University of Massachusetts, Dartmouth. Reference: Chen, C., H. Liu and R. C. Beardsley, 2003. An unstructured grid, finite volume, three-dimensional, primitive equations ocean model: application to coastal ocean and estuaries, *Journal of Atmospheric and Oceanic Technology*. Vol. 20, 159-186. ☞

September 30th Dinner Meeting Report

Hydropower 401 Certification with Chris Maynard, WA DOE

**Anne Weekes, Student Chapter Representative**

The Washington State Chapter of AWRA hosted a dinner meeting September 30<sup>th</sup> at Hales Ales to hear Chris Maynard of the Washington Department of Ecology discuss the dam licensing process. Chris is the Ecology lead for the proposed revisions to the 401 certification process. Clearly there is interest in this topic as the well-attended meeting conflicted with the first Bush-Kerry presidential debates.

After explaining the role of the Department of Ecology in the Dam Certification Process, Chris went on to describe the current status of certifications in Washington State. The State is currently inundated with re-licensing projects. Ecology has been drafting guidance for potential applicants and expects to release a review draft this month. The guidance describes Ecology's role and authority in licensing, the process used in developing water quality certifications and the information needs, data and studies required for re-licensing of existing hydropower facilities.

Following his presentation, Chris fielded questions from the audience. Key issues discussed during the question and answer period included the status of Ecology's proposed water quality standards and the proposed Use Attainability Analysis. Chris referred much of the interest to Ecology's web page, which contains links to several resources related to re-licensing hydropower facilities ([www.ecy.wa.gov/programs/wq](http://www.ecy.wa.gov/programs/wq)). ☞

## Fall brings new hunting, fishing and wildlife viewing opportunities

Fall is in the air, turning the landscape red and gold as the days grow shorter and colder. Birds fly south in a steady stream, while salmon move in from the ocean toward the rivers where their lives began.

For Washingtonians who enjoy the great outdoors, the arrival of fall also signals the start of a new season of recreational opportunities from the Pacific coast to the Idaho border. Here are just a few highlights for the weeks ahead:

- **Hunting seasons:** New hunting opportunities for quail, bobwhite, chukar and gray partridge begin Oct. 2, which is also the opening day of the early muzzleloader deer and elk season in select units across the state. Pheasant season is also open on the west side of the state, with duck and goose seasons coming up Oct. 16 on both sides of the Cascades.
- **Razor clams:** The first razor-clam dig of the fall season is tentatively scheduled to begin Oct. 14-16, provided that test results show the clams are safe to eat. If the tests prove favorable, WDFW will proceed with a three-day dig on evening tides at Long Beach, Mocrocks, Copalis and Twin Harbors. See the South Sound/Olympic Peninsula section of this report for more details.
- **Fall fishing:** Thanks to one of the highest steelhead returns in the past 15 years, anglers can fish for marked, hatchery steelhead in portions of the upper Columbia, Okanogan and Methow rivers starting Oct. 1. Several westside rivers - including the Chehalis, Satsop, Wynoochee and Wishkah - also open for salmon fishing that day.

For anyone who hunts, fishes or just likes to spend time outdoors, the state Department of Health (DOH) recommends taking precautions against mosquito bites. Washington is now the only state in the Lower 48 that has not yet logged a human case of West Nile virus, and DOH is urging residents - particularly those who spend a lot of time outdoors - to reduce their chance of exposure to the potentially serious disease.

To do so, DOH recommends wearing long sleeves and long pants and using insect repellent with DEET while in the field. For more information call the Department of Health West Nile virus information line 1-866-78-VIRUS (1-866-788-4787) or log on to <http://www.doh.wa.gov/WNV>.

**Fishing:** Coho salmon continue to provide the bulk of angling action in marine and freshwater areas. The southwestern shore of Whidbey Island, the Possession Point-to-Shipwreck area, and Edmonds south of the ferry terminal have all produced fish. Anglers have also been finding coho along the Kitsap shoreline of Puget Sound in areas such as **Kingston** and **Jefferson Head**, as well as **Elliott Bay** in front of Seattle. Fish have been biting on fresh herring, imitation squid fished with a small herring strip, spoons or large flies. **Chinook** must be released in Marine Area 7 beginning Oct. 1, except in **Bellingham Bay**, where two chinook 22 inches or longer may be retained as part of the four-fish daily limit. The remainder of Marine Area 7 has a two-fish daily limit. Anglers who like to fish Marine Area 8-2 should know that the **Tulalip Bay "bubble"** fishery for chinook has ended. The entire area is open through Oct. 31 with a two-fish daily limit, and all **chinook** must be released. **Coho** catch rates in rivers have yo-yoed with stream conditions, but fishing in general should be improving well into October if water levels and clarity stabilize. Anglers on the **Skagit River** have been finding some nice coho, plus the occasional Dolly Varden, which must be at least 20 inches to retain. The **Skagit** is open from the mouth to the confluence with the Cascade River with a three-fish daily limit. Release all chinook and chum.

From WDFW Weekender Report: <http://www.wdfw.wa.gov/do/weekendr/weekendr.htm>

**About the Newsletter.** This newsletter is a publication of the Washington Section of the American Water Resources Association. It is published bi-monthly or quarterly. This is a forum for members to share ideas and opinions. Opinions expressed in the AWRA Newsletter are those of the authors and do not necessarily represent the official position of the AWRA – Washington Section. Comments on articles are welcome.

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**Submissions are welcome for the Jan-Feb, 2005 newsletter.** The submittal due date is January 10, 2005. The editor reserves the right to make changes for reasons of length, grammar, or clarity. Contact Sandra Slayton at 425/883-0777, or send submittals directly to: [sslayton@golder.com](mailto:sslayton@golder.com). Recent newsletters available online at: [www.wa-awra.org](http://www.wa-awra.org).

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**AWRA-Washington Section Annual Conference**  
**The Impact of Climate Change**  
**on Pacific Northwest Water Resources**

**October 28th, 2004**

*Seattle Art Museum, downtown Seattle*

**Who should attend:** Representatives from all levels of governments, business, and academia, including consultants, tribal communities, attorneys, and concerned citizens involved or interested in water resources in the state of Washington.

-----detach & mail with registration-----

**Washington AWRA 2004 Annual Conference Registration**

- Pre-registration (includes year 2005 State Section membership) - \$100
- Student pre-registration (includes year 2005 State Section Membership) - \$45
- Walk-ins will be accepted subject to space limitations (includes year 2005 State Section Membership) - \$125

Name \_\_\_\_\_ Title \_\_\_\_\_  
Affiliation \_\_\_\_\_  
Street Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone (\_\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_\_) \_\_\_\_\_  
E-Mail \_\_\_\_\_@\_\_\_\_\_

- Please check here if you do not want to be on the list of attendees provided at registration.

<p><b>Checks only.</b> Please make payable to: "AWRA Washington Section".</p> <p><b>No credit cards or purchase orders, please.</b> Refunds up to October 14th, less a \$40 administration fee.</p>	<p><b>Please mail checks by Friday October 14<sup>th</sup>, 2004 to:</b></p> <p><b>WA AWRA Conference Registration</b></p> <p><b>Golder Associates</b> <b>C/O Lisa Vaughn</b> 18300 NE Union Hill Road, Suite 200 Redmond, WA 98052 ph: 425-883-0777</p>
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For questions regarding the Conference, contact conference Chair Jacque Klug by phone: (425) 649-7230 or email: JKLU461@ECY.WA.GOV



Fall Conference Agenda:

The Impact of Climate Change on Pacific Northwest Water Resources

October 28, 2004

Time	Program Outline	Speaker
8:00	Registration (Lobby)	
8:30	<b>Opening Remarks</b>	Conference Chair, Jacque Klug
	<b>President's Message</b>	Section President, Joe Mentor Jr.
8:50	<b>Introductory Speaker</b> Moderator – Jacque Klug, Dept. of Ecology	Ed Miles – UW School of Marine Affairs
9:30	<b>THE STATE OF THE SCIENCE: THE DRIVERS AND UNCERTAINTIES ASSOCIATED WITH CLIMATE CHANGE</b> Moderator – Pete Sturtevant, CH2M Hill	Alan Hamlet, University of Washington School of Engineering Dennis Hartman, Chair, University of Washington Atmospheric Sciences Program
10:40	Networking Break	
11:00	<b>PREDICTION TOOLS: PREDICTED CHANGES TO THE PACIFIC NORTHWEST</b> Moderator – Tom Martin, Battelle	Phil Mote, WA State Climatologist. Pascal Storck, 3Tier Environmental Forecast Group
12:10	Lunch	
1:30	<b>SECTION AWARDS AND ANNUAL REPORT</b>	
	» Outstanding Contribution to Washington's Water Resources	Pete Sturtevant
	» Fellowship Awards	Stan Miller
	» Annual Report	Joe Mentor, Jr.
2:00	<b>Keynote Speaker</b> Moderator – Sandra Slayton, Golder Associates	Richard Gammon; Professor, UW Oceanography
2:40	<b>ADAPTATION: HOW CAN WE PLAN AND ADAPT TO CLIMATE CHANGE?</b> Moderator – Cleve Steward, Steward and Associates	Bill Pennell, Pacific Northwest National Laboratory Chris Pitre, Golder Associates
3:40	Networking Break	
4:00	<b>WHERE DO WE GO FROM HERE? POLICIES, REGULATIONS, INCENTIVES</b> Moderator – Joe Mentor Jr., Mentor Law Group	<u>Panel Session:</u> Doug McChesney, Dept of Ecology Tom Ring, Yakama Nation Kim McCartney, Bureau of Reclamation TBD
4:45	<b>Annual Meeting of the Chapter</b>	Joe Mentor Jr., Section President
	» Election of Officers and Board for 2005	

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# 2005 Board of Director Elections – October 28<sup>th</sup>, 2004

***Immediately following the October 28<sup>th</sup> AWRA Washington Section Annual Conference, the AWRA Washington Section will be conducting elections for the 2005 Board of Directors. All members are welcome to attend and to nominate other candidates, including themselves, for any of the positions. The 2004 Board of Directors is pleased to present the following candidates:***

## **Executive Directors**

**President - Tom Martin Jr., P.E.** - Tom is a water resources engineer with 23 years experience in consulting. He has worked in the Seattle area for over 13 years, and recently joined the Marine Sciences Lab of the Pacific Northwest National Laboratory in Sequim. He is a registered Professional Engineer in Washington and Maine concentrating in hydrology, hydraulics and water quality and numerical modeling. Tom received a B.S. from the University of Vermont in 1981 and a Certificate of Advanced Studies from Harvard in 1988. Since moving to the Northwest, Tom has participated in inter-disciplinary teams focusing on water rights; river/aquifer interactions; watershed, river and estuary management and restoration; and salmon recovery. Tom has served on the AWRA Board of Directors since 2001, co-chaired the 2002 Annual Conference, and was Secretary in 2004. Since 2001, he served on a local citizen advisory committee on urban creek stormwater issues. Tom makes award-winning homebrew, likes good defensive basketball, and most of all enjoys joining his wife in watching our four year old daughter discover her world.

**Vice President - Mona Thomason** – Mona has worked for the U.S. Army Corps of Engineers since 1985. She is currently the chief of the Planning Branch for the Seattle District, overseeing the district's water resource development program. She supervises planners, project managers, economists, biologists, archeologists, and other staff. Projects include ecosystem restoration, flood damage reduction, navigation, and other water-related purposes. Before coming to the Seattle District, she worked as an economist at the Corps' Institute for Water Resources in the Washington D.C. area, and Los Angeles, Mobile, and Portland Districts. Mona received a B.S. in Economics from Lewis and Clark College in Portland, Oregon. In her spare time, Mona reads, gardens, does home improvement projects, and enjoys her daughters' (Katie, 15, and Allie, 12) sports activities.

**Secretary - Paul Wetherbee** - Paul is a hydrologist with Bellevue-based Puget Sound Energy. A product of the liberal arts, he is an alumnus of Carleton College, the University of Wisconsin-Madison, and the University of Washington. Paul works primarily with surface water quantity and quality technical issues as applied to water resource negotiations. He thinks the Pacific Northwest is a terrific place to live work in water resources.

**Newsletter Editor – Sandra Slayton** – Sandra is an Environmental Planner with Golder Associates in Redmond. Most of her current work centers around 2514 watershed planning and water quality assessment; she has experience with salmon recovery planning, environmental planning and policy analysis, and watershed assessment. She has a Masters degree in Ecology from the University of North Carolina and a B.A. in Environmental Science from the University of Virginia. Before moving to Seattle, Sandra worked for a municipality in North Carolina doing critical areas and GIS work. Sandra enjoys whitewater kayaking, hiking and running.

**Treasurer - Scott Bender** - Scott is the Principal of Bender Consulting, LLC in Kirkland, Washington and is a hydrogeologist with over 18 years of experience in groundwater and surface water hydrology. He has a Masters degree in Hydrogeology from the University of Idaho and a B.S. in Geology from the University of Washington. His work focuses on water rights, litigation support, and groundwater control. He has won ASCE Engineering Excellence Awards for his groundwater control system designs for projects at the U.S. Embassy site in Bogotá, Columbia and at the Boston Central Artery in Boston, MA. Scott is a native Seattle-ite and enjoys fishing, hiking, and skiing.

**Past President – Joe Mentor, Jr.** – Joe Mentor, Jr., Principal of Mentor Law Group, PLLC, concentrates his practice in the areas of water resources, land use, and natural resources development. Joe has developed and is helping to implement water supply, mitigation and land development strategies for the MountainStar Master Planned Resort in Roslyn, Washington. In addition, Joe currently represents Skagit County in developing a water resources strategy for the Skagit River watershed, which addresses both instream needs in the Skagit River and its tributaries, and out of stream needs for rural development. In addition to his law practice, Joe publishes extensively on a variety of water and natural resources topics. An avid hunter and fly fisherman, he and his wife Marie are also the proud parents of two teenagers.

## **Directors**

**Steve Foster** – Steve is Water Resource Program Manager for the local office of HDR Engineering, Inc. and Regional Coordinator of their Environmental & Resource Management Business Class. Steve, a former Chief of Planning for the Seattle District Army Corps of Engineers, served on this board from 1997 to 1999. His combined 36 years of experience in the public and private sectors have been primarily focused on water resource studies, projects and programs in the Pacific Northwest involving environmental restoration, flood control, navigation, hydropower, water supply and erosion control. Steve and his wife Pat have two adult children, Shannon and Michael. Steve enjoys biking, hiking, boating, fishing and skiing.

**Carl Einberger** - Carl is a Senior Hydrogeologist and Water Resources Manager with Geomatrix Consultants in Seattle. He has been based in Seattle for the last 18 years, where he has worked as a consultant on multi-disciplinary environmental projects including water rights, water supply development, well rehabilitation, hydrology, abandoned and

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proposed mine investigations, contaminated site remediation and redevelopment, storm water management, and numerical groundwater and surface water modeling. Carl has a B.S. in Geological Engineering from the Colorado School of Mines, and an M.S. in Geology from the University of Wisconsin-Madison, and is a licensed hydrogeologist and engineering geologist in Washington. Carl is an avid photographer, hiker, and telemark skier, with two children who take pride in passing him on the ski runs.

**Jacque Klug**- Jacque is a Watershed Planner with the Department of Ecology. Her experience includes watershed planning, water rights administration, and policy development and analysis. She has a B.A. in Environmental Science from Duke University and a M.S. in Forest Resources from the University of Washington College of Forest Resources. In her leisure time, she enjoys backpacking, skiing, running, and restoring her Craftsman bungalow.

**Christopher Konrad** - Chris is a research hydrologist with the U.S. Geological Survey in Tacoma, Washington. He is involved with scientific research that informs a range of water-resources management issues in Washington State including the fate of sediments during dam removal, the hydrologic effects of land use, ground-water and surface-water exchanges, instream flows. Prior to joining the USGS, he worked as a research scientist at the University of Washington and as a hydrologist and environmental policy analyst with private consulting firms. He earned a B.S. in Biology from Stanford University and a M.S. and Ph.D. in Civil and Environmental Engineering from the University of Washington. Chris and his wife Katie live on Vashon Island with their two children. Chris spends as much of his free time as possible outside, biking, hiking, and skiing with his family and friends.

**Stan Miller** – Stan is Program Manager for Spokane's regional aquifer protection program. This program works toward integrating the groundwater protection efforts of all municipalities and water purveyors using the Spokane Valley-Rathdrum Prairie Aquifer; the program is administered through the Spokane County Public Works Department, Utility Division. In addition to working on this program at the administrative level, Stan has developed technical information and conducted local studies on the potential impacts of storm water infiltration on ground water quality and the interaction of the Spokane River and the Spokane Valley Aquifer. Away from work, Stan enjoys canoeing, backpacking, running, and working on the restoration of a turn-of-the-century home.

**Tom Ring** - Tom is a hydrogeologist with the Water Resources Program of the Yakama Nation. He has held this position since 1990 and, in that role, has worked on a variety of projects involving groundwater and surface water quantity and quality, water rights, irrigation and fisheries issues and planning for future water needs. Previously he worked for the Water Resources Program at the Washington Department of Ecology. Tom has Bachelors and Masters of Science degrees in geology from Central Washington University and Northern Arizona University respectively. He has taught geology and hydrogeology classes at Central Washington University and is a licensed geologist and hydrogeologist in Washington State. When not working, he enjoys hiking, climbing, and skiing in the mountains of the west.

**Cleve Steward** - Cleve Steward is a fisheries scientist and consultant with over 25 years experience and education in salmon and trout ecology and management, both as a government agency employee and as a consulting biologist. His firm – Steward and Associates – provides technical assistance in analyzing environmental impacts, complying with governmental regulations, and resolving conflicts involving fisheries and aquatic resources, with emphasis on water management, dams, watershed analysis, habitat restoration, and fisheries research and management. Cleve serves as scientific advisor to federal, tribal and state agencies engaged in the recovery of threatened and endangered salmon and steelhead in the Willamette and Lower Columbia Rivers. He is an avid hunter, fisherman, soccer player and youth soccer coach.

**Peter Sturtevant** –Pete is a Senior Water Resources Engineer at CH2M Hill in Bellevue. He works primarily on drainage and stream restoration projects. He has 30 years of experience in the fields of water resources and environmental impact assessment that has included water supply studies, water quality assessments, flood control, wastewater and water reuse projects. More recently his work has centered on stream stabilization and restoration. A proud Husky alumnus, Pete enjoys hiking, canoeing, sailing, and other water related activities in the Great Northwest and he bicycled across North America in 2002. Pete co-chaired the AWRA National Conference, which was held in December 1999 in Seattle and has also served as past chapter president. He is currently chairman of the committee planning for the 2005 National Conference, which will also be held in Seattle.

**Mona Thomason** – Mona has worked for the U.S. Army Corps of Engineers since 1985. She is currently the chief of the Planning Branch for the Seattle District, overseeing the district's water resource development program. She supervises planners, project managers, economists, biologists, archeologists, and other staff. Projects include ecosystem restoration, flood damage reduction, navigation, and other water-related purposes. Before coming to the Seattle District, she worked as an economist at the Corps' Institute for Water Resources in the Washington D.C. area, and Los Angeles, Mobile, and Portland Districts. Mona received a B.S. in Economics from Lewis and Clark College in Portland, Oregon. In her spare time, Mona reads, gardens, does home improvement projects, and enjoys her daughters' (Katie, 15, and Allie, 12) sports activities.

**Kathy Wright** - Kathy is the Water and Land Resource Division Program Manager for King County sponsored Army Corps of Engineers habitat restoration projects. In addition, she coordinates the County's ESA Section 7 consultations as the Corps' non-federal representative. In over 15 years with the County she has worked with scientists, engineers, economists, managers, and representatives from many federal and local entities to facilitate resource protection and restoration efforts. Kathy is interested in participating as a board member to work with other professionals in the state for educational programming and to promote the significance of state water resource needs at the national level. Kathy, a native Washingtonian, and her husband Tom have two adult children, Sarah and Ben. She enjoys gardening, boating, beach and woodland walks, and time visiting her children.

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## UPCOMING EVENTS

**AWRA 2004 National Conference.** November 1-4, 2004 at the Sheraton World Resort in Orlando Florida. [www.awra.org](http://www.awra.org).

**Watershed Planning: Approaches, Challenges, and Strategies for Success Symposium.** November 1-3, 2004 at the Skamania Lodge, Stevenson. Sustainable Fisheries Foundation: 250/729-9625.

**Pacific Fisheries Management Council Meeting.** November 1-5, 2004 at the Embassy Suites Hotel in Portland, OR. [www.pccouncil.org/events.2004/pfmc1104.html](http://www.pccouncil.org/events.2004/pfmc1104.html)

**Oregon Water Law – 13<sup>th</sup> Annual Conference.** November 4-5, 2004 in Portland, OR. For info contact the Seminar Group: 206/493-4400. [www.theseminargroup.net](http://www.theseminargroup.net)

**Dam Removal: Lessons Learned.** November 8-9, 2004 at the Heathman Lodge in Vancouver, WA. [www.erwinstitute.org/damremoval04/washington/wa\\_register.cfm](http://www.erwinstitute.org/damremoval04/washington/wa_register.cfm)

**2004 Northwest Environmental Conference and Tradeshow.** November 16-17, Jantzen Beach Doubletree in Portland, OR. [www.nebc.org/NWEC.asp](http://www.nebc.org/NWEC.asp)

**21<sup>st</sup> Annual Water Law and Resources Issues Seminar.** November 18-19, 2004 at the Doubletree Riverside in Boise, ID. Idaho Water Users Association. [www.iwua.org](http://www.iwua.org).

The Washington AWRA Chapter will be hosting the **2005 National AWRA Conference in Seattle**. We are looking forward to this opportunity to share our experiences with other Water Resources Professionals from across the country. Planning for the conference is already underway, and the WA-AWRA Board is looking for chapter input. We are currently outlining sessions and themes for the 4-day event. **If you would like to contribute to this effort**, please email Pete Sturtevant ([psturtev@ch2m.com](mailto:psturtev@ch2m.com)), the 2005 National Conference Committee Chair.

The **2005 ASCE/EWRI World Water and Environmental Resources Congress** will be held in Anchorage, Alaska, May 15-19. For more information visit:

<http://www.asce.org/conferences/ewri2005>.

**Water Environmental Federation National Conference - WEFTEC.05** - Call for Abstracts is Now Open! Online Submission is now available. [www.wef.org](http://www.wef.org) **Deadline: December 2, 2004** Be a part of the most powerful water quality event of the year by submitting your abstracts on cutting-edge water quality topics of interest to all environmental stakeholders. This is your opportunity to showcase your environmental contributions to over 17,000 attendees, more people than any other venue! WEFTEC.05 will be held from October 29 - November 2, 2005, In Washington, DC.

*To submit your organization's upcoming events for posting in the next issue of the AWRA newsletter, email to [sslayton@golder.com](mailto:sslayton@golder.com).*

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2005 Membership Application / Change of Address Form  
( ⌘ please circle, as appropriate ↗ )

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Annual membership in the state chapter costs \$25.

(If you attend the 2004 November Conference, your conference registration includes 2005 membership.)

Name \_\_\_\_\_ Position \_\_\_\_\_ Affiliation \_\_\_\_\_

Street Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone(\_\_\_\_\_) \_\_\_\_\_ Fax(\_\_\_\_\_) \_\_\_\_\_ E-mail \_\_\_\_\_ @ \_\_\_\_\_

Please indicate if you prefer to receive your newsletter electronically.

Check if you would like to be actively involved on a committee.

You will be contacted by one of the board members.

2005 Membership Dues: \$25.00. **Checks only.** Please make check payable to **AWRA Washington**

**Section.**

Mail to: American Water Resources Assoc. WA. Section

P.O. Box 2102

Seattle, WA 98111-2102

The American Water Resources Association is a scientific and educational non-profit organization established to encourage and foster interdisciplinary communication among persons of diverse backgrounds working on any aspect of water resources disciplines. Individuals interested in water resources are encouraged to participate in the activities of the Washington Section.

***Special thanks to Golder Associates Inc. for document processing and graphics support on this newsletter.***

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