

WATER ENVIRONMENT SCHOOL 2012



March 27-29, 2012

Join us for the 36th Annual ORWEF Water Environment School at Clackamas Community College

This event gives the registered participant the opportunity to gain a full 2.3 CEUs. Presented topics will provide supplemental occupational education, training, and technical upgrading for those employed in both the municipal and industrial arenas.

For questions and more information, contact:

School Information

Naomi Sether or Matt LaForce
Clackamas Community College
Naomi – 503-594-3345 Email: naomis@clackamas.edu
Matt – 503-594-3148 Email: laforce@clackamas.edu

Registration Information

Mike Stebbins ~ City of Portland
Columbia Blvd. WWTP
Phone: 503-823-2653 FAX: 503-823-2407
E-Mail: michael.stebbins@portlandoregon.gov

Pre-Registration

On-Site Registration

Full-three days:	<input type="checkbox"/> \$ 195	<input type="checkbox"/> \$ 205
Two days:	<input type="checkbox"/> \$160	<input type="checkbox"/> \$ 170
One day:	<input type="checkbox"/> \$105	<input type="checkbox"/> \$ 115
*Student (3-day)	<input type="checkbox"/> \$ No charge	

*Students must be currently enrolled as full-time students in a community college approved environmental program, or full-time science/engineering students in an applicable curriculum at a college, technical college or university to qualify for “No charge” registration. Call, if you have questions on your status.

FINANCIAL AID AVAILABLE

Application due by Friday, March 2, 2012

The Water Environment School Committee in conjunction with the Oregon Water Education Foundation (ORWEF) sponsors two types of financial assistance for attendance at this year’s 3-day School in March.

GRANT-IN-AID

Monetary grants will be awarded (up to \$250) in addition to a fee waiver (up to \$195 for all 3 days) limited to the availability of funds.

How do you apply? Simply make a written request/application to:

OREGON WATER EDUCATION FOUNDATION (ORWEF)

ATTN: Mike Stebbins FAX: 503-823-2409 or 503-823-2407 Phone: 503-823-2653 Email: michael.stebbins@portlandoregon.gov

Columbia Blvd, WWTP ~5001 N. Columbia Blvd~Portland, OR 97203

Include (on official letterhead) your wastewater facility/collection system type, size, and staffing level; include your name, certification grade, and general statement of both training and funding support needs. All applications for Grants-In-Aid will be evaluated based on the applicants need. If you are outside of a 100 mile commute, explain why you would need overnight lodging assistance. If you have received a Grant-In-Aid within the last three years, you are not eligible to apply this year.

FEE WAIVER

To be considered for a Fee Waiver the Applicant/Student must meet a minimum of one of the following criteria:

- Current student attending an accredited Water Quality Technology academic program as recognized by the Oregon DEQ. The student must be enrolled in at least 6 credit hours of classes leading to either a 1-year College Certificate or a 2-year Associates of Applied Science Degree.
- Current student attending an Oregon College/University or Oregon resident attending any College/University in the Pacific Northwest studying environmental science or engineering. The student must be enrolled in at least 6 credit hours of classes leading to a 4-year Baccalaureate Degree in these fields of study.
- Previously employed in the wastewater field (within the past two years), holding a valid Wastewater Operator License and currently unemployed.
- Previously employed in the wastewater field, holding a valid Wastewater Operator License, but currently on an extended medical, or family leave verified by your employer.

NOTE: Work/Study students currently enrolled in a “Cooperative Work Experience” program through a community college network will typically not be considered for a Fee Waiver. Considerations will be made on a case-by-case basis and limited by support funds available.

DEQ Testing

Friday, March 30, 2012

Applications for **March** non-computer, paper/pencil testing must be postmarked no later than January 16, 2012.

The Oregon Department of Environmental Quality will administer the certification exams in all grades (I-IV) for both wastewater treatment and wastewater collection systems on Friday, March 30th, 2012 (8:30 am – 12:30 pm) at Clackamas Community College, Oregon City, Gregory Forum, GF108.

You will need to attach to your application proof, that you have met, or will meet within 4 months following the month of the exam, the education and experience requirements for the certificate sought. Required documents include a copy of your High School Diploma, GED certificate or equivalent, and for all post high school claims, copies of college or university transcripts, and certificates of continuing education (CEUs or training hours). The Water Environment School will offer you the opportunity to meet a minimum of 2.0 CEUs for certificate renewal.


For applications and further information, contact the DEQ Certification Program Office at (503) 229-5161 or toll free in Oregon (800) 735-2900.

Do this immediately.

Current application forms, certification rules, fees and exam information may also be found on the DEQ website at: www.deq.state.or.us/wq/opcert/opcert.htm

Lodging Information

This list provides you with a few motel choices. The college is located only 5 minutes south off I-205 (Park Place Exit #10), which makes access from this freeway quick and easy. When making your reservation, be sure to mention "Clackamas Community College Water Environment School" to ensure that you are quoted the rates listed here.

<p style="text-align: center;"><u>Rivershore</u></p> <p>1900 Clackamette Drive Oregon City, OR 97045 1 bed: 72.00* 2 beds: \$77.00*</p> <p>Phone: (503) 655-7141 or (800) 443-7777</p> <p>*Add 11% city and county tax. Includes full breakfast.</p>	<p style="text-align: center;"><u>Sunnyside Inn Motel</u></p> <p>12855 S.E. 97th (I-205/Sunnyside Exit 14 Clackamas, OR 97015 1 bed: \$55.00* 2 beds: \$60.00*</p> <p>Phone:(503) 652-1500 or (800) 547-8400</p> <p>*Add a 7% county tax. Includes continental breakfast.</p>	<p style="text-align: center;"><u>Days Inn</u></p> <p>9717 S.E. Sunnyside Road (I-205 at Exit #14) Clackamas, OR 97015 1 bed: \$69.55* 2 beds: \$73.83*</p> <p>Phone:(503) 654-1699 or (800) 325-2525</p> <p>*Includes tax. Includes continental breakfast.</p>
<p style="text-align: center;"><u>Oxford Suites</u></p> <p>75 82nd Drive (by Safeway Store) Gladstone, Oregon 97027 (I- 205 @ Gladstone Exit # 11) 1-2 people/room: \$99* (rate subject to change) 100% Non-smoking</p> <p>Phone:(503)722-7777 or (877)- 558-7710</p> <p>* Add a 7% county tax. Oxford Suites serves a complete breakfast and evening hors d'oeuvres & beverages</p>	<p style="text-align: center;"><u>Hampton Inn</u></p> <p>9040 S.E. Adams Clackamas, OR 97015 (I-205 @ Clackamas/Estacada Exit #12 from the South and Exit #12A from the North) Single/Double: \$75*</p> <p>Phone: (503) 655-7900</p> <p>* Add a 7% county tax. Includes continental breakfast and free evening reception.</p>	

Thank You Water Environment School Committee

Chair: Joel Borchers

Treasurer: Pam Flynn-Anderson

Registration: Mike Stebbins

Section 1 – Operations & Management – McLoughlin Section 7 – Biosolids Management – Pauling Center, P102

Auditorium

Mark Johnston

Joel Borchers, Terry Hinzman

Section 2 – Source Control – Pauling Center, P101

Section 8 – Stormwater – Gregory Forum, 108 B & C

Kathy Caldwell, Diana Lindoff

Luke Bushman, John Nagy, Boris Piatski

Section 3 - Collections – Gregory Forum, 108A

Section 9 – Safety & Health – DeJardin Hall, DJ191

Paul Eckley

Faye Lindroos

Section 4 - Maintenance – Pauling Center, P132

Section 10 – Laboratory – Pauling Center, P103

Dennis Wolfe

Kristen Thomas

Section 5 – Wastewater Basics, Pauling Center, P131

Section 11 – Technology – Pauling Center, P164

Kay Hust, Elaine Huber

Erin Duffy, Robert George

Section 6 – Supervision & Leadership – CC127

Manufacturer Display – Randall Gymnasium

Noah Harvey

Ken Black

**2012 Manufacturer's
Representatives Exhibit**

This year's manufacturer/exhibitorA

display will be on

Wednesday, March 28, 2012

in Randall Gymnasium.

There is still time to reserve a table.

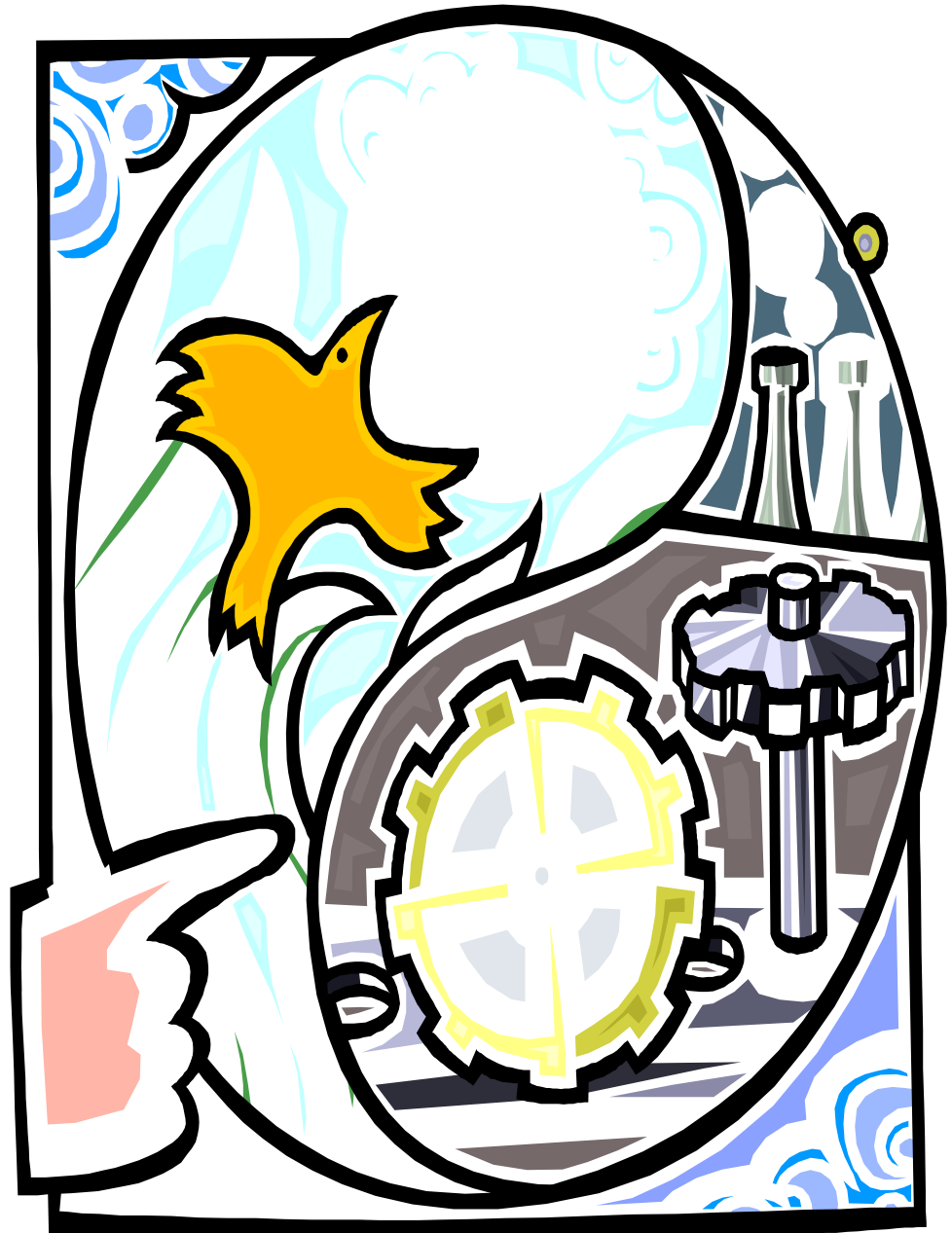
Please call Ken Black at

503-631-8905 or

kenb@beaver-equipment.com

for more information.

Please plan to visit the exhibitor's
display on Wednesday, March 28!!



Section 1~ Operations & Management ~ McLoughlin Auditorium

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Alternatives to Gravity Sewers <i>Howard Taub and Richard Shellhorn</i>	16 8:00	On-site Chlorine Generation <i>Jason Morse</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	<i>Manufacturer Representative's Display</i> <i>Randall Gymnasium</i>	17 9:00	In-Situ Analysis <i>Jason Morse</i>
2 10:10	Activated Sludge Nitrification/ Denitrification Fundamentals <i>Dale Richwine~ Richwine Environmental</i>	10 10:10	Chlorination <i>Howard Taub~Correct Equipment</i>	18 10:10	Electronic O & M Manuals <i>Jim Reeves~Kennedy/Jenks</i>
3 11:10	The New Approach to Odor Control <i>Connie Boag~Ambio</i>	11 11:10	Cellular Telemetry <i>Tim Owens~Correct Equipment</i>	19 11:10	Keeping the Bugs Alive LaCenter WWTP Startup <i>Jennifer Coker~Kennedy/Jenks</i>
4 1:00	Aeration Control <i>Peter Schauer~ Clean Water Services</i>	12 1:00	Submersible Pump Maintenance <i>Howard Taub~Correct Equipment</i>	20 1:00	Corvallis Nutrient Recovery Facility Pilot Testing <i>Dan Hanthom~City of Corvallis Preston Van Meter~Kennedy/Jenks</i>
5 2:00	Foam and Foam Control in Wastewater Treatment <i>Chris Sharpe ~Enterprise Specialty Products</i>	13 2:00	BOD Testing <i>Perry Brake</i> <i>Joint Session Basics and Laboratory</i> <i>Held McLoughlin Theater</i>	21 2:00	Phosphorous Removal <i>Justine George~Clean Water Services</i>
6 3:10	Durham's Headworks Improvements <i>Randy Naef ~Clean Water Services</i>	14 3:10	BOD Testing <i>Perry Brake</i> <i>Held McLoughlin Theater</i>	22 3:10	Horizontal Drilling Part 1 <i>Steven Donovan~SHN- Consulting Engineers & Geologists</i>
7 4:10	Ostara - Part Deux <i>Brett Laney~Clean Water Services</i>	15 4:10	Enhanced Biological Phosphorus Removal Fundamentals <i>Mario Benisch~HDR Engineering</i>	23 4:10	Horizontal Drilling Part 2

Section 2~ Source Control ~ Pauling Center P101

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Detection Limits <i>Chuck Lytle~ City of Portland</i>	16 8:00	Grease Summit <i>Vince Chavez-CWS</i> <i>Ed Gilmore- Clackamas Co. WES</i> <i>Clayton Brown- CWS</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Regulating Non-Permitted Industries <i>Patrick Torre~ City of Portland</i>	17 9:00	Grease Summit <i>Continued</i>
2 10:10	Pretreatment 101 <i>Curtis Barton~Clackamas Co. WES</i>	10 10:10	<i>Manufacturer Rep Display</i> <i>Randall Gymnasium</i>	18 10:10	Enforcement Case Study <i>Marc Callaghan~ EPA Special Agent</i>
3 11:10	Industry Presentation: Metal Finishing <i>Bret Bruhn~ VIA Systems</i>	11 11:10	Eco-Friendly Burial Options <i>Dave Noble & Holly Pruet~Green Burial Council</i>	19 11:10	Green Chemistry <i>Brian Penttila~ PNW Pollution Prevention Resource Council (PPRC)</i>
4 1:00	Oregon's New Water Quality Standards for Toxics <i>Dave Klierer~City of Portland</i>	12 1:00	Hazardous Waste – What's Out There? <i>Grant Coffey~ Portland Hazmat</i>	20 1:00	Industry Case Study <i>Duke DeClue</i>
5 2:00	Reasonable Potential Analysis <i>Bob Baumgartner~Clean Water Services</i>	13 2:00	Hazardous Waste – What's Out There? <i>Continued</i>	21 2:00	Characterizing Emerging Contaminants <i>Jennifer Morace~United States Geological Survey (USGS)</i>
6 3:10	Review of SB 737 and the Pollution Prevention Tools <i>Janet Gillaspie~ Oregon ACWA</i>	14 3:10	Regulating Dental Facilities <i>Frank Dick~City of Vancouver</i>	22 3:10	Blue Gold: World Water Wars Part 1 <i>Film</i> <i>Held in Gregory Forum 108B & C</i>
7 4:10	Industrial Sampling Techniques <i>Jeremy Bartleson~ Veolia Water Gresham</i>	15 4:10	Outreach: Communication Strategies <i>Sheri Wantland</i> <i>Clean Water Services</i>	23 4:10	Blue Gold: World Water Wars Part 2 <i>Film</i> <i>Continued</i>

Section 3~ Collection Systems ~ Gregory Forum A

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Chemical Root Control for Sanitary Sewerlines <i>Tom Edwards~Dukes Root Control Inc.</i>	16 8:00	SSO Emergency Response Plans <i>Mike Pinney – DEQ</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Oregon-OSHA Consultation Services <i>Michael Gordon</i>	17 9:00	Purchasing Helps <i>Nancy Ahlbin (Kelly Stevens-Malna)</i>
2 10:10	Asset Management – ICOM3 Software <i>Michelle Beason~RedZone Robotics</i>	10 10:10	<i>Manufacturer Rep Display Randall Gymnasium</i>	18 10:10	Cleaning Up SSO's on the Customer Side <i>Tyler Creek~ServPro</i>
3 11:10	Oregon Clean & Safe – Keeping Emerging Pollutants Out of Collection Systems, Wastewater Treatment Plants & Promoting Biosolids Quality <i>Janet Gillaspie~ Oregon ACWA</i>	11 11:10	Sewer Pipe Lining and Repair Systems <i>Rick Gage or Jeff Tinlan~LMK</i>	19 11:10	Safe Root Removal for Storm & Sanitary
4 1:00	Hydraulic Modeling of Wastewater Collection Systems <i>Brian Ginter & Ian Besaw ~MSA</i>	12 1:00	Wastewater Outfall MicroHydro I <i>Cliff Malm</i>	20 1:00	H2S in Sewer Systems I <i>Rick Allen ~ BioLynceus</i>
5 2:00	Sewer Cleaning Vac Units <i>Frank Clanton~ Enviro-Clean</i>	13 2:00	Wastewater Outfall MicroHydro II <i>Cliff Malm Continued</i>	21 2:00	H2S in Sewer Systems II <i>Rick Allen ~ BioLynceus</i>
6 3:10	Trenchless Rehabilitation Part I – Cured-in-Place Pipe (CIPP) <i>Robert Lee, P.E., ~Brown and Caldwell Engineering</i>	14 3:10	CUPSS I <i>Shannon Jones and Barry Buchanan</i>	22 3:10	Blue Gold: World Water Wars Part 1 <i>Film</i> <i>Held in Gregory Forum 108B & C</i>
7 4:10	Sewerline Packer Injection Grouting <i>Robert Lee, P.E., ~Brown and Caldwell Engineering</i>	15 4:10	CUPSS II <i>Shannon Jones and Barry Buchanan</i>	23 4:10	Blue Gold: World Water Wars Part 2 <i>Film</i> <i>Continued</i>

Section 4~ Maintenance ~ Pauling Center P132

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	<i>TBA*</i>	16 8:00	<i>TBA*</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Couplings <i>Nick Van Egmond</i>	17 9:00	<i>TBA*</i>
2 10:10	<i>TBA*</i>	10 10:10	Plant Construction <i>Steve Reynolds~CH2MHill</i>	18 10:10	<i>TBA*</i>
3 11:10	<i>TBA*</i>	11 11:10	<i>Manufacturer Rep Display</i>	19 11:10	<i>TBA*</i>
4 1:00	<i>TBA*</i>	12 1:00	Seals <i>Jim Proncuost~John Crane</i>	20 1:00	<i>TBA*</i>
5 2:00	<i>TBA*</i>	13 2:00	Clarifier Maintenance – Upgrades and Rebuilds <i>Terry Reyborn~OUIVO USA</i>	21 2:00	<i>TBA*</i>
6 3:10	<i>TBA*</i>	14 3:10	Drive Rebuilds <i>Chad Layton~OUIVO USA</i>	22 3:10	<i>TBA*</i>
7 4:10	<i>TBA*</i>	15 4:10	After Market Servies <i>Terry Reyborn & Chad Layton~OUIVO USA</i>	23 4:10	<i>TBA*</i>

*Check website http://depts.clackamas.edu/wet/WET_WaterEnvSchool.aspx for updates to schedule

Section 5 ~ Wastewater Basics ~ Pauling Center P131

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Effective Communication Through Public Speaking <i>Ron Moeller</i>	16 8:00	<i>TBA*</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	ORE DEQ WW Certification Program <i>Belete Etsegenet~DEQ</i>	17 9:00	<i>TBA*</i>
2 10:10	Groundwater Treatment Technology <i>Lee O Dell ~ CH2MHill</i>	10 10:10	History of Wastewater Treatment <i>Paul Proctor</i>	18 10:10	Discharge Monitoring Reports <i>Pat Bailey~ WDOE</i>
3 11:10	Surface Water Treatment Technology <i>Lee O Dell ~ CH2MHill</i>	11 11:10	History of Wastewater Treatment <i>Paul Proctor</i>	19 11:10	Log Books <i>Pat Bailey~ WDOE</i>
4 1:00	Basic Activated Sludge <i>Rick Kelly, PhD., PE~ Brown & Caldwell</i>	12 1:00	<i>Manufacturer Rep Display Randall Gymnasium</i>	20 1:00	Groundwater Monitoring <i>Carl Jones~ WDOE</i>
5 2:00	Basic Activated Sludge <i>Continued</i>	13 2:00	BOD Testing <i>Perry Brake</i> <i>Held in McLoughlin Theater</i>	21 2:00	<i>TBA*</i>
6 3:10	Basic Activated Sludge <i>Continued</i>	14 3:10	BOD Testing <i>Perry Brake</i> <i>Continued</i>	22 3:10	<i>TBA*</i>
7 4:10	Basic Activated Sludge <i>Continued</i>	15 4:10	Basics of Odor Control for Wastewater Processes <i>Mark Smith ~ Grown & Caldwell</i>	23 4:10	<i>TBA*</i>

*Check website http://depts.clackamas.edu/wet/WET_WaterEnvSchool.aspx for updates to schedule

Section 6 ~ Management & Supervision ~ Community Center CC127

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Innovative Sustainability Analysis for WW Facilities Planning <i>Muriel Gueissz-Teufe~ HDR</i>	16 8:00	Energy Matters: A Look at Sustainability & Energy Efficiencies <i>Rick Allen~ Bio Lynceus LLC</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	<i>Manufacturer Rep Display Randall Gymnasium</i>	17 9:00	Blowing Your \$ Away: Combine New Tech. with an Energy Savings Grant to Retrofit Aeration Systems at a Fraction of the Cost <i>Jeffrey Zahller~HDR</i>
2 10:10	Ambient H₂O Qual. Conditions Study in the Col. Riv.- Determining Critical Seasonal Periods for Receiving H₂O Ammonia Toxicity <i>David McBride~ Brown & Caldwell</i>	10 10:10	Portland Oregon's SSO Reporting <i>John McGregor~ City of Portland</i>	18 10:10	Retrofit an Existing Treatment Plant with MBR Technology - Challenges & Results <i>Tom Giese~Kennedy/Jenks Consultants</i>
3 11:10	Energy Recovery Enhances WW Treatment Sustainability <i>Jyh-Wei (Al) Sun, CDM</i>	11 11:10	Ammonia Nitrogen Recovery & Biomethane Prod from Anaerobic Digestate <i>Dennis A. Burk~ Env. Energy * En. Co.</i>	19 11:10	Operation and Maintenance Energy Efficiency Checklist for WWTP's <i>Walt Mintkeski~Energy Trust of Oregon</i>
4 1:00	Lessons Learned from Disconnecting Downspouts in Portland, Oregon <i>Amber Clayton ~ City of Portland</i>	12 1:00	Wastewater Treatment in 2062...What Does That Look Like? <i>Lydia Holmes~ Carollo Engineers</i>	20 1:00	Determining the Long & Short Term Costs of Pump System Efficiency <i>Joe Evans Pumptech NW</i>
5 2:00	The Evolution of MBR Design to Minimize Capital Cost and Optimize Energy Efficiency <i>Adrienne Menniti~, CH2MHill</i>	13 2:00	Technology Evaluation and Membrane Pilot Study to Achieve Low-Level Phosphorus Limits for Barrie, Ontario <i>Rip Cophorn~ GHD Inc.</i>	21 2:00	Leading & Developing Your Staff as a Supervisor <i>Ron Moeller~ Kennedy/Jenks Consultants</i>
6 3:10	Using Existing Assets for CSO Control - City of Portland <i>Gregg Humm~Brown & Caldwell</i>	14 3:10	Critical Issues: Twelve Challenges Facing Water Professionals & Leaders <i>Rick Allen~ Bio Lynceus LLC</i>	22 3:10	Developing Skills to Influence & Motivate <i>Ron Moeller~ Kennedy/Jenks Consultants</i>
4:10	Characterizing VFA Sources to Optimize Treatment at the Post Point Treatment Plant <i>Jeff McCormick~Carollo</i>	15 4:10	Critical Issues: Twelve Challenges Facing Water Professionals & Leaders Continued	23 4:10	Public Outreach Efforts for Challenging Projects <i>Stephen Sykes~ City of Portland</i>

Section 7 ~ Biosolids Management ~ Pauling Center P103

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Dealing with the Media & Modern Communication <i>Joe Krumm~North Clackamas Schools</i>	16 8:00	Documentary Film: Liquid Assets Part 1 <i>Penn State Public Broadcasting (WPSU-TV)</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Dealing with the Media & Modern Communication <i>Continued</i>	17 9:00	Documentary Film: Liquid Assets Part 2 <i>Penn State Public Broadcasting (WPSU-TV)</i>
2 10:10	Biosolids Jeopardy <i>Harry Bludworth & Dave Arguello Clean Water Services</i>	10 10:10	Soils & Biosolids Nutrient Management <i>Dr. Craig Cogger~WSU</i>	18 10:10	Pre-Treatment & Lagoon Management <i>Rick Allen~ BioLynceus, llc.</i>
3 11:10	Oregon Clean & Safe – Keeping Emerging Pollutants Out of Collection Systems, Wastewater Treatment Plants & Promoting Biosolids Quality <i>Janet Gillaspie ~Oregon ACWA</i>	11 11:10	Biosolids Nutrients and Agronomic Rates <i>Dr. Craig Cogger ~WSU</i>	19 11:10	Wastewater Lagoon Management <i>Rick Allen~ BioLynceus, LLC</i>
4 1:00	Selecting & Managing Biosolids Land Application Sites In Oregon <i>Ron Doughten~DEQ Paul Kennedy~DEQ Connie Schrandt~DEQ</i>	12 1:00	Field Evaluation of Class A Biosolids Products <i>Shannon Andrews & John Yeo OSU Grad Students</i>	20 1:00	Portland Biosolids Management <i>Greg Charr</i>
5 2:00	Selecting & Managing Biosolids Land Application Sites In Oregon <i>continued</i>	13 2:00	Manufacturer Rep Display	21 2:00	Woodburn Biosolids Program <i>Curtis Shultz</i>
6 3:10	Selecting & Managing Biosolids Land Application Sites In Oregon <i>Continued</i>	14 3:10	Biosolids Sampling and Testing <i>Keith Chapman~City of Salem</i>	22 3:10	Winter Storage In Private Barns <i>Mark Johnston~City of Salem</i>
7 4:10	Summary <i>Mark Johnston</i>	15 4:10	Summary <i>Mark Johnston</i>	23 4:10	Summary <i>Mark Johnston</i>

Section 8 ~ Stormwater ~ Gregory Forum B & C

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Phytotechnology Options for Stormwater Management <i>Renee Stoops~ Chemeketa/Oregon Gardens</i>	16 8:00	Maintaining Portland's Green Streets - Adaptive Management in the Urban Environment <i>Denis O'Brien~BES</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Update on Industrial Stormwater Permits <i>Jenine Camilleri~DEQ</i>	17 9:00	Earthquakes: Japan, Chile & Potential Hazards in Oregon <i>Allison Pynch ~Shannon & Wilson, Inc.</i>
2 10:10	West Linn Environmental Services and NPDES Compliance <i>Boris Piatski, P.E. ~ City of West Linn</i>	10 10:10	Field GPS'ing of Storm Systems <i>Susan Ottersen & Tim Kay~Clack. Co. WES Held in GF B & C</i>	18 10:10	MS4 Phase II & TMDL Updates <i>Benjamin Benninghoff~ODEQ</i>
3 11:10	Storm Drain Cleaning Assistance Program <i>Keri Handaly~ City of Gresham</i>	11 11:10	Pervious Natural Aggregate Pavers <i>Ron Putz~ Xeripave</i>	19 11:10	Beavers: Unlicensed Ecosystem Engineers <i>Tim L. Hiller, Ph.D. ~ODFW</i>
4 1:00	Portland's CSO Control Program: Start to Finish <i>Virgil Adderly~ BES</i>	12 1:00	A Review of Stormwater Treatment Case Studies <i>Sig Fransen~Contech</i>	20 1:00	Sandy River Floods Aftermath <i>Steve Hanschka~Clackamas County</i>
5 2:00	Maintainability of Stormwater Systems <i>Paul Wirfs~ODOT</i>	13 2:00	<i>Manufacturer Rep Display</i>	21 2:00	WES Pond Retrofits <i>Bob Skinner, Nick Degliantoni & Dillon Koester~ Clackamas Co. WES</i>
6 3:10	Light Rail & Environmental Issues <i>Gary Parkin~City of Milwaukie</i>	14 3:10	Streamside Stewards Program <i>Nicole West & Chris Runyard~ NCUWC</i>	22 3:10	Movie Part 1 Blue Gold: World Water Wars <i>Held in Gregory Forum 108B & C</i>
7 4:10	No session	15 4:10	No Session	23 4:10	Movie Part 2 Blue Gold: World Water Wars <i>in Gregory Forum 108B & C</i>

Section 9 ~ Safety & Health ~ DeJardin Hall DJ191

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Bloodborne Pathogen Training <i>Ivy Markesino, PHR, Human Resources Analyst~ Clackamas County</i>	16 8:00	<i>TBA*</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Oregon-OSHA Consultation Services <i>Michael Gordon</i> <i>Held in Gregory Forum A</i>	17 9:00	<i>TBA*</i>
2 10:10	Below the Hook, Lifting Device Safety <i>Art Stanley~West Coast Wire Rope & Rigging, Inc.</i>	10 10:10	Confined Space Entry <i>Greg McDonald~Public Works Supply Co.</i>	18 10:10	Protecting Your Hearing <i>Matt Beltran, EHS&S Manager ~ Veolia Water</i>
3 11:10	Below the Hook, Lifting Device Safety <i>Continued</i>	11 11:10	Confined Space Entry <i>Continued</i>	19 11:10	<i>TBA*</i>
4 1:00	Dig Safely <i>Anita Floyd~CenturyLink Communications</i>	12 1:00	<i>Manufacturer Rep Display</i>	20 1:00	Preparing for the Big One <i>Larry Goff~City of Lake Oswego Fire Dept.</i>
5 2:00	Fungi and Human Health <i>DeEtta Burrows, MSPH, CIH~ Wise Steps, Inc.</i>	13 2:00	Defensive Driving <i>Risk Management~City of Portland</i>	21 2:00	<i>TBA*</i>
6 3:10	Fungi and Human Health <i>Continued</i>	14 3:10	Defensive Driving <i>Continued</i>	22 3:10	<i>TBA*</i>
7 4:10	<i>TBA*</i>	15 4:10	Slips, Trips, and Falls <i>Judy West~ Clean Water Services</i>	23 4:10	<i>TBA*</i>

*Check website http://depts.clackamas.edu/wet/WET_WaterEnvSchool.aspx for updates to schedule

Section 10 ~ Laboratory Practices ~ Pauling Center P103

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	Detection Limits <i>Chuck Lytle Held in P101</i>	16 8:00	Wastewater Laboratory QA/QC and Lab Sampling & Storage <i>Scott Hoatson & Shannon Swantek</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Everything You Wanted to Know About Oregon's Laboratory Accreditation Program but were Afraid to Ask <i>Gary Ward~ ORELAP</i>	17 9:00	Wastewater Laboratory QA/QC and Lab Sampling & Storage <i>Continued</i>
2 10:10	Sewers, Then and Now: From Ancient Rome to Modern-Day Portland <i>Lisa Ekman</i>	10 10:10	<i>Manufacturer Rep Display</i>	18 10:10	Records and Reporting for Permit Compliance <i>April Graybill~DEQ</i>
3 11:10	Stormwater Solids Sampling Using Inline Sediment Traps <i>Randy Belston~City of Portland's</i>	11 11:10	Ethics Training for NELAC <i>Dennis Wells</i>	19 11:10	Cyanide Inline Flow Distillation <i>Ken Earle</i>
4 1:00	Oregon's Water Quality Toxics Standards <i>Dave Kliewer Held in P101</i>	12 1:00	TOC Analyzers <i>Paul Winkler</i>	20 1:00	<i>TBA*</i>
5 2:00	WQLAS Meeting	13 2:00	BOD Testing <i>Perry Brake Joint Session Operations and Basics Held McLoughlin Theater</i>	21 2:00	<i>TBA*</i>
6 3:10	Weighing and Balances <i>video, hands-on demo and discussion to follow</i>	14 3:10	BOD Testing <i>Perry Brake Held McLoughlin Theater</i>	22 3:10	Movie Part 1 Blue Gold: World Water Wars <i>Held in Gregory Forum B & C</i>
7 4:10	Industrial Sampling Techniques <i>Jeremy Bartleson~Veolia Water Gresham Held in P101</i>	15 4:10	pH <i>video, hands-on demo and discussion to follow</i>	23 4:10	Movie Part 2 Blue Gold: World Water Wars <i>Held in Gregory Forum B & C</i>

*Check website http://depts.clackamas.edu/wet/WET_WaterEnvSchool.aspx for updates to schedule

Section 11 ~ Technology & Asset Management ~ Pauling Center P164

TUESDAY 3/27/12		WEDNESDAY 3/28/12		THURSDAY 3/29/12	
8:00	Opening Ceremony RANDALL GYMNASIUM	8 8:00	VAM – Venturi Air Manifold Aeration System <i>Lewis Titus~Titus Industrial Group, Inc.</i>	16 8:00	The Living Machine-Organic Wastewater <i>Doug Sams ZGF Architects</i>
1 8:35	EPA Approved Water Quality Standards: What It will Mean for Municipalities, Agencies, Rate Payers and the Environment of Oregon <i>DEQ Representative</i>	9 9:00	Oak Lodge – The Cannibal Process <i>Mark Walter~Oak Lodge Sanitary District</i>	17 9:00	TBA *
2 10:10	What is CMOM and Why Should You Care? <i>Gary Irwin~City of Portland</i>	10 10:10	Field GPS'ing of Storm Systems <i>Susan Ottersen & Tim Kay~ Clack. Co. WES</i> <i>Held in Gregory Forum B & C</i>	18 10:10	TBA *
3 11:10	CSO Project <i>Mike Ciolli & Virgil Adderly~Portland BES</i>	11 11:10	Value of Online Instrumentation for Wastewater Treatment Plant Operations <i>Mario Benisch~HDR. Inc.</i>	19 11:10	TBA *
4 1:00	Columbia Biogas Food Waste Digestion Project <i>Dale Richwine~Richwine Environmental</i>	12 1:00	Developing and Implementing Energy Management Programs at a Wastewater Utility <i>Dick Frank~City of Vancouver</i>	20 1:00	Asset Management for Utilities <i>Chris Wanner~ City of Portland BES</i>
5 2:00	Solar Energy for Industry and Water Facilities: What can Solar do for You? <i>Doug Boleyn~Energy Trust of Oregon</i>	13 2:00	<i>Manufacturer Representative's Display</i>	21 2:00	BES Solar Installation <i>Chris Wanner~City of Portland BES</i>
6 3:10	TBA *	14 3:10	TBA *	22 3:10	Micro-hydro Generation <i>Chris Wanner~City of Portland BES</i>
7 4:10	TBA *	15 4:10	TBA *	23 4:10	TBA *

*Check website http://depts.clackamas.edu/wet/WET_WaterEnvSchool.aspx for updates to schedule

36th Annual Water Environment School

March 27, 28 & 29, 2012

Mail-in Registration Form



Date: _____

Name on Nametag (Please print clearly)

 SS# (last four digits): XXX-XX-

Last	First	MI	Date of Birth (Month/day/year)
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Street address	City	State	ZIP
Home Phone			
Email Address			

Organization/Agency	Work Phone
Street address	Cell Phone
City	State
City	State
ZIP	ZIP

Course - Sec #	Course name	Cred.	Time	M	T	W	TH	F	Room	Start Date
WQT-009-01	Water Environment School	2.3 CEU	8-5		X	X	X	X		Comm. Ctr. 3/27-3/29/12

Your pre-registration form must be received by March 11, 2012.

Preregistration: <input type="checkbox"/> Full Reg \$195	<input type="checkbox"/> 2 Day Reg \$160	<input type="checkbox"/> 1 Day Reg \$105	Amount enclosed \$ _____	Payment Type: <input type="checkbox"/> Check
On-Site Registration: <input type="checkbox"/> Full Reg \$205	<input type="checkbox"/> 2 Day Reg \$170	<input type="checkbox"/> 1 Day Reg \$115	# _____ <input type="checkbox"/> Purchase Order	# _____ Visa or Mastercard <i>NOT</i> Accepted
Are you a student or ORWEF Committee Member? <input type="checkbox"/> Student (proof required*) <input type="checkbox"/> ORWEF Committee Member				
*unofficial transcript or current registration document				
If attending less than 3 days check which days you plan to attend: <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday				
Vegetarian lunch required? Please check which days: <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday				

Make checks or purchase orders payable to: **OREGON WATER EDUCATION FOUNDATION (ORWEF)**

Please return form and payment to:

OREGON WATER EDUCATION FOUNDATION (ORWEF)

ATTN: Mike Stebbins

Columbia Blvd, WWTP • 5001 N. Columbia Blvd, Portland, OR 97203

FAX: 503-823-2409 or 503-823-2407

Phone: 503-823-2653

michael.stebbins@portlandoregon.gov

DO NOT SEND REGISTRATION TO CLACKAMAS COMMUNITY COLLEGE. One registration per person. You may duplicate this form for multiple registrations.

Clackamas Community College's Affirmative Action Policy ensures that discrimination based on race, color, religion, sex, marital status, age, disability, and family relations does not exist in any area, curriculum activity, or operation of the college.

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