

ShopTalk

Plant Operations Support Consortium

Volume 17, Number 1

Summer 2012

County Member Follows Road to Great Savings New GPS system "changed how we do things for the better"

By Phil Partington, Consortium Staff

Clark County has always been a beacon for innovation in facilities management, and recent developments there reconfirm that reputation. The county completed installation of GPS units in all of its vehicles in October 2011.

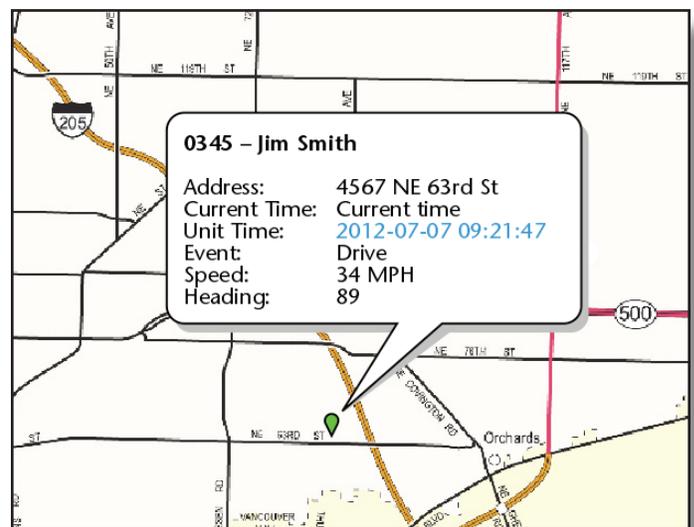
A pilot project was conducted to determine if the GPS system was behaving as claimed by the company and delivering fuel savings and other efficiencies. The first day of the pilot project revealed travel patterns that were not considered business-related and went against the county's policies. This was enough to justify the decision to install GPS units in all Department of Facilities vehicles. The savings recorded since are nothing short of impressive.

Fuel Savings

From January 2011 to September 2011, the county's average monthly fuel usage was 988.1 gallons per month. From October 2011 to December 2011 (after the GPS units were installed), average monthly fuel usage was 825.8 gallons, saving an average of 162.3 gallons per month. Projected cost savings are \$6,960 per year.

Efficiencies

While it is difficult to calculate the efficiencies in the county's work program based on the number of work orders completed, it is interesting to note that the volume of work orders after the installation of



GPS units increased by 5.2 percent. This increased work production translates to labor savings of about \$90,000 per year.

Other Benefits

- Handling emergency calls is part of the county's mission and everyday workload. The GPS system has allowed its lead workers to quickly locate the vehicle that has the fastest response time to minimize damage to the facilities.

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WSU Energy Program
Plant Operations Support Consortium

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Shop Talk is a quarterly electronic newsletter of the Plant Operations Support Consortium, providing information focused on facility operations. We welcome feedback from readers. To provide feedback or to subscribe to the Consortium electronic Listserv, email us at PlantOps@energy.wsu.edu.

Archived issues of *Shop Talk*
are available at:

www.energy.wsu.edu/PublicFacilitiesSupport/PlantOperations/ShopTalk.aspx

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Shop Notes

By Edwin Valbert,
Consortium Manager

Hard to believe another summer season in the Northwest is upon us. At WSU Plant Operations Support, that means we have completed another Energy/Facilities Connections Conference (and we're already planning for next year, so highlight May 7-9, 2013, on your calendar). We have also developed a new mission/vision statement and are in the middle of our membership renewal season. So let's take a minute and talk about all three of these.

For us, the 2012 Energy/Facilities Conference was a success. Attendance was strong at 211 participants and the feedback has been positive. In an effort to continually improve the conference, we have sent a survey to those who attended asking for feedback.

If you attended, please take the time to complete the survey – we rely on your feedback to help us deliver the information you need. If you did not attend the conference, feel free to contact any of the Plant Operations staff and discuss what might be adjusted or included in the next conference so you will be motivated to attend next year. We are always looking for new ideas, session topics and speakers, so let us know what is challenging you in your facilities management job and we will do our best to offer conference materials that will help.



Edwin Valbert

Of course, helping with facility management issues is what we are all about, which brings me to the second topic: the new Plant Operations mission/vision statement.

Our Mission:

To increase the efficiency and sustainability of facility operations by providing timely and creative technical assistance, education and consultation to support facility construction, operation and maintenance.

Our Vision:

Facilities are recognized – and managed – as an important component in the mission of any organization.

The people who operate and maintain the facilities are recognized and supported as essential partners in the mission of any organization.

We hope the new mission statement reflects both our intense desire to be a partner in the efficient operation of each member's facility and the increased depth and breadth of expertise we enjoy as part of the WSU Energy Program.

See **Notes** on page 8

Consortium Dives into the World of Wastewater and Water Treatment

Wastewater and water treatment plants unite to save energy

By Phil Partington, Consortium Staff

The Plant Operations Support Consortium continues to identify new ways to help increase the efficiency and sustainability of facility operations. With that in mind, members are encouraged to think outside the box when calling us because the Consortium can support you in many ways beyond what is listed on the program's menu of services (view the Consortium mission by accessing www.energy.wsu.edu/PlantOperations and clicking on the program mission PDF).

Water and wastewater systems consume approximately three percent of the electricity used in the United States, or 30 to 40

percent of the electricity used by most U.S. cities. While many of these plant operators are doing great things to reduce this energy demand, internal resources are seldom devoted to taking a comprehensive approach to manage and reduce these facilities' energy consumption and costs. As a result, the cost to operate these facilities continues to rise.

This challenge has led the Consortium, in partnership with the Bonneville Power Administration, Puget Sound Energy and the U.S. Environmental Protection Agency, to create the Wastewater/Water Sustainable Energy training cohort patterned



WASTEWATER/WATER SUSTAINABLE ENERGY COHORT

after a very successful program in Oregon. The goal of the program is for Washington wastewater and water utilities to gain greater control over – and reduce – their energy costs by applying energy management systems, energy efficiency processes and renewable energy technologies while still achieving excellent environmental standards.

The training series lasts a full year and includes four onsite workshops, three webinars and continuing conversations throughout the year. The planning team provides technical assistance to cohort participants as they complete assignments that directly relate to the participant's facility. All aspects of this one-year training will directly apply to real-world operations of the participants' facilities. Cohort participants can leverage the program by creating long-



Session one of seven of the Cohort training occurred mid-June 2012 at the West Sound Utility District in Port Orchard, Washington.

See **Treatment** on page 6

ENERGY/FACILITIES CONNECTIONS

WASHINGTON STATE UNIVERSITY
EXTENSION ENERGY PROGRAM



Building Connections for Building Solutions

Energy/Facilities Connections strives to build on growing success

By Phil Partington, Consortium staff

The 8th annual Energy/Facilities Connections Conference in May was a success, but the EFC Planning Team continues to rise to the challenge of further improving the educational experience. Those who have attended the event in the past might be aware that it is designed to address these four factors:

- Session topics should reflect timely needs and interests of attendees.
- Participant experiences should be unique in a positive way.
- The event should remain affordable for attendees so they have a greater chance of seeing immediate payback from the lessons learned.
- People learn in many different ways.

The final factor indicates why the educational element of the con-

ference is divided into three types of training: traditional classroom-style, hands-on and interactive, and structured networking and cross-talk.

Classroom-Style

Past conference participants have indicated on their evaluations that they are interested in having more breakout sessions. The Planning Team listened and packed additional breakouts in lieu of an extended lunch on the first day of this year's conference. Feedback on this change was a little mixed, but most seemed to approve.

Hands-on and Interactive

The *Hot Shop* component of the conference enables attendees to hear brief explanations about cutting-edge technologies and equipment, while taking advantage of the opportunity to interact with the technology and ask questions of the technical

instructor. This year, the Planning Team included more stations and blocked out a larger portion of time for participants to experience those stations at their leisure. Most participants were pleased with this adjustment, although feedback often mentioned that there was too much noise and too much time spent at each station during the guided portion. Plans are already in the works to improve this format.

Structured Networking and Cross-Talk

The Planning Team recognizes that, while there are many experts among the speakers and *Hot Shop* instructors, there is also a wealth of knowledge among the attendees. The educational experience should not end in the classroom. One of the Planning Team's goals is to enhance networking opportunities by making them more convenient and inviting for

Continued on the next page

participants. This year, the team branded the social event on the second evening as Reconnections, where attendees could easily identify speakers and Hot Shop instructors in order to ask that vexing question they did not think to ask during a session or chat further with the experts on topics of particular interest.

Special thanks to the ESC Automation/Delta Controls team (Platinum sponsor) and Honeywell (Silver sponsor) for sponsoring the two after-hour socials. Additionally, thank you to MacDonald-Miller Facilities Solutions (Platinum sponsor) for hosting a wine tasting/networking social the night prior to the event.

Successes

A number of attendees have already shared some of their wins from attending the conference. For example:

Dennis Flynn, Washington Department of Natural Resources (DNR): “I was able to make contact with several people who could really help DNR move our energy program along. We recently hired two energy and conservation engineers. At the EFC event, I was able to learn more from other RCMs about where they received training and how they are improving their campuses. I also acquired key contacts from the RCM programs at Puget Sound Energy and Avista Corporation, as well as information on incentives and rebates. If this weren’t enough, I was able to connect to folks with the WSU Energy Program, who are queued to help us with alternative funding opportunities, metering and life cycle cost analysis for photovoltaic projects. This is just a sample. The list goes on.”

Randy Graham, Washington Department of Veteran Affairs (DVA): “We made a fantastic contact that provided huge lighting incentive options through Avista Power. We’re looking into upgrading our Spokane facility, built in 1984, which has been soldiering on with old and soon-to-be-obsolete T12 fluorescents. The initial project cost of \$40,000 will result in a \$12,000 rebate. Additionally, it will reduce utility costs \$11,000 per year, giving a capital payback of 2.5 years. Not exactly small change in this economy.”

For more information on the Energy/Facilities Connections Conference, contact your Consortium staff at 360-956-2057 or plantops@energy.wsu. ✖



GPS*Continued from page 1*

- The system promotes self-management and accountability in the crew.
- Risk Management can better manage complaints about county vehicle activity.
- The system provides a measure of safety for employees who might have a medical emergency in a remote area.
- Equipment Services receives maintenance alerts and engine diagnosis from the system.

Darrel Stump, facilities manager at the county, has been pleased with the successes of the new GPS system. "In many ways, this has changed how we do things for the better," said Stump. "We enjoy finding new ways to be more effective while saving dollars and resources, so this has been very exciting for us. Working for

*Darrel Stump*

the taxpayers is what we're driven by, and this ultimately helps them in the long run."

Consortium staff applauds Clark County's continual pursuit of excellence. As it continues on its journey, the county is producing more innovative practices to be emulated. See page 7 for another unique Clark County success.

For additional information on the Clark County GSP system or other

We enjoy finding new ways to be more effective while saving dollars and resources, so this has been very exciting for us.

**Darrel Stump
Facilities Manager
Clark County**

county successes, contact Darrel Stump, 360-397-2282 or Darrel.Stump@clark.wa.gov. ✖

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lasting relationships with other cohort participants and pool resources through an interactive website. The website includes document-sharing capabilities, a message forum, an interactive calendar and a comprehensive contact list. It will also feature one- to five-minute video clips that showcase technology implemented at various cohort member sites, equipment demonstrations, excerpts of onsite sessions and other convenient training tools.

The first of seven sessions

occurred June 13, 2012 at one of the cohort member's sites (allowing for a tour of the plant after the day-long training session). During the summer, participants have engaged in onsite visits and conference call check-ins. The first webinar (available only to cohort members) will occur in early September.

The Consortium is thrilled to be a part of such a progressive, innovative program. We look forward to interacting with staff from more wastewater and water treatment

plants. The Consortium can help you meet your professional development needs by linking staff to appropriate certification trainings or connecting them with other organizations for a "shadow training."

For additional information on the Wastewater/Water Sustainable Energy Cohort of Washington, e-mail phil@energy.wsu.edu or call 360-902-7257. ✖

Clark County Adopts Vending Machine for Supplies

The Clark County Facilities Department has started utilizing the Fastenal FAST Solutions vending machines with great success. The Fastenal FAST Solutions is a system of vending machines installed in its maintenance department and stocked with maintenance supplies that get used up quickly. The items are dispensed when a worker enters a work order number or user ID. The machines are connected to the local Fastenal store, which replenishes inventory on an as-needed basis. Clark County is charged for the inventory consumed during the month, not for the items stored onsite in the machines. Automated lockers are available so staff can check out hand tools or other maintenance items. Visit the link below or call Darrel at Clark County for more information on how the system is working for them. www.fastenal.com/web/en/9/fast-solutions ✕



Clark County adopts new vending machine that dispenses smaller facilities supplies, such as nuts and bolts, in an effort to cut cost and improve efficiency.

Energy Efficiency Grant Opportunities

Public higher education institutions and local governments are eligible to apply for 2012 energy efficiency grants from the Washington State Department of Commerce. A total of \$18 million is available to local governments and \$20 million to higher education for projects using Energy Savings Performance Contracting or equivalent. Grants are awarded in two rounds. Round one applications, due July 2, 2012, are for applicants with ready-to-go projects (final investment-grade audit completed). Round two applications are due December 31, 2012. Applications for both rounds are available on Commerce's website: www.commerce.wa.gov/.

K-12 school districts are also eligible for energy grants, specifically for energy operational cost savings, through the Office of Superintendent of Public Instruction. A total of \$40 million allocated as part of the 2011-13 capital budget will be awarded in three rounds. The first round has recently been granted from the previous budget year's applicants. In November 2012, \$14 million will be awarded in the second round and in February 2013, \$20 million will be awarded in round three. School districts must conduct an investment-grade audit and use either Energy Savings Performance Contracting or a traditional design-bid-build contracting method. Download an application at www.k12.wa.us/SchFacilities/Programs/EnergyImprovement/EnergyGrantProgram.aspx. ✕

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Be sure to visit our web page, www.energy.wsu.edu/PlantOperations.aspx, to see our complete mission and vision statement.

The ability of WSU Plant Operations to deliver solutions and support to the front lines of facility management is directly tied to the funding provided by renewing members and the knowledge and experience that each individual member adds to the organization. Often, our ability to solve a problem and find a solution is directly related to the resources of another member. That is the true power of

the Consortium – the combined experience and wisdom of its members. The more members there are, the more opportunity there is to save time and money by tapping that vast wealth of knowledge and experience.

So when your renewal notice comes, we look forward to your continued support of the Consortium, now in our 16th year. In return, we will continue to leverage the experience and knowledge of many to benefit all of you.

Of course, if you feel like you have not received benefit from your Consortium membership, please

call me or any of the staff and let us know what we can do better to earn your continued support. It is important to remember that we can only help if we know what you need, so please continue to call or e-mail us with your challenges, requests or offers of support.

Finally, if you are not currently a member, give us a call and let's discuss how we can help you.

Thanks again for all you do, not only for your individual facilities, but for the Consortium as a whole. ✖



Consortium Members

K-12 Schools

Bridgeport
Camas
Centralia
Chilliwack, BC
Coquitlam, BC
Delta, BC
Eatonville
Enumclaw
ESD 101
ESD 114
ESD 121
Federal Way
Forest Ridge School of
the Sacred Heart
Highline
Hoquiam
Inchelium
LaCrosse
Marysville
Mission, BC
Moses Lake
Mukilteo
Nine Mile Falls

Odessa
Okanagan Skaha, BC
Olympia
Orcas Island
Orondo
Pateros
Peninsula
Port Angeles
Portland, OR
Reardan-Edwall
Renton
San Juan Island
Selah
Selkirk
Shoreline
Snohomish
Surrey, BC
Wenatchee
White River
Wishkah Valley
Yakima

Universities/Colleges

Bates Technical College
Clark College
Community Colleges of
Spokane
Everett Community
College
Grays Harbor College
Highline Community
College
North Seattle
Community College
Olympic College
Pierce College
Seattle Central
Community College
South Puget Sound
Community College
The Evergreen State
College
Washington State
University Extension
Energy Program
Wenatchee Valley
College

Municipalities

City of Centralia
City of Des Moines
City of Hoquiam
City of Kent
City of Longview
City of Olympia
City of Tumwater
City of Vancouver
Clark County
Cowlitz County
Cowlitz County PUD #1
Grays Harbor Public
Development Authority
Jefferson County
King County Department
of Executive Services
Lakehaven Utility
District
Lewis County
Pierce County Library
System
Skamania County
Snohomish County
Tacoma-Pierce County
Health Department
Thurston County
Whatcom County

States/Tribal/Misc.

Muckleshoot Tribe
State of Alaska
Squaxin Island Tribe
Hopelink
Tacoma Convention &
Trade Center

Washington State Agencies

Corrections
Ecology
Health
Licensing
Liquor Control Board
Natural Resources
Parks & Recreation
School for the Blind
Social & Health Services
State Patrol
Transportation
Veteran's Affairs