



**33rd ANNUAL WATER ENVIRONMENT SCHOOL (2009)**

**TUESDAY, MARCH 24, 2009 Water Environment School 2009**

| **SESSION** | **1**  **OPERATIONS** *Joel Borchers**Kay Hust**David Jones**Steve Yoder* **McLoughlin Auditorium** | **2**  **SOURCE CONTROL**  *Diana Lindoff*  *Rick Williams*  **Pauling 101** | **3**  **COLLECTION**  **SYSTEMS**  *Tom Binder*  *Jim Lowe* **Gregory Forum A** | **4**  **MAINTENANCE**  *Chuck Merritt*  *Mark Walter*  *Dennis Wolfe*  **Pauling 132** | **5**  **MANAGEMENT**  **SUPERVISION**  *Noah Harvey*  *Mark Poling*  *Tom Stow*  **Comm. Center 127** | **6**  **WASTEWATER BASICS**  *Monica Anderson*  *Steve Desmond*  **Pauling 131** | **7**  **BIOSOLIDS**  **MANAGEMENT**  *Mark Johnston*  *Anya Revelle*  *Robert Watson*  **Pauling 102** | **8**  **STORMWATER**  *Luke Bushman*  *John Nagy*  *Shaun Rohret* **Gregory Forum****B & C** | **9**  **SAFETY & HEALTH**  *Faye Lindroos*  *Karen Menard* **DeJardin 191** | **10**  **LABORATORY**  **PRACTICES**  *Victoria Boettcher*  *Charles Lytle*  **Pauling 103** | **11**  **TECHNOLOGY**  *Erin Duffy*  *Steve Hanson* **Pauling 164** |
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| **7:00 a.m. – 8:00 a.m. REGISTRATION, COMMUNITY CENTER** | | | | | | | | | | | |
| **1**  **8:00** | **OPENING CEREMONY – Neimeyer Center – Osterman Theater** | | | | | | | | | | |
| **2**  **8:30** | **GENERAL SESSION: Neimeyer Center -- Osterman Theater**  ***Jennifer Wigal, Department of Environmental Quality Water Quality Division***  ***Henryk Melcer, Senior Process Engineer, Brown & Caldwell***  ***Karen DeBaker, Clean Water Services, Public Affairs*** | | | | | | | | | | |
| **MORNING BREAK - 9:45 - 10:00 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Community Center** | | | | | | | | | | | |
| **3**  **10:10** | **Dewatering Options & Selection**  *Jenny Coker*  *Kennedy Jenks* | **The Changing Paradigm of the Wastewater Industry**  *Dr. Kenneth Williams*  *OSU* | **Hydronix (Smart Covers)**  *David Drake* | **Stabilizing the Pump Shaft**  *Al Jones* | **Connecting with Schools & Teachers**  *Karen DeBaker*  *Clean Water Services* | **Preliminary & Primary Treatment**  *John Harrison* | **2009 Biosolids Jeopardy**  *Mark Johnston*  *Anya Revelle*  *Bab Watson* | **Rain Gardens**  *Candace Stoughton*  *E. Multno*  *Soil & Water Conservation District* | **Below the Hook**  **Lifting Device Safety**  *Art Stanley*  *West Coast Wire Rope and Rigging, inc.* | **PNCWA Oregon Water Quality Lab Analyst Section (WQLAS)** | **SCADA and Data Historian**  *Kevin Bare*  *Wonderware PacWest* |
| **4**  **11:10** | MBRS: Operations, Process Control Real-Life Results  *Henryk Melcer*  *Brown & Caldwell* | **FOG & Green Waste Programs**  *Alan Zelenka*  *Kennedy Jenks* | **Vaporooter**  *Bill Fuller and/or*  *T.J. Suiter* | **Seals**  *Ward Forest* | **Energy Conservation Measures and Financing**  *Walt Minski*  *Oregon Energy Trust* | **Activated Sludge**  *John Harrison* | Biosolids Management  State & Federal Compliance  *Ron Doughten*  *DEQ NW Region*  *Natural Resource Specialist* | **Creating a Watershed Heath Index**  *Jim Harper & Jennifer Belknap-Williamson*  *Brown & Caldwell* | **Ethics In the Municipal WW Laboratory**  *Dennis Wells*  *ESC Lab Sciences* | **Cyber Security Protection/Change Management**  *Larry Claussen*  *WinTip, LLC* |
| **LUNCH for Attendees - 12:00 – 1:00 – CAFETERIA** | | | | | | | | | | | |
| **5**  **1:00** | Headworks Design – Screening  *Dale Richwine*  *MWH Americas* | **Brown Grease Symposium Update**  *Debra Taevs*  *PPRC* | **Hydro-Excavating/Grounding Mats Certification**  *Kri-Tech* | **Rigging**  *Art Stanley* | Achieving Energy Independence  *Alan Zelenka*  *Kennedy Jenks* | **Basic Chemistry**  *Doug Kelley*  *Inland Environmental Resources* | Biosolids Management Plans  *Paul Kennedy*  *DEQ Wester Region*  *Natural Resource Specialist* | **Tualatin Toxic Blue Green Algae**  *Stewart Rounds*  *USGS* | **Preventing Dogbites**  *Kurt Von Steiger*  *City of Salem* | **OTAC**  **Your Link to the Oregon NELAC Program**  *Shane Sinclair*  *City of Corvallis* | **Benchmarking WWTPs in the Energy Star Program**  *Clarence Ortman* |
| **6**  **2:00** | **Five Laws of Wastewater Treatment**  *Dale Richwine*  *MWH Americas* | **Flushables – Who Said So?**  *Ely Teragli*  *Clean Water Services* | **Turbo Blowers –**  **Just Hot Air?**  *Jeff McCormick*  *Carrollo Engineers* | **Math Basics**  *Doug Kelley*  *Inland Environmental Resources* | **Biosolids Spill Plans**  *Paul Kennedy*  *Natural Resource Specialist*  *DEQ* | **Interactive WR. Temp Trading Tool**  *Stewart Rounds*  *USGS* | **Watch Out!**  **Pedestrian & Bicycle Safety**  *Stephanie Noll* | **The Oregon NELAC Program**  *Dan Hickman*  *Oregon DEQ* | **No Session** |
| **AFTERNOON BREAK - 2:50 – 3:10 – Cafeteria** | | | | | | | | | | | |
| **7**  **3:10** | **Advanced BNR**  *John Harrison* | **Drug Take Back – What’s Happening in the Legislature?**  *Janet Gillaspie*  *OR ACWA* | **Hydro-Excavating/Grounding Mats Certification**  *Continued* | **Asset Management**  *Combined with Technology in Pauling Center P164* | **No Session** | **If It Stinks It Corrodes**  *Doug Kelley*  *Inland Environmental Resources* | **Biosolids Sampling & Testing**  *Dan Strong*  *Kristina Franklin*  *Ron Myers*  *Clackamas Co. WES* | **Wilsonville Natural Areas**  *Lisa Nead*  *City of Wilsonville* | **Confined Space**  *Brandi Davis*  *Oregon OSHA* | **No Session** | **No Session** |
| **8**  **4:10** | **Personal Care Products – What Should We Expect?**  *Elena Nilson*  *USGS* | **No Session** | **A Green Alternative to Caustic**  *Doug Kelley*  *Inland Environmental Resources* | **Daily Wrap-up**  *Mark Johnson*  *Anya Revelle*  *Bob Watson* | No Session | **No Session** | **No Session** |

**WEDNESDAY, MARCH 25, 2009 Water Environment School 2009**

|  | **OPERATIONS**  **McLoughlin Auditorium** | **SOURCE CONTROL**  **Pauling 101** | **COLLECTIONS**  **Gregory Forum A** | **MAINTENANCE**  **Pauling 132** | **MGMT & SUPER.**  **Comm Ctr. 127** | **BASICS**  **Pauling 131** | **BIOSOLIDS**  **Pauling 102** | **STORMWATER**  **Gregory Forum A & B** | **SAFETY & HEALTH**  **DeJardin 191** | **LABORATORY PRACTICES**  **Pauling 103** | **TECHNOLOGY**  Pauling 164 | |
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| **9**  **8:00** | **Math for Wastewater Operators**  *Terry Dokken*  *CH2MHill - OMI* | **Preferred Pumper Program: The Reality of the Program**  *Ed Gilmore*  *Clackamas County Water Environment Services* | **OUCC**  *Russ Thomas*  *City of Newberg* | **Flair – Infrared Technology**  *TBA* | No Session | **Disinfection**  *TBA* | **Huber Press Presentation**  *T.R. Gregg*  *Huber Technology* | **DEQ’s Toxic Pollutants Program**  *Kevin Masterson*  *DEQ* | **Lock Out/Tag Out**  *Training Staff*  *Oregon OSHA* | **Using LDO Technology for Dissolved Oxygen**  *Mark McElroy*  *Thermo-Orion* | **Advances in SCADA Telemetry**  *Mike Hogan &*  *Jon Scott*  *Portland Engineering* | |
| **10**  **9:00** | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Lubrication**  *TBA* | **Worker’s Compensation Claims 101**  *Scott Neufeld*  *SDAO Loss Control Manager*  *Chip Bartel* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Manufacturer Representative’s Display**  ***Randall Gym*** | Water Quality Considerations in the Marmot Dam Removal  *John Esler*  *PGE* | **The Astoria-Pacific Discrete Analyzer for WW Analyses**  *Steve Stadimann*  *Brady Miller*  *Astoria Pacific* | Life Station Controls  *Mike Hogan &*  *Jon Scott*  *Portland Engerring* | |
| **MORNING BREAK - 9:50 - 10:10 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Randall Gym** | | | | | | | | | | | | |
| **11**  **10:10** | Odor Control  *Mark Smith*  *HDR* | **A Virtual Inspection**  *Cathy Caldwell*  *Clean Water Services* | **Confined Space Entry**  *Greg McDonald*  *Public Works Supply* | **Loctite**  *Kirk Floyd* | Blower Energy Efficiencies  *Jan Rosholt*  *Parametrix* | **Basic Pump Station Operations**  *Brian Casey*  *Corollo Engineering* | **Brookings, Oregon: Lime Stabilization Process Approval Issues**  *Mark Cullington*  *Consultant*  *Kennedy Jenks Inc.* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Lock Out/Tag Out**  *Continued* | **Hach Process Instrumentation**  *Garrett Lawson*  *Hach Company* | **Manufacturer Representative’s Display**  ***Randall Gym*** | |
| **12**  **11:10** | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Almalgam Separators – Maintenance and Cleaning Issues**  *City of Salem* | Extech  *TBA* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Basic Math Fundamentals**  *Brian Casey*  *Corollo Engineering* | **Biosolids Reduction Technology**  *Dale Richwine*  *MWH Americas Inc.* | **Portland’s 2008 Stormwater Management Manual**  *BES* | **When Do You Need a LIMS?**  *John Dorner*  *OPS Systems* | **Aeration Basic Retrofit at Tri-Cities Wastewater Treatment Plant**  *Brook Weeks*  *MWH* | |
| **Lunch for Attendees - 12:00 – 1:00 – Cafeteria** | | | | | | | | | | | | |
| **13**  **1:00** | **Pharmaceutical Removal in WWTPs**  *Dale Richwine*  *MWH Americas* | **Home Biodiesel Kits – Concern About Spills and Disposal?**  *Bret Arvidson*  *Oak Lodge Sanitary District* | GASB 34  *Al Rossmeisel*  *Wincan America* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Coaching in Organizations – Creating a High Performance Culture**  *Dan Cox*  *Executive Coach*  *TransAlliance* | **Open Channel Flow Metering**  *Greg Brown*  *Pacific Services & Supply Co.* | **Biosolids Nutrient and Agronomic Loading Rate Calculations**  *Craig Cogger*  *Extension Soils Scientist*  *Washington State University*  *Puyallup* | **Graham Oaks and Lovejoy Projects**  *Elaine Stewart, METRO* | **What to Expect from an OR-OSHA Inspection From Someone Who Has Been on Both Sides**  *Kathryn Jernstedt*  *CSP*  *Safety & Loss Control Analyst*  *Clackamas County* | **Manufacturer Representative’s Display**  ***Randall Gym*** | | **Sustainability and Assessment of SCADA & Enterprise Systems**  *Gilbert Kwan*  *Harris Group* |
| **14**  **2:00** | **Update on Tri-city WPCP**  *Dale Richwine*  *MWH Americas* | **Illicit Discharges: Where Did It Come From?**  *Chris Collins*  *City of Salem* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **No Session** | **Overcoming Team Dysfunction in Organizations – A Five Step Process**  *Dan Cox, Executive Coach*  *TransAlliance* | **Chemical Feed System Operations**  *Greg Brown*  *Pacific Services & Supply Co.* | **Land Application Programs: Oregon Experiences**  *Bill Fasth*  *Brown & Caldwell* | **Connect the Drops**  *Brian Wegener*  *Tualatin River Keepers* | **Manufacturer Representative’s Display**  ***Randall Gym*** | **Arsenic Speciation for NPDES Permits**  *Amy Dahl*  *Frontier Geosciences* | | **Migration Path From an Aging Network to Ethernet Controls**  *Gabe Shone*  *Harris Group* |
| **AFTERNOON BREAK - 2:50 - 3:10 – Cafeteria** | | | | | | | | | | | | |
| **15**  **3:10** | **McMinnville’s ATAD System**  *Dave Gehring* | **Industry: Solar World**  *Bryan Trotter*  *Solar World* | **T-Liner Laterals**  *Bill Fellows*  *Wades Pipeline Service* | **Air Diaphragm Pumps**  *George Polopolus* | **No Session** | **Sewer Overflows**  *Debra Gorman*  *Clean Water Services* | **Site Authorization Requests**  *Bob Watson*  *Water Environmental Services* | **Portland’s Grey to Green Program**  *Jennifer Karps*  *BES* | **Recognition: Find Them Before They Find You**  *Kathryn Jernstedt*  *CSP*  *Safety & Loss Control Analyst*  *Clackamas County* | **No Session** | | No Session |
| **16**  **4:10** | **Computer Applications to Enhance Communications**  *Joel Borchers, Clean Water Services* | **Industry: Centralized Truck Washington**  *James Ratkitsky*  *Quala Wash* | **Rhino Manhole Lining**  *Bill Fellows*  *Wades Pipeline Service* | No Session | **Permit and Compliance**  *Beth Moore*  *Oregon DEQ* | **Daily Wrap-up**  *Mark Johnson*  *Anya Revelle*  *Bob Watson* | No Session | **No Session** | | No Session |

**THURSDAY, MARCH 26, 2009 Water Environment School 2009**

|  | **OPERATIONS**  **McLoughlin Auditorium** | **SOURCE CONTROL**  **Pauling 101** | **COLLECTIONS**  **Gregory Forum A** | **MAINTENANCE**  **Pauling 132** | **MGT/SUPER**  **Comm. Center 127** | **BASICS**  **Pauling 131** | **BIOSOLIDS**  **Pauling 102** | **STORMWATER**  **Gregory Forum A & B** | **SAFETY & HEALTH**  **DeJardin 191** | **LABORATORY PRACTICES**  **Pauling 103** | **TECHNOLOGY**  **DeJardin 233** |
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| **17**  **8:00** | **SCADA System Fundamentals**  *Rick Inglin*  *Informative Controls* | **Liquid Assets**  *Documentary Film* | **Flagging**  *T2* | **Documentary Film: Liquid Assets Part 1**  *Combined with Biosolids in Pauling Center, P102* | **No Session** | **Operating a Wastewater Treatment “The Primer”**  *Paul Proctor &*  *Monica Anderson*  *Veolia Water Gresham* | **Documentary Film:**  **Liquid Assets Part 1** | **Trenchless Technology**  *Daryn Thorp, CCDTD* | **Back to Basics – HAZMAT**  *Grant Coffee*  *City of Portland Fire Bureau* | **We Got Approved for BOD Using LDO Technology**  *Keith Chapman*  *City of Salem* | No Session |
| **18**  **9:00** | **How to Read Pump Curves**  *Ken Black*  *Beaver Equipment* | Seals -- Packing  *Jim Pronovost* | **Electronic Facility Planning Tools**  *Ann Conklin*  *Carrolo Engineers* | **Dealing With the Media**  *Joe Krumm*  *Directory*  *Community & Government Relations NCS* | **Rock Creek Sustainability Initiative**  *Carol Murdock*  *WES* | **The Basics of pH**  *Mark McElroy*  *Thermo-Orion* | **Incorproating Sustainable Features Into the Tri-City WPCP Phase I Expansion**  *Dale Richwine* |
| **MORNING BREAK - 9:50 - 10:10 – COFFEE, TEA, ETC. DONUTS/BAGELS/FRUIT – Cafeteria** | | | | | | | | | | | |
| **19**  **10:10** | **Struvite Recovery**  *Ahren Britton*  *Ostara Nutrient Recovery Technologies Inc.* | **Slug Plan – What’s Really Needed?**  *Denise Healy*  *Oregon Department of Environmental Quality* | **Flagging**  *Continued* | Bearing Isolators  *Jim Pronovost* | **Sustainable Future for Wastewater**  *Michelle Burkhart*  *CH2M Hill* | **Tour of Tri-Cities WWTP**  **(Sign up open in class Tuesday)** | **Building Trust With Neighbors for Biosolids**  *Ken Vanderford*  *City of Eugene* | **Rogue River Sewer Services’ NPDES Phase II Program**  *Maynard Flohaug, PE*  *Rogue Valley Sewer Services* | **Dig Safely**  *Anita Floyd*  *Construction Supervisor*  *Qwest Communications* | **Are Detection Limits Driving You Crazy??**  *Chuck Lytle*  *City of Portland* | **Fast Track Construction**  *Michael Trent*  *Water Environment Services*  *Jude Grounds*  *MWH* |
| **20**  **11:10** | **Corvallis Influent Pump Station**  *Preston Van Meter*  *Kennedy Jenks Consultants* | **Industry Fact Sheets:**  **What Is Required?**  *Mark Humphrey*  *City of Albany* | **Positive Displacement Pump**  *Brett Wittman* | **No Session** | **Managing Local and Eastern Oregon Biosolids Program**  *Davae Arguello*  *Harry Bloodworth*  *Clean Water Services* | **Agricultural Stormwater**  *Jeremy Baker*  *Clackamas Soil & Water Conservation District* | **Aeration Basin Control for Cost Optimization**  *Garret Lawson*  *Hach Company* | **Something Really Great from Dale Richwine**  *Dale Richwine*  *MWh* |
| **Lunch for Attendees – 12:00 - 1:00 – Cafeteria** | | | | | | | | | | | |
| **21**  **1:00** | **The Missing Link – P & ID’s for Effective Communication Between Engineers and Operators**  *Jennifer To*  *Clean Water Services* | **Pretreatment Discharge Classification – What Limits Apply**  *Denise Healy*  *Oregon Department of Environmental Quality* | **FOG**  *Terry Sackett* | **Clarifier Drive Maintenance**  *Jess Kelly*  *WesTech* | **No Session** | **Basic Asset Management**  *Richard Ludlow*  *Veolia Water Gresham* | **Parker Ag Biosolids Application & Transport Services**  *Mike Sharp*  *Parker Ag* | **Ballast Water Discharge**  *Rian Hooff*  *DEQ* | **Sleep Deprivation**  *Bill Kolzow*  *Oregon Technology*  *Transfer Center*  *(ODOT)* | **No Session** | PLC Discussions  *Shawn Davison*  *WESCO* |
| **22**  **2:00** | **Reading P & IDs**  *Catherine Dummer*  *Brown & Caldwell* | **Plant Closure & Permit Transfers**  *Pete Gayeska*  *Clean Water Services* | **Sewer Line Locating**  *Dale Berryman* | Sodium Hydrochlorite Generation  *Thomas Trackman* | **No Session** | **The Basics of an Effective Safety Program**  *Matt Beltran*  *Veolia Water Vancouver* | **Local Liquid Land Applications Projects and Transportation**  *Brian May & Andy Duncan*  *Agri-Tech Inc. of Oregon* | **ODOT Management of Storm Damage**  *Steve Hay*  *ODOT* | **Health and Wellness Programs Work!**  *Debra Metz*  *Clackamas County* | **No Session** | **PLC/HMI Discussions**  *Shawn Davison*  *WESCO* |
| **AFTERNOON BREAK - 2:50 – 3:10 – Cafeteria** | | | | | | | | | | | |
| **23**  **3:10** | **Trauma Nurses Talk Tough**  ***Combined with Health & Safety in***  ***McLoughlin Theater*** | **Enforcement Issues – Case Study**  *Eric Martenson*  *EPA*  *Criminal Investigation Division* | **Manhole Inspection**  *Mike Malone*  *City of Newberg* | Sodium Hydrochlorite Generation  *Continued* | **No Session** | **Anaerobic Digestion**  *Mark Kennedy* | **Portland Biosolids – 15 Years with Madison Ranch**  *John McQueen*  *Horticulture Research*  *OSU* | The River They Saw  *OPB Video* | Trauma Nurses Talk Tough  *Combined with Operations*  *In*  *McLoughlin Auditorium* | **No Session** | **Solar Arrays and Mcro Hydro Generation Facilities**  *Chris Wanner*  *Portland Water Bureau* |
| **24**  **4:10** | **Enforcement Issues**  *Continued* | **Smoke Testing**  *Mike Malone*  *City of Newberg* | Documentary Film: Liquid Assets Part 2  *Combined with Biosolids in Pauling Center, P102* | No Session | **Operator Certification**  *Steve Desmond*  *Oregon DEQ* | **Documentary File:**  **Liquid Assets Part 2** | No Session | **No Session** | No Session |