

25th Annual NC On-Site Water Conference

Water, Wastewater and Reuse April 29 – May 1, 2009

April 29 AM

Opening Session – Water, Wastewater, and Reuse April 29 - AM Moderator: Joe Lynn, OSWP		
Time	Title	Speaker
700-815	Registration	
815-830	Welcome	David Lindbo, NCSU
830-920	Epidemiological relationships between disease incidence and well/septic system proximity	Floyd Frost, Aurora Health Care
920-1010	Wastewater and soils – The National View	Jerry Tyler, Tyler and Associates Inc.
1010-1040	BREAK and Exhibits	
1040-1130	Water, wastewater and reuse	Chuck Gerba – Univ of AZ, Soil Water and Environmental Science Dept.
1130-1200	The birth of wastewater in NC	Steve Steinbeck
1200-1215	Awards Steinbeck Award – Walter and Joanna Bright	Joe Lynn, OSWPS
1215-130	Lunch Buffet and Exhibits	

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Session 1 – Western Piedmont/Mountains
April 29 PM
Moderator: Doug McVey, Madison Co. HD

Time	Title	Speaker
130-200	Use of cluster systems in western NC	Mark Brooks, Brooks Eng.
200-230	The need for extra space due to site/vegetation issues	Karen Wallace, OSWP
230-300	Identifying Springs, Seeps, and Intermittent Streams	Danny Smith, NCDENR, SWP
300-330	Break	
330-400	Saprolite – identification and the rules	Stan Crownover, Buncombe Co. HD
400-430	Saprolite –waste water treatment potential and movement	Aziz Amoozegar, NCSU
430-500	Multi-agency cooperation	Terrell Jones, NCDENR, OSWPS

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Session 2 – Design and Engineering
April 29 PM
Moderator: Stephanie Luster-Teasely, NC A&T

Time	Title	Speaker
130-200	The importance of Site Assessment	Jim Beeson, SEC
200-230	The importance of Site Assessment to Design	Darian Creed, Hugh Creed and Associates,
230-300	Community Scale Onsite Reuse	Bob Rubin, McKim and Creed
300-330	Drip in the Mountains	Mark Brooks, Brooks Eng.
330-400	Break	
400-430	High Strength wastewater	Mark Lubbers, Bioclere
430-500	How to get to the next 25 years	Bill Freed, EnvirotechNC

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Session 3 – Installation @ McKimmon
April 29 PM
Moderator: Keith Vernon

Time	Title	Speaker
130-200	Why the soil makes a difference	Dave Lindbo, NCSU
200-230	Reading & understanding onsite permits	Kevin Neal, OSWP
230-300	Why the EHS asks and does what they do	Andy Adams, Orange Co. HD; Steve Bristow, Wake Co. Envi Ser.;
300-330	Break	
330-400	Pump Dist.: Manifold & Manatees design	Wayne Jones, Randolph Co., HD
400-430	Reuse Installations	Bob Rubin, McKim and Creed
430-500	Problems at time of installation	Albert Mills, Orange Co., HD;

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Session 4, OSWW Basics
April 29 pm
Moderator: Nancy Deal, NCSU

Time	Title	Speaker
130-200	Evolution of Decentralized Management	Nancy Deal, NCSU
200-230	Site Evaluation	Heath Ward, Guilford Co. HD
230-300	Break	
300-400	Soil Evaluation	Albert Mills, Orange Co. HD
400-500	Water flow	Scott Greene, Guildford Co. HD

APRIL 30 AM

Session 5 @ LAKE WHEELER during main conference April 30 AM Joe West, Harnett Co. HD, Coordinator		
45 minute rotations	Layout & design hands-on	Kevin Neal, OSWP Karen Wallace, OSWP Joe Johnson, Guilford Co. HD
45	Inspections of installed system	Hank Sowers, Davidson Co. HD
	Break	
45	Alt. Systems and Modified	Steven Berkowitz, OSWP Cory Brantley, Brantley and Sons
45	Pumps & alarms	Trish Angoli, OSWP Albert Mills, Orange Co., HD

APRIL 30 AM

Session 6 – Operation and Inspections
April 30 AM
Moderator: Chad Rakes, Forsythe Co., HD

Time	Title	Speaker
830-900	ABCs of O&M of treatment units	Steve Barry, AQWA
900-930	Grinder pumps vs sewage pumps vs lift pump	Darren, Meyers, Zoeller
930-1000	Grey Water Systems and use	Chuck Gerba, Univ of AZ, Soil Water and Environmental Science Dept.
1000-1030	Break	
1030-1100	Failure versus non-compliance versus compliance	Bill Freed, Envirotech
1100-1130	What do/ should inspectors (time of sale) look at/for during an inspection?	Diana Rashash and Gene Young, NCOWCICB
1130-1200	Understanding/troubleshooting control panels	Tim Bannister, TCW; Eric Valentine, American Mfg.

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Session 7 – Piedmont April 30 AM Moderator: Alan Clapp, Orange Co. HD		
Time	Title	Speaker
830-900	LTAR-is this the best way to design systems?	Jerry Tyler, Tyler and Associates Inc.
900-930	Soils of the Piedmont	Joe Kleiss, NCSU
930-1000	“Tiger dirt” – What is it and what does it mean?	Roger Leab, NRCS
1000-1030	N cycle Basics – for WW	Bill Fenner, CES
1030-1100	Break	
1100-1200	“EH rules at the Round Table” Topics for Discussion 1) Performance vs Prescriptive 2) LTAR – hydrologic vs organic 3) Mineralogy – Lab test that works?	Scott Greene, Guilford Co., HD and Joe Lynn, OSWP (moderate)

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Session 8 – Wells and Groundwater 1 April 30 AM Moderator: Drew Morgan, DWQ		
Time	Title	Speaker
830-930	Basic Hydrogeology	Rick Bolich, DWQ
930-1000	Break	
1000-1100	Ground water contaminants	Walt Haven, OSWP
1100-1200	Hydrology, wells, and large system site assessment	Don Wells, S&EC

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Session 9 OSWW Basics
April 30 am
Moderator: Nancy Deal, NCSU

Time	Title	Speaker
830-900	Tanks	Wayne Jones, Randolph Co. HD
900-1000	Pumps and controls	Tim Banister, TCW
1000-1030	Break	
1030-1130	Pretreatment	Tim Crissman, OSWP
1130-1200	Distribution	Nancy Deal, NCSU

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Session 10 – Wells and Groundwater April 30 PM Moderator: Joanne Rutkofske, DWQ		
PM Session		
130-200	Safety and siting issues of Well Construction	Wilson Mize, OSWP
200-230	On-site water treatment	Joe Harrison, WQA
230-300	What's in your water and how is it treated?	Barbara Grimes, OSWP
300-330	Break	
330-400	2C.100 Rules	David May and Debra Watts, DWQ
400-430	Common Misinterpretations of the rules	Leslie Easter, Stokes Co. HD
430-500	Common well problems	John Nykamp, Guilford Co.

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Session 11 – Eastern (Coastal) NC
April 30 PM
Moderator: Christine Nitt, Carteret Co. HD

Time	Title	Speaker
130-200	Keeping up with pretreatment ----- Rule .1970	Ted Lyon, OSWP
200-230	Onslow Off-site rules	Angie Manning, Onslow Co.
230-300	Coastal storm water rules and on-site wastewater systems	Charlie Humphrey, Craven Co. CES
300-330	Break	
330-400	Shellfish sanitation issues and on-site wastewater	Andrew Haines, Shellfish Sanitation
400-430	North River septic sewage (MST) project and Swans Quarter project	Lloyd Liwimbi – NCSU
430-500	CWMTF Grant in Onslow SSTRIP	Diana Rashash, NCSU Jon Harrison, Onslow Co HD

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Session 12 – Research and other Issues (Current Topics)

April 30 PM

Moderator: Ramona Dunphy, Union Co., HD

Time	Title	Speaker
130-200	Separation Distance in Sands	Charlie Humphrey, NCSU
200-230	Vadose Zone Nitrate Transport	Sergio Abit, NCSU
230-300	CIDWT Installer Program	Nancy Deal, NCSU
300-330	Break	
330-400	New Systems etc.	Trish Angoli, OSWP
400-430	Performance of on-site wastewater systems sited on the basis of soil evaluation	Bob Uebler, OSWP
430-500	Soil Reports	Ted Lyon, OSWP

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Session 13 OSWW Basics
April 30 pm
Moderator: Nancy Deal, NCSU

Time	Title	Speaker
130-230	Soil treatment area	Alan Clapp, Orange Co., HD
230-330	Safety	David Lindbo, NCSU
330-400	Break	
400-415	Monitoring	Tim Crissman, OSWP
415-500	Rules	Gene Young/Diana Rashash

Field Tours
May 1 (830-430)

Number	Title/Location	Organizer
Raleigh (Lake Wheel and Other) AM		
1	Bentonite Grouts – use real wells in area	Drew Morgan
2	Vehicle Safety Inspections – DMV - Raleigh	Joe West
4	Soils on tough sites – design (Breeze Farm)	Kevin Neal
Raleigh (Lake Wheel and Other) PM		
5	Installer Field Tour – Lake Wheeler	Hank Sowers
6	Well Drilling Rigs - Mud vs. Air How they work. Lake Wheeler	Drew Morgan
Greensboro Area		
7	GIS and GPS in the Field (min 10 max 20) Site Survey related to site evaluation (benchmarks)	Heath Ward
Mountains		
8	Advanced Pretreatment in Burke Co.?, Lake James Soils, Design, Installation, Stabilization	Scott Greene
9	Bentonite Grouts – use real well Fletcher PM	Leslie Easter
10	Vehicle Safety Inspections – DMV – Fletcher AM	Doug McVey
Coastal		
11	Reuse Systems (Craven County) Water Balance Issues Soils of Site	Charlie Humphrey