

Upcoming Events

**Thursday, September 19
5:30 P.M.**

Dinner Meeting

Featuring
Gwenn Maxfield of the Interim Water Group
(see page 2 for details)

**Monday, October 21
5:00 P.M.**

Membership Meeting
(see page 7 for details)

**Wednesday
November 20**

Washington Section Fall Conference - Start planning early to attend!
(see page 6 for details)



PRESIDENT'S NOTES

by Rodney Sakrison, President, AWRA Washington Section

A Walk on the Demand-Side

I hope you are enjoying our summer and being water-wise too. I find it encouraging that every time the thermometer moves over 80 degrees the newscasts begin covering residential lawn watering. You probably heard the public announcement spots that Seattle, Tacoma, Bellevue and other participating utilities have had on the radio. I also heard Lloyd Warren, Acting Director, Bellevue Public Utilities, taking on NPR about lawn watering being the target for conservation efforts. This message has been around for years, but it looks like it really hit home during the drought of 1992. Water use steeply declined in 1992, and though it has risen somewhat, it looks like it is following a long-term trend downward.

Seattle Water Department has some interesting figures related to water demands for the regional supply system. Average daily per capita peak-season consumption declined from about 200 gallons per capita per day (gpcd) in the late 1980s, to less than 120 gpcd in 1992. Annual per capita has remained below 120 gpcd while average peak season per capita has risen somewhat to 140 gpcd in 1995.¹ What accounts for the reduction?

Reduced summer consumption levels are probably associated with less lawn watering, due to the combined effects of conservation efforts and higher prices. Data from my own dissertation research at the University of Washington for 500 randomly selected

single family homes in suburban east King County show summer household water use peaking at 1.8 times the winter water use. This is a more modest increase over conventional system design standards of up to a 2.5 peak ratio. My best estimate of average per household peak-season daily use for dwelling units constructed under current zoning is 144 gpcd (assuming 2.4 persons per household) and 80 gpcd non-peak season water use.

Continued...

¹ Personal communication from Bruce Fluery, SWD. Aggregate peak-day consumption has taken a similar plunge from nearly 330 million gallons per day (mgd) throughout the 1980s to around 290 mgd in 1990, and currently closer to 255 mgd.

PRESIDENT S NOTES (continued)

Looking at the countywide water needs in the 1994 King County Comprehensive Plan, there will be 195,000 new households in King County by the year 2012. Using demand factors based on current consumption data rather than nominal engineering assumptions, and higher housing density, additional supply requirements would be about 40 mgd (not including commercial-industrial or governmental sectors). This is far less need for new water than was forecast in the past, by a factor of about one-third.

Can current consumption levels be maintained? Will demand revert to previous patterns? These are important questions for which there are no clear answers. The effect of denser housing patterns is factored into my forecasts, but will King County and the suburban cities maintain the commitment to containing sprawl? I suggest that the choice of land use patterns and development standards is a significant factor from a resource management perspective. Land use decisions can build in permanent reductions to long-term water requirements. Funny things occur, however, when policy recommendations get to the political decision-makers. For example, in 1994 the King County Council decided at the last moment not to apply the water budget restrictions in the landscape code (K.C.C. 21.A.16 Landscaping and Water Use) to single family parcels, limiting implementation of the code to just common areas, parks and play areas. This came about as a result of strong lobbying from the landscape profession. Fully implementing the landscape code to all new single family parcels could reduce countywide residential water need to around 35 mgd (a 12% reduction).

Other demand-side reductions must be pursued more vigorously. Anyone closely associated with public water supply will confess that we are not doing all the conservation that is economically-justifiable. Stay tuned, though, the newly-signed Safe Drinking Water Act makes it a federal requirement that utilities prepare water conservation programs, and this may throw new weight behind efforts to give demand-side measures equal attention.

With this issue of the Newsletter, we begin in-depth discussions of water supply and demand issues. It is my hope that the Washington Section can serve as a welcome forum for the open discussion of arguably the most pressing resource management issue facing this region. Within this issue we are pleased to announce the fall conference, which will be held at the Seattle Art Museum on Wednesday, November 20, 1996. We also will be holding a stimulating dinner meeting in Bellevue on September 19, 1996. Both of these occasions will focus on the pending water "crisis" in this area. As we begin to address these issues, let's start by defining whether there *is* a real water crisis, or if it is a crisis of management or, perhaps, ownership.

Lloyd Warren, Acting Bellevue Utilities Director and **Meg Ludlum**, Senior Economist with the Seattle Water Department have co-authored an enlightening explanation of Water Governance through the New Entity. Their article provides an excellent background for Gwenn Maxfield's September Dinner presentation. **Sheldon Lynne**, City Engineer, City of Issaquah Public Works Department, contributes his notes on how this strategically-located city plans to cope with water supply issues. Mr. Lynne insightfully states that ..."it will be challenging for any party to obtain new supply." Elsewhere in this issue, upcoming events such as the Annual Fall Conference and an important membership meeting are announced.

"Go as far as you can see, and when you get there, you will see farther."

Anonymous

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This newsletter is a publication of the Washington Section of the American Water Resources Association. It is published bi-monthly. This is a forum for members to share ideas and opinions; as such, opinions expressed in the AWRA Newsletter are those of the authors and do not necessarily represent the official position of the Washington Section of AWRA.

Announcements or articles are welcomed for the November/December edition of the newsletter. The editor reserves the right to make changes for reasons of length, grammar, legality or clarity. The submittal due date is October 7, 1996. Contact Teresa Platin at (206)-453-5000, or send submittals directly via the following methods:

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(most document/graphic formats are acceptable)

SEPTEMBER DINNER MEETING

Gwenn Maxfield to Speak About Eastside Water Needs: The Interim Water Group

On September 19 at 5:30 p.m., AWRA will host a dinner meeting at the Best Western Bellevue Inn's Yarrow Point Banquet Room. **Gwenn Maxfield, Chair of the Interim Water Group and Commissioner of the Woodinville Water District** will discuss the Interim Water Group (sometimes also known as the New Entity) and its challenges and goals as the Eastside reconsiders its water supply sources in the coming years. Local water providers are evaluating their future potable water demands and the upcoming need to either re-enter a contract for water from the City of Seattle or to develop their own sources. The Interim Water Group is spearheading an investigation of the political, technical and socio-economic realities of such a venture.

Dinner will be served at 6:15, followed by the featured presentation. **Please join us at 5:30 for socializing and no-host bar service.** As always, guests are welcome.

Pre-registration for the meeting is requested (\$16.00), but walk-ins will be accepted at the door for a higher cost (\$20.00). **Make checks payable to AWRA, and mail them to Teresa Platin, CH2M HILL, PO Box 91500, Bellevue, Washington 98009-2050.** (Call 453-5005, extension 5235 with questions). Indicate whether you would like Chicken Parmigiana (boneless breast baked golden brown, served with marina sauce) or Fresh Linguine with Pesto (fresh pasta tossed with a lively sauce of garlic, pine nuts, parsley, basil and olive oil). All meals are served with tossed salad, warm rolls, and a side accompaniment. Dessert and coffee, tea, or decaffeinated coffee are also included.

Directions: Driving north or south on I-405, take Exit #12. Drive west on SE 8th Street, taking a right on 114th. The Best Western Bellevue Inn is located just a few blocks up on the left side. Parking is complementary. Please enter at the main lobby; there you will receive directions to the Yarrow Point Banquet Room.

Are there topics you would like to see addressed during the 1997 Dinner Meeting Series? If so, please contact a board member with your suggestions.

WATER GOVERNANCE -- THE ROAD TO A NEW ENTITY

by Lloyd Warren, Acting Bellevue Utilities Director and Meg Ludlum, Senior Economist, Seattle Water Department

What's in a name? If it's the New Entity, there is a long history. Some say too long. The Interim Water Group, composed of suburban city and water district officials, is charged with creating a means to provide water governance for the Eastside. They say "The New Entity" sounds so nondescript—why not something that has a ring to it like "King County Regional Water Authority?" When elected officials from Seattle, suburban cities, and water districts get together over such a contentious issue as water, one can imagine that every word is important. If 'Authority' sounded too omnipotent, and 'Regional' too inclusive, what was left? The words New and Entity evolved because they didn't offend anyone. As work proceeds toward developing final agreements for a new water supply governance arrangement for the King County area, a new name will evolve.

The Seattle ancestors had either great vision, or good luck. They have left the region with a first class water supply system that has fed the Seattle area for a century. But as the region continues to grow, the thirst continues. More water is needed for suburbia. Who should make the decisions and take the risks for such an expensive venture? That is the question that brought local decision makers together.

Seattle Mayor Norm Rice and Bellevue Mayor Terry Lukens kicked off the water governance process over six years ago. Elected officials representing Seattle, twenty-nine suburban cities (now thirty-three), and numerous water districts came together as the 'Tri-Caucus' to talk about responsibility for future water supply development for the region. Under water supply contracts signed in 1982, Seattle is responsible for meeting the wholesale water demands of 26 other cities and water districts (commonly called 'purveyors') in the metropolitan area, and has the right to recover costs under terms specified in the contract. But purveyors wanted a bigger voice in water supply decisions, and Seattle was interested

in having other jurisdictions assume a greater role in financing expensive water projects that are needed primarily to meet suburban growth. Another impetus for the discussions was that under Seattle's existing water supply contracts, the parties must notify one another by the beginning of 1997 if they intend to renew the contract beyond its scheduled expiration in 2012. All in all, the participants had more reason to stay at the table than to leave.

The first two years were spent in wary and polite conversation. Did the purveyors want to hijack the regional water system? Was Seattle willing to give up any control? Any solution needed Seattle concurrence. Reality is that no one was going to start an independent regional water supply system. It would be too costly, and it is unlikely that the State would allow the extra water rights. Finally, the breakthrough came. The Seattle Council focused on a future vision. As long as Seattle continued to own and control their existing regional system, they would not be opposed to suburbans taking on the ownership and risk for new supply. Such an arrangement requires an interdependency since the New Entity system would incrementally build upon existing Seattle infrastructure.

Details...details. The last three years were spent creating the framework for this future relationship.

- Seattle would sell all water in excess of its needs to the New Entity and get out of the supply development business, but would continue to have a market for its excess supply.
- Before purveyors jump the Seattle ship, they want assurance that there would be some surplus supply to avoid an immediate crisis. Seattle and the New Entity are now negotiating for that supply cushion with Tacoma.

Continued...

WATER GOVERNANCE (continued)

- Even after purveyors jump the ship, they must hop back on if purveyors with 75% of Seattle's wholesale sales don't join the New Entity within two years of its formation.
- Participants recognize that some purveyors are comfortable with the current arrangement with Seattle. The Seattle contract runs to 2012. However, Seattle agreed that come 2012 they would sell all remaining surplus only to the New Entity. This will leave some tough choices for purveyors remaining with Seattle.
- The New Entity would be a water broker and membership would be voluntary. In addition to surplus supply from Seattle, the New Entity would have the option of developing new supply or buying from others, such as Tacoma, or those with groundwater in excess of their local needs.

With handshaking and much relief, a Tri-Caucus Agreement of Principles was signed in August of 1995. The Tri-Caucus continues to meet to resolve the last sticky issue of how to conduct the regional water supply planning process. In the meantime, to support the formation of the New Entity, Seattle has notified the purveyors that it will not renew the existing water supply contract in its present form or discuss provisions for a new water supply contract while efforts to hammer out a new institutional arrangement are in progress. The Interim Water Group, composed of suburban city and water district officials, is working on putting together interlocal agreements to create the New Entity. Will these suburbanites be able to get along apart from Seattle? Will purveyors be willing to accept the costs (in dollars and obligations) of independence? The next year will be a telling one. Either a New Entity will evolve and a new era will begin, or we will find out that suburbanites are not ready to be regional players.

WATER SUPPLY NEEDS: One City's Strategies

by Sheldon Lynne, City Engineer
City of Issaquah Public Works

During the early 1990's, the City of Issaquah updated its Water Utility Comprehensive Plan and at the same time developed an agreement with a property owner for a local development. As water supply was evaluated against forecasted growth, it became apparent that using the current system operating strategy, the City would need more supply by 2000.

Historically, the water customers of Issaquah use significantly less water on an average daily basis than most on the east side of Lake Washington. Thus, a shift in the operating strategy dealing with storage volume may be used to offset the peak demands in the summer, thereby extending the existing supply.

Following analysis of consumption versus different levels of equalizing storage capacity, along with 13% conservation on all new development, it was determined that the City could extend its water supply to accommodate growth to about the year 2010. This shift in operating strategy was to provide for peak week storage rather than providing for average day demand storage. This means providing approximately 2.1 million gallons of additional equalizing storage for the existing City's needs. When potential annexation areas develop, they will be required to provide adequate equalizing storage for peak week demands. As mitigation for impacts to the City's water supply, the developer has agreed to construct the additional storage required to convert the existing City operations to peak week.

To achieve additional water supply needed after 2010, the City is participating in the regional water governance process, regional water supply efforts, and continuing to look for groundwater sources within the lower Issaquah Creek Valley. Given the regulatory environment concerning new water rights, it will be challenging for any party to obtain new supply.

STATEWIDE WATER RIGHTS DISCUSSED BY RACHAEL PASCHAL: JUNE DINNER MEETING

On June 27, the Washington Section of AWRA hosted a dinner meeting at the Latitude 47° Restaurant in Seattle. Rachael Paschal spoke about statewide water rights issues and the hearing held earlier in the day before the Pollution Control Hearing Board. Ms. Paschal is the Director of the Center for Environmental Law & Policy ("CELP") and teaches water and environmental law at the University of Washington.

Ms. Paschal provided a historical perspective on "how we got" to the statewide water rights hearing before the PCHB, and she discussed the arguments that various parties made at the hearing earlier that day. She described the statewide issues hearing as the "most important" water rights case in the state right now and perhaps for years to come. Ms. Paschal then initiated an open and wide-ranging discussion among the 20 people in attendance regarding the merits of arguments advanced at the hearing, the likely outcome to be decided by the PCHB, and the consequences of the decision. Future newsletters will explore the litigation in more detail, but in July the PCHB generally ruled in favor of Ecology and CELP on the statewide water rights issues.

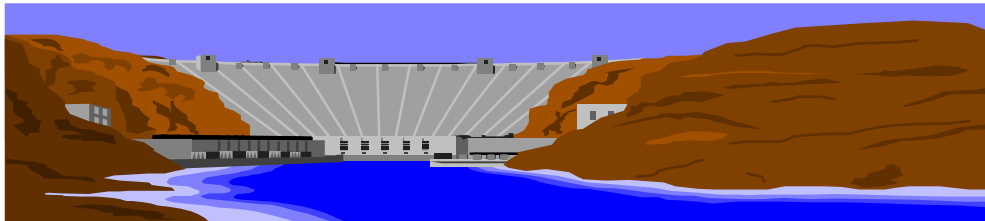
1996 WASHINGTON SECTION AWRA FALL CONFERENCE PLANS SET

The Water "Crisis": Myth, Reality, and Opportunities

Now is the time to begin planning to attend the AWRA Washington Section Fall Conference. The Seattle Art Museum will be the site of this year's conference focusing on important water supply issues, challenges and solutions for the ever-growing Puget Sound Region.

Held on November 20, 1996, this 1 day conference will feature three panels of leading authorities that will describe current developments regarding water management, new supply alternatives, regulations, conservation strategies and technical issues. The panels promise to be an interesting forum to explore the "water crisis" and begin to develop solutions to carry us into the next century.

Stay tuned for more information. You will be receiving the informational flier and registration form later this month, and the next edition of this newsletter will provide additional details.



NOTICE: SPECIAL MEMBERS MEETING TO BE HELD OCTOBER 21

The AWRA Board is calling a special membership meeting to consider and act on a proposal to organize the Washington Section of the AWRA as a nonprofit corporation under Washington state law. Open to all current section members, the meeting will be held at 5:00 pm, Monday October 21, at the Seattle offices of Preston Gates & Ellis, located at Suite 5000, 701 5th Avenue. To attend the meeting, come to 50th Floor of the Columbia Center and ask the receptionist for the AWRA meeting. Please call Adam Gravley at (206) 623-7580 if you have questions about attending the meeting.

The Board recommends that the organization file papers with the Secretary of State

to formally become a corporation. There are many advantages to becoming a corporation, but one of the key advantages is that the AWRA Washington Section will be able to limit its liability in connection with events that it sponsors. The Board has called the special meeting so that the incorporation can be completed in advance of the November conference. Incorporation also provides an opportunity to update the organizational structure of the AWRA. Currently, drafts of the incorporation papers are being prepared for distribution to the Board. If you would like a copy, please call Adam Gravley at (206) 623-7580. Also, please convey any comments that you have about this matter to any Board member.

1996 Fellowship Announcement

The Fellowship Committee received three applications for the 1996 AWWA Washington Section Fellowship. One of the submittals was withdrawn because of a change in plans by the student applying for the award.

The Fellowship Committee is currently reviewing the application packages. A decision will be made by mid-September and the student selected to receive the \$1,500 award will be notified shortly thereafter. The winner will be introduced and the fellowship will be presented at the 1996 Washington Section Fall Conference in Seattle.

The Fellowship Committee would like to remind members that they are welcome to encourage students to apply for the fellowship. Though we send notices to nearly 150 academic departments at Washington colleges and universities, we typically receive only five or six applications. If you would like to obtain information on applying for next year's fellowship, contact Stan Miller, Fellowship Committee Chair at (509) 456-3600.

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 CH2M HILL, Bellevue, for their word processing and graphics support on this newsletter.

**AWRA WASHINGTON SECTION
1996 MEMBERSHIP APPLICATION**

NAME:

ORGANIZATION:

ADDRESS:

Check if you would like to be actively involved on a committee during 1996. You will be contacted to determine what committee involvement you would like.

1996 Membership Dues (through October 1996): \$25.00. Please make check payable to **AWRA Washington Section**.

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