



Tacoma/Olympia Section Civil Engineer THE NEWSLETTER

MAY 2009

CASCADE WATER ALLIANCE: PLANNING TO ENSURE LONG-TERM WATER SUPPLIES



The Cascade Water Alliance (Cascade) is a Wash-

ington non-profit corporation formed in 1999. It is composed of these eight utilities in King County: the cities of Bellevue, Issaquah, Kirkland, Redmond and Tukwila; the Sammamish Plateau, Skyway Water & Sewer Districts and the Covington Water District. Their goal is to meet the current and future water supply needs of its members by developing and owning water supply assets, contracting with other water providers and coordinating and planning with other regional water providers to provide a safe, clean, reliable, cost-effective and environmentally responsible water supply for the next 50 years and beyond.

To serve the current needs of its members, Cascade is purchasing water from the City of Seattle under a long-term wholesale contract. Cascade also has a wholesale water purchase contract with the City of Tacoma. In order to make use of water purchased from Tacoma and to efficiently serve its members in the future, Cascade will develop and acquire regional transmission facilities. Cascade has also negotiated the acquisition of the Lake Tapps Reservoir and associated water rights for future development as a municipal water supply. Cascade also provides regional conservation programs for its members.

Long-term planning includes determining the water supply needs of its members over the next 50 years and identifying the appropriate portfolio of resources best suited to meet those needs. One of the long-term sources being actively pursued is the Lake Tapps Reservoir.

This presentation will review the history of the Lake Tapps Reservoir since 1911. The Lake Tapps Reservoir was a hydroelectric project owned and operated by Puget Sound Energy, Inc. Issues revolving around the FERC licensing process, activi-

ties of the Lake Tapps Task Force, the application for and issuance of new municipal water rights and their subsequent appeal and remand will be covered. Cascade has executed an Asset Purchase Agreement with PSE, Inc. and developed agreements with the Muckleshoot and Puyallup Indian Tribes regarding minimum White River flows and for maintenance of recreational lake levels with the Lake Tapps Community. Following the issuance of an Environmental Impact Statement, the State Department of Ecology will be in a position to issue revised municipal water rights. ●

Speaker

Michael A. Gagliardo, Cascade, Director of Planning

Michael A. Gagliardo has managed the development of Cascade's formation and program development activities since 1999. Prior to that appointment Mr. Gagliardo was Director of the United States Conference of Mayors' Urban Water Council and Managing Director of the Conference's Municipal Waste Management Association. He has a long history of involvement in the development and financing of environmental infrastructure projects. From 1980-1995, he was associated with the Northeast Maryland Waste Disposal Authority in Baltimore where he oversaw all areas of development, finance and operation of a number of solid waste and sewage sludge management facilities. He has been involved in the development of legislation, regulations and policy at the local, state and federal levels. His early professional experience involved water quality planning, wastewater facilities planning and hazardous waste management.

Mr. Gagliardo received a B.S. of Science in Natural Resources Management from the University of Maryland, College Park in 1975.



Honors & Awards Banquet

Dinner Meeting
Tuesday, May 12th

La Quinta Inn
1425 E 27th St
Tacoma, WA 98421
(I-5 exit 135 at Portland Ave)

Social: 5:30pm
Dinner: 6:00pm
Program: 6:30pm

MENU:

Cost: \$25 per person
students half/price. Cash or checks payable to ASCE are accepted.

RSVP: by Friday, May 8th.
Contact Kay Hoke:
khoke@cityoftacoma.org
or 253.591.5760 ●

President's Corner with Jason Moline



Jason Moline has worked for the City of Tacoma for the past six years. He is currently a Professional Engineer for the Supply section of Tacoma Water. He holds degrees in Civil Engineering from Stanford (MS '02) and the University of Washington (BS '01).

In March, I traveled to Washington D.C. to represent our section at the ASCE Government Relations Leadership Training Program (Fly-In). ASCE arranges meetings with the office of each senator and representative for every participant in the Fly-In. Surveys of legislators indicate that in person visits from constituents have a lot of influence, which is why ASCE does not rely solely on full-time professional lobbyists.

ASCE advocates infrastructure funding. Our training pointed out that the U.S. has been investing about 2.4% of its gross domestic product (GDP) on infrastructure, versus that of 5% in Europe and 9% in China. ASCE released the full version of its "2009 Report Card for America's Infrastructure" during the week of the Fly-in, and we delivered copies to our respective senators and representatives. ASCE asked us to speak to our legislators specifically about the following pieces of legislation pending in Congress:

1. The Dam Rehabilitation and Repair Act (S. 732/H.R. 1770) would establish a federal program to work with state dam safety programs to repair, rehabilitate or remove unsafe publicly-owned dams. The Association of State Dam Safety Officials estimates that \$12 billion is needed over the next 10 years to address the nation's most critical dams.

2. Prompt passage of the FAA Reauthorization Act of 2009 (H.R. 915) would help address congestion on airport runways and gates across the country.

3. When Congress reauthorizes the nation's surface transportation systems later this year, funding should adequately address the congestion and poor conditions so

many Americans endure in their communities.

I went with four other ASCE members from Washington State to meetings with staff of our two senators. One of these other ASCE members is the current ASCE delegate to the Architects & Engineers Legislative Council (AELC). AELC is an organization for association and/or organization of architects and architectural firms, engineers and engineering firms in Washington State to work cooperatively on legislative objectives and issues for the improvement of business conditions. The Tacoma/Olympia section of ASCE has previously contributed to AELC, and representatives from AELC have spoken to us briefly at past section meetings.

Meeting other engineers is one of the main benefits of being actively involved with ASCE at a national level. It was interesting to compare notes on ASCE section leadership and other engineering issues. Even sections that are thousands of miles away face many of the same issues, and are happy to share how they are addressing their challenges. Someone I met at a previous ASCE regional leadership workshop encouraged me to go to the Fly-In this year.

Our first meeting was with a legislative aide for Senator Patty Murray. He seemed genuinely interested in what we had to say. He also had several follow up questions, primarily about transportation priorities, at the end of our meeting. The next meeting was with a senior policy advisor to Senator Maria Cantwell. He used to work as an electrical engineer, and was very knowledgeable about current transportation issues. Finally, I met with a legislative assistant to Congressman Norm Dicks. She was especially interested in the section of the ASCE report card discussing the success of the third runway project at Sea-Tac airport.

It is typical to meet with staff rather than directly with the congressperson. ASCE selected spring for the Fly-In because Congress is particularly busy at this time as many bills are being considered and we can have the biggest impact. Each of my meetings lasted approximately 15-30 minutes, which is considered average to somewhat long.

Prior to these meetings, ASCE provides training about the issues and about what to expect during the meetings. I found this to be very useful as D.C. is an impressive place and can be intimidating. The National Mall area is full of huge stone buildings that serve as the headquarters of government and sprawling plazas that celebrate our nation's history. Entering any of the Senate or House office buildings requires passing through security checkpoints that appear similar to those at airports. Nearly everyone inside and near the senate and house office buildings wore dark suits, as did we.

It is worth noting that ASCE does not support a particular party or candidate. There are a huge variety of lobbyists in D.C. for other interest groups. The big time lobbyists make significant contributions and maintain long-term relationships. If we do not make our wishes known to the politicians, we will be left out of the process. I also think it is worthwhile for members of our section to be aware of what ASCE is doing at the Society level.

Regards,

Jason Moline

2008-2009 Tacoma/Olympia
Section President

Top Three Infrastructure Concerns* for Washington State

1. Roads
2. Bridges
3. Mass Transit

Key Infrastructure Facts

- * 29% of Washington's bridges are structurally deficient or functionally obsolete.
- * There are 145 high hazard dams in Washington. A high hazard dam is defined as a dam whose failure would cause a loss of life and significant property damage.
- * 29 of Washington's 950 dams are in need of rehabilitation to meet applicable state dam safety standards.
- * 17% of high hazard dams in Washington have no emergency action plan (EAP). An EAP is a predetermined plan of action to be taken including roles, responsibilities and procedures for surveillance, notification and evacuation to reduce the potential for loss of life and property damage in an area affected by a failure or mis-operation of a dam.
- * Washington's drinking water infrastructure needs an investment of \$6.67 billion over the next 20 years.
- * Washington ranked 23rd in the quantity of hazardous waste produced and 13th in the total number of hazardous waste producers.
- * Washington's ports handled 122 million tons of waterborne traffic in 2005, ranking it 7th in the nation.
- * Washington reported an unmet need of \$60.6 million for its state public outdoor recreation facilities and parkland acquisition.
- * 33% of Washington's major roads are in poor or mediocre condition.
- * 27% of Washington's major urban highways are congested.
- * Vehicle travel on Washington's highways increased 27% from 1990 to 2007.
- * Washington has \$3.75 billion in wastewater infrastructure needs.

Sources:

- *Survey of the state's ASCE members conducted in September 2009.
- Deficient Bridge Report, Federal Highway Administration, 2008.
- National Inventory of Dams, U.S. Army Corps of Engineers, 2008.
- Drinking Water Needs Survey and Assessment, Environmental Protection Agency, 2003.
- National Biennial RCRA Hazardous Waste Report, Environmental Protection Agency, 2007.
- The U.S. Waterway System – Transportation Facts, Navigation Data Center, U.S Army Corps of Engineers, February 2007.
- 2007 Annual Report, Land and Water Conservation Fund State Assistance Program, National Park Service.
- TRIP Fact Sheet, March 2009.
- Clean Water Needs Survey, Environmental Protection Agency, 2004.
- Learn about from ASCE about the infrastructure of other states at <http://www.infrastructurereportcard.org/states>.

ASCE Conferences

Your gateway to the newest technical information in your field.

- ◆ Meet new colleagues.
- ◆ Guide the future of the profession
- ◆ Earn CEUs and PDHs.
- ◆ Gain valuable insight to the newest breakthroughs in your profession.

These are just a few of the conferences you can attend in 2009:

- World Environmental & Water Resources Congress 2009
May 17 - 21, 2009
Kansas City, Missouri
- Automated People Movers 2009
May 31 – June 3, 2009
Atlanta, GA
- 2009 Triennial Conference - Coastal Engineering: Future Challenges and Risks
June 1 - 2, 2009
St. Johns, Newfoundland
- 2009 ASCE International Workshop on Computing in Civil Engineering
June 24 - 27, 2009
Austin, TX

Joint 2009 ASCE-ASME-SES Conference on Mechanics and Materials
June 24-27, 2009
Blacksburg, VA

TCLEE 2009 Conference: Lifeline Earthquake Engineering in a Multihazard Environment
June 28 – July 1, 2009
Oakland, CA

33rd International Association of Hydraulic Engineering & Research (IAHR) Congress
August 10 - 14, 2009
Vancouver, British Columbia, Canada

Pipelines Conference 2009
August 16 - 19, 2009
San Diego, CA

14th Conference on Cold Regions Engineering
August 30 – September 2, 2009
Duluth, MN

ASCE 139th Annual Civil Engineering Conference
October 29 – 31, 2009
Kansas City, MO

Electrical Transmission and Substation Structures Conference 2009
November 8 - 12, 2009
Fort Worth, TX

5th Congress on Forensic Engineering
November 10 - 15, 2009
Washington, DC

ATC-SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures
December 9 - 11, 2009
San Francisco, CA

For more information and a full listing of ASCE conferences, visit <http://www.asce.org/conferences>.

See Your AD Here!

Advertise in our newsletter!
Post your advertisement in our newsletter for the following rates:

- One time, 1/8 page - \$50
- One year, 1/8 page - \$200
- One year, 1/4 page - \$250
- One year, 1/2 page - \$400
- One year, full page - \$500

Interested? Contact:
Jason Moline...253.396.3383
jmoline@cityoftacoma.org

Congratulations 2009 Life Members!



Please come to our May dinner to celebrate the achievements of the following new ASCE Life Members:

- * Mr. Walter Brown, M.ASCE
- * Mr. Clifford Holman, P.E., M.ASCE
- * Mr. Jerry Lenzi, P.E., L.S., M.ASCE
- * Mr. Charles A. (Cap) Pearson, P.E., S.E., M.ASCE
- * Mr. Joseph R. Schlechten, P.E., S.E., M.ASCE
- * Mr. James Spaid, P.E., M.ASCE

Life Member status is an honor awarded to members that have made a lifetime commitment to ASCE and the civil engineering profession. To obtain Life Member status, ASCE Members, Associate Members and Affiliate Members must:

- * have reached the age of 65 years
- * have paid dues for at least 30 years
- * have 10 years continuous membership immediately preceding the attainment of Life Member.

Three of the six 2009 life member award recipients provided the section with their career history, which we share in this issue of the newsletter.

2009 Life Member Mr. James Spaid, P.E.

Jim Spaid has been active in civil engineering for over 42 years. He earned his Bachelor of Science degree in Civil Engineering at California State University–Humboldt. He is a licensed Civil Engineer in the State of Washington.

After graduation, Jim immigrated to Washington State to work for Boeing where he worked as a structural designer on the 747 wing. After a couple of years with Boeing, Jim started his career with the Washington State Department of Transportation (then the Dept. of Highways.) He is currently employed with WSDOT as the State Roadway Construction Engineer. Over the years, Jim has been involved in design and construction of a number of interchanges along SR 16, in the Gig Harbor area, and US 101 west of Olympia. In his current job, Jim is responsible for the content of a portion of the Standard Specifications for Road and Bridge Construction.

During some time away from WSDOT, Jim was in private practice in Lacey. His experience during that time included engineering design and construction management for several residential subdivisions in Lacey and Olympia.

Jim has been married to his wife, Jan for 42 years. They have three grown children and four grandchildren. Jim and Jan are active members of St. Mark Lutheran Church in Lacey. Jim is also active in the Lacey Rotary Club.

Congratulations, Mr. James Spaid, P.E.!

“Engineers Make the *Difference*...
They Provide the *Quality* of Life!”

2009 Life Member

Mr. Joseph R. Schlechten, P.E., S.E., Senior Structural Engineer

Mr. Schlechten is a graduate of Montana State University in Bozeman, Montana. He initially received a Construction Technology degree and began his career working for a consulting firm preparing the design drawings for highways, streets, sewer systems and other civil projects. This work inspired him to return to Montana State where he earned a degree in Civil Engineering. Upon his return to the consulting firm, he worked extensively on the design of highway bridges, getting his start in structural engineering.

After several years, he joined ABAM Engineers in Tacoma, Washington. There he became involved in waterfront structural design where he has spent most of his career. His work at ABAM included several unique waterfront structures, such as the floating container terminal in Valdez, Alaska. He was a recipient of the silver AISC award for design work on the two 200 foot long orthotropic steel deck transfer spans that anchored the floating dock to land and provided access to and from it. Other unique structures included a floating structure for Sohio intended for oil exploration in the Beaufort Sea and the initial design efforts for development of prestressed concrete piles for the Navy. While at ABAM, he became a registered structural engineer and earned his Master's degree in Structural Engineering from the University of Washington while working full time.

Mr. Schlechten went to work with Harris Group in Seattle where he became involved in structural design for pulp and paper mills and numerous projects for Boeing. While at Boeing, he designed the new foundations and enclosure building for their partial rebuild of the wind tunnel at their facility near Boeing Field.

He left Harris Group for a couple of years to join a small consulting firm. There he designed the 12 foot diameter x 400 foot long tube at Glacier Northwest's new facility at DuPont that carries the gravel conveyor down a steep bank over the railroad tracks for discharge into a barge loader.

Eight years ago he joined KPFF Consulting Engineers in Tacoma, Washington where he has again been involved extensively in waterfront design work. He was involved in designing repairs for the 7 foot thick floor slab in the Navy's carrier dry dock at the shipyard in Bremerton. The floor slab was settling due to poor soil conditions below the floor slab. The work included the development of a three dimensional computer model of the entire dry dock structure.

As can be seen from some of the structures on which he has worked, Mr. Schlechten has been involved in a wide variety of projects and enjoyed their challenges and uniqueness.

Congratulations, Joseph R. Schlechten, P.E., S.E.!

“Engineers Make the *Difference*...
They Provide the *Quality* of Life!”

2009 Life Member

Mr. Charles A. (Cap) Pearson, P.E., S.E.

Cap was born in Tacoma, Washington in 1944 to Charles T. and Jeanne K. Pearson. Charles T. (Chuck) Pearson was a graduate of University of Washington in Architecture and was a principal in the Lea, Pearson and Richards Architectural Firm which was started in 1937 and closed in 1984. Jeanne Pearson graduated in Social Science from Washington State College and began work in Tacoma with the State Child Welfare Department. Except for an interim while she attended the University of Chicago graduate school she worked there until Cap was born.

Cap attended Bellarmine High School in Tacoma, graduating in 1962. He then attended Washington State University, first starting in Chemical Engineering, but after three semesters transferred to the Civil Engineering Department. He graduated from WSU in February 1967 and fairly soon afterwards joined the Air Force before the draft caught up with him. While stationed at Forbes Air Force Base just south of Topeka, Kansas, he worked as a draftsman and surveyor. He also had temporary duty assignments for about a month each at Mountain Home Air Force Base in Idaho, and at Avon Park Bombing Range in Florida. Both of these assignments were surveying projects.

Cap got out of the Air Force April 11, 1969 and went to work with the City of Tacoma on April 21, 1969. He started in the Public Works Department, Building Division, which later became the Building and Land Use Services Division. After 40 years he still is working for the Public Works Department, Building and Land Use Services Division.

Cap obtained his EIT in 1970, his Professional Engineers License in Civil Engineering in 1973, and his Structural Engineers License in 1975. Cap has been supervising the Plan Review Section in one capacity or another since 1973. He also has a Professional Engineers License in Civil Engineering in Idaho by comity received in 1982, and a Structural Engineers License in Idaho by comity received in 1990. (Before 1990 or thereabouts, Idaho did not have a structural specialty license.)

According to his membership card, Cap has belonged to ASCE since 1967! He was a director for the Tacoma/Olympia Section from 1992–1994. Cap has been very active in the Structural Engineers Association of Washington, Southwest Chapter. He was chapter treasurer from 1979–1982, Vice President 1982–1983, Chapter President 1983–1984, and State President 1984–1985

He also belongs to the Washington Society of Professional Engineers (since 1973) and has served in a variety of offices at the local and state level including: President of the Tacoma Chapter in 1976–1977, and again in the 1980–1981. He served at the state level as treasurer from 1998–2004, and will be serving as the Vice President West beginning July 1, 2009.

In 2001 the Puget Sound Engineering Council awarded Cap the Government Professional Engineer of the year award.

On April 21, 2009 Cap celebrated his 40th anniversary with the City of Tacoma and the crew at the office threw him a surprise party. There were a lot of friends and acquaintances from the city as well as engineers, architects and contractors who he has worked with over the years there to help him celebrate.

Congratulations, Cap Pearson, P.E., S.E.!

“Engineers Make the *Difference*...
They Provide the *Quality* of Life!”

SECTION CALENDAR and ENGINEERING RESOURCES



Section Calendar

Tacoma/Olympia
ASCE Section
Meetings/Activities

Meetings are **generally** held the second Tuesday of each month*. This is a tentative meeting schedule. Please call any board member if you have questions.

June-August 2009 – Summer recess

Wednesday, September 16, 2009 – Dinner with Structural Engineers Association of Washington (SEAW)

Tuesday, October 13, 2009 – Dinner in Tacoma
*DATE/TIMES/LOCATIONS TO BE ANNOUNCED/VERIFIED

Tacoma/Olympia ASCE Board Meetings:

Local Board Meetings are open and generally held the first Monday of the month at 5:30pm. Locations vary. Please check the WEB site, this calendar, or contact the president for confirmation.

Younger Member Forum Activities And Update

Younger Member Newsletter
www.asce.org/inside/cym_pubs.cfm

For more information on Upcoming Events & Activities for Younger Member programs, contact: Brook Maples at brookm@gmail.com

Continuing Ed

For scheduled seminars in your geographic area are available on ASCE's website at www.asce.org/conted/seminars.

These in-depth, practice-oriented programs are produced by ASCE's Continuing Education Department and may be of interest to many ASCE members in your Sections and Branches. We would greatly appreciate if you would consider posting information on these seminars in your newsletters and on your websites.

If you have questions or need assistance, please contact:

Kelly Jarvis, Continuing Education Registrar at kjarvis@asce.org or

Michael Cook at mcook@asce.org.

TRANSPEED Courses

For a complete list of courses, visit the website at <http://www.engr.washington.edu/epp/Transpeed/index.html> for specific course **descriptions and dates. Click on the specific course link to view the course outline.** or contact:

Julie Smith
Engineering Professional Programs
Phone: 206-543-5539
Toll-Free: 1-866-791-1275

2009 Professional Development Short Courses

For a complete description of the course and registration information visit our website

<http://www.engr.washington.edu> or call us at: Engineering Professional Programs, University of Washington, phone: 206.543.5539
(fax) 206.543.2352 or
(toll free) 1.866.791.1275

Stephanie Strom, Program Mgr:
ssstrom@u.washington.edu

Opportunities to Serve on the Board

The nominating committee is currently seeking new candidates for next year's board positions. Positions available include director (2-year term) and president-elect (that is, the person who will be president in 2010-2011). We understand everyone's time is limited and would be happy to work with whatever interest you have. Serving on the board is a great way to network and expand your skills. It is also a chance to learn about local projects and meet other engineers. Please contact one of the board members if you are interested.



Tacoma/Olympia Section Board 2008 - 2009

<http://sections.asce.org/tacoly/html/board.htm>

President

Jason Moline...253.396.3383
jmoline@cityoftacoma.org

President-Elect vacant

contact any board member for info

Secretary

Don Davis...253.474.9449
DonDavis@sitts-hill-engineers.com

Treasurer

Morris J. "Gus" Fant...253.922.2332
fusgant@aol.com

Director

Lyle Stone...(...) ...~....
lstone@geoengineers.com

Director (2-year)

Bruce McDonald...253.830.5337

Region 8 Governor

Dale A. Nelson, P.E....509.280.9079
danelson@earthlink.net

Younger Member Chair

Brook Maples...
brookm@gmail.com

Past-President

Bernie Hargrave
Bernard.L.Hargrave.Jr@nws02.usace.army.mil

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We're on the Web at

<http://sections.asce.org>