



# On-site Program Guide

## Environmental Concerns in Rights-of-Way Management 9th International Symposium

September 27 - 30, 2009  
Portland, Oregon  
Doubletree Hotel, Lloyd Center



# Agenda at a Glance

\*\*Denotes separately ticketed events. If you have not preregistered, check availability at the registration desk.

Note: Meetings and times are subject to change.

All symposium events will be held at the Doubletree Hotel, Lloyd Center.

## Sunday, September 27

- 7:30 AM – 2:00 PM Symposium Registration Open, *Sellwood Room, First Floor*  
2:00 PM – 6:00 PM Symposium Registration Open, *Holladay Foyer, First Floor*  
8:30 AM – 4:30 PM PacifiCorp Lewis River Hydroelectric Project Tour\*\* - *Tour will leave promptly at the Banquet entrance near the Foyer.*  
8:30 AM – 4:30 PM Columbia River and Cascades Region Tour\*\* - *Tour will leave promptly at the Banquet entrance near the Foyer.*  
*Buses Sponsored in part by*  **PACIFIC POWER**  
A DIVISION OF INCHPECOB
- 6:00 PM – 7:00 PM Welcome Reception, *Lloyd Center Ballroom, First Floor*

## Monday, September 28

- 7:00 AM – 12:00 PM Speaker Ready Room, *Hawthorne Room, First Floor*  
7:30 AM – 5:00 PM Symposium Registration Open, *Holladay Foyer, First Floor*  
7:30 AM – 8:30 AM Early AM Refreshments, *Lloyd Center Ballroom, First Floor*  
7:30 AM – 6:00 PM Exhibits Open, *Lloyd Center Ballroom, First Floor*  
9:00 AM – 12:00 PM Opening Plenary Session (See Grid page 5), *Three Sisters/Mt. Bachelor, Second Floor*  
Sponsored by 
- 10:00 AM – 10:20 AM Break on the Exhibit Floor, *Lloyd Center Ballroom, First Floor*  
Sponsored by 
- 12:00 PM – 1:15 PM Lunch, *Lloyd Center Ballroom, First Floor*  
Sponsored by 
- 1:30 PM – 5:00 PM Concurrent Educational Sessions, *Second Floor*, (See Grid page 5 for individual times and rooms)  
Vegetation/Mitigation Session Sponsored by 
- 3:10 PM – 3:40 PM Break on the Exhibit Floor Sponsored by 
- 5:00 PM – 6:00 PM Wine & Cheese Poster Session Reception, *Lloyd Center Ballroom, First Floor*

## Tuesday, September 29

- 7:00 AM – 12:00 PM Speaker Ready Room, *Hawthorne Room, First Floor*  
7:30 AM – 5:00 PM Symposium Registration Open, *Holladay Foyer, First Floor*  
7:30 AM – 5:00 PM Exhibits Open, *Lloyd Center Ballroom, First Floor*  
7:30 AM – 8:30 AM Early AM Refreshments, *Lloyd Center Ballroom, First Floor*  
Morning Refreshments Sponsored by 
- 8:30 AM – 11:50 AM Concurrent Educational Sessions, *Second Floor*, (See Grid page 5 for individual times and rooms)  
Integrated Vegetation Management Session Sponsored by 
- 10:10 AM – 10:30 AM Break on the Exhibit Floor, *Lloyd Center Ballroom, First Floor*  
Sponsored by 
- 12:00 PM - 1:15 PM Lunch, *Lloyd Center Ballroom, First Floor*  
1:20 PM – 5:00 PM Concurrent Educational Sessions, *Second Floor*, (See Grid page 5 for individual times and rooms)  
Integrated Vegetation Management/Cultural Resource Management Session Sponsored by 
- 2:50 PM – 3:20 PM Break on the Exhibit Floor, *Lloyd Center Ballroom, First Floor*  
Sponsored by 

# Agenda at a Glance

Wednesday, September 30

7:00 AM – 12:00 PM Speaker Ready Room, *Hawthorne Room, First Floor*  
7:30 AM – 12:00 PM Symposium Registration Open, *Holladay Foyer, First Floor*  
7:30 AM – 1:30 PM Exhibits Open, *Lloyd Center Ballroom, First Floor*  
7:30 AM – 8:30 AM Early AM Refreshments, *Lloyd Center Ballroom, First Floor*

Morning Refreshments Sponsored by



8:30 AM – 11:40 AM Concurrent Educational Sessions, *Second Floor*; (See Grid page 5 for individual times and rooms)  
10:10 AM – 10:40 AM Break on the Exhibit Floor, *Lloyd Center Ballroom, First Floor*

Sponsored by



11:50 AM – 12:50 PM Lunch, *Lloyd Center Ballroom, First Floor*  
1:00 PM – 3:00 PM Concurrent Educational Sessions, *Second Floor*; (See Grid page 5 for individual times and rooms)

## Attendee Information

### Registration Desk Hours

The ROW 9 Registration desk will be located in the Sellwood Room, First Floor, on Sunday morning. For the remainder of the Symposium, it will be located at the Holladay, First Floor Foyer area of the Doubletree Hotel.

Sunday, September 27..... 7:30 AM - 6:00 PM  
Monday, September 28..... 7:30 AM - 5:00 PM  
Tuesday, September 29..... 7:30 AM - 5:00 PM  
Wednesday, September 30..... 7:30 AM - 12:00 PM

### Name Badges

Name badges must be worn during all official Symposium events, including educational sessions and evening functions. If you misplace your name badge, please go to the Symposium registration desk for a replacement badge.

### Cellular Phones

All cellular phones must be turned off during educational sessions.

Don't miss the exhibits in the Lloyd Center Ballroom, First Floor. Learn about the latest trends and technology in the industry.

### Exhibit Hours

Sunday, September 27 6:00 PM – 7:00 PM  
Monday, September 28 7:30 AM – 3:45 PM  
5:00 PM – 6:00 PM  
Tuesday, September 29 7:30 AM – 3:30 PM  
Wednesday, September 30 7:30 AM – 1:00 PM

### Exhibitors (as of 9/10/2009)

106 Group	DuPont
ACRT, Inc.	Environmental Consultants, Inc.
Aquimax	Ecology & Environment
ArborMetrics	GeoDigital
Arizona Public Service	Gray & Pape, Inc.
Aspen Environmental Services	Nelson Tree Expert Company
Asplundh Tree Expert Company	Pacific Gas & Electric
CN Utility Consulting	Sightline Solutions a division of RTSA
Davey Tree Expert Company	SSI Maxim
DeAngelo Brothers, Inc.	Trees, Inc.
Dow AgroSciences	Wright Tree Service

### Posters

Posters are available for viewing throughout the Symposium. Poster presenters will be available for questions during the Wine and Cheese Poster Session Reception (Lloyd Center Ballroom, First Floor) on Monday, September 28 from 5:00 PM to 6:00 PM.

#### Posters (as of 9/10/2009)

Constructability Considerations for Bulk Electric Transmission Line Siting & Permitting in New England  
*Durand/Knapik, ENSER/AECOM*

Energy transmission lines and landscapes: issues and principles of the implementation of projects  
*Gagnon/Paquette/Poullaouec-Gonidec, University of Montreal*

Evaluation of different Ragweed control methods on Hydro-Québec properties  
*Meunier/Rioux/Poulin/Gauthier, GENIVAR/Hydro-Québec*

Monitoring Vegetation Heights and Clearances Using LIDAR and Color Infrared Imagery  
*Steven/Loos/Visintini/Niemann/Brown, University of Victoria/Terra Remote Sensing, Inc.*

Position Statement on Biodiversity Conservation in Transmission Power-line ROW in Québec.  
*Doucet/Fortin/Gauthier, Hydro-Québec TransÉnergie/Foramec, division de SNC-Lavalin Environment Inc.*

The Use of Portable Washing Stations to Help Prevent the Spread of Noxious Weeds and Sudden Oak Death  
*P. Beesley, Pacific Gas & Electric*

Sprague's Pipit Research Project: The Effectiveness of Recommended Setback Distances for Sprague's Pipits Related to Pipeline Construction and Clean-Up Activities  
*TERA Environmental Consultants and Enbridge Pipelines Inc.*



Credit: Travel Portland

# Thank you, Volunteers!

The ROW 9 Symposium could not have been accomplished without volunteers who have helped moderate the sessions, participate on conference calls, review abstracts, develop the program, and promote the Symposium.

Symposium Chair: Joe Reinemann, Natural Resource Group

Larry Abernathy, Utility Arborist Association/Davey Tree Expert Co.  
 Larry Abrahamson, SUNY ESF  
 Stuart Buchanan, Natural Resource Group  
 Allen Crabtree, Crabtree's Collection Old Books  
 Steve Cieslewicz, Utility Arborist Association/CN Utility Consulting  
 Brian Clark, Kentucky Department of Fish & Wildlife Resources  
 Ed Cunningham, Utility Arborist Association/ECI  
 Jean Doucet, Hydro-Québec  
 Ken Finch, Utility Arborist Association/Retired  
 Brian Fisher, Utility Arborist Association/BC Hydro  
 John Goodrich-Mahoney, EPRI  
 Heidi Grapevine, Natural Resource Group

James Evans, Retired  
 Ray Henning, Utility Arborist Association/Austin Energy  
 Kevin McLoughlin, Environmental Consultants Inc  
 Randy Miller, Utility Arborist Association/PacifiCorp  
 Dean Mutrie, TERA Environmental Consultants  
 Mike Neal, Utility Arborist Association/Arizona Public Service  
 Jim Orr, Utility Arborist Association/Asplundh Tree Expert Co.  
 Laura Simpkins, Natural Resource Group  
 Richard Skarie, Natural Resource Group  
 Mike Timpson, Natural Resource Group  
 Eric Wirfs, PacifiCorp

The ROW 9 Symposium is made possible through the commitment of many individuals and groups. Symposium education and events are generously supported by sponsoring businesses and organizations. Please continue to support these sponsors.



Symposium Proceedings



The miracles of science™

Symposium Bags

## ROW 8 - Saratoga Springs, NY Committee



Monday Plenary Session



Padfolios



Monday Lunch



Name Badge Holders



Hotel Keycards



In-Kind Support



Monday Program



Tuesday Program



Tuesday Program



Wednesday AM Break



Monday PM Break



Tuesday PM Break



Monday AM Break



Sunday Tour Bus



AM Coffee



Tuesday AM Break

# Educational Sessions

Monday, September 28

**9:00 AM – 10:00 AM**

Welcome: Bill Eaquinto, Pacific Power, Vice President of Transmission and Distribution Operations  
 Opening Plenary Session, 3 Sisters/Mt. Bachelor - Second Floor Sponsored by:  
 Keynote speaker – James A. Holtkam, Holland and Hart/University of Utah



**10:00 AM – 10:20 AM**

BREAK ON THE EXHIBIT FLOOR (Lloyd Center Ballroom, First Floor) Sponsored by:



**10:20 AM – 12:00 PM**

Panel Discussion: **Resolving issues with Connecting Renewable Energy Sources to Consumers**

Moderated by Allen Crabtree

Panelists: Booker Holton, Ph.D., TOVA Applied Science & Technology  
 Joshua Bar-Lev, Vice President, Regulatory Affairs, Bright Source Energy  
 Carl Zichella, Director of Western Renewable Programs, Sierra Club  
 Jim Kingzett, Principal, Grid USA and Geovada  
 Elisabeth Blaug, Legal Staff to Commissioner Suedeem Kelly, Federal Energy Regulatory Commission

**12:00 PM – 1:30 PM**

LUNCH - VISIT WITH EXHIBITORS (Lloyd Center Ballroom, First Floor) Sponsored by:



Mt. Hood - Second Floor  
**Public Affairs**

Mt. St. Helens - Second Floor  
**Restoration/Reclamation**

3 Sisters/Mt. Bachelor - Second Floor  
**Integrated Vegetation Management**

**1:30 PM – 1:50 PM**

Communicating with Stakeholders on Linear Projects: What's Working and What Could work Better with FERC and NEB Processes – *O'Connor/Reicher, Natural Resource Group*

A Case Study in Successful Desert Restoration: Kern River 2003 Expansion Project – *Smith/Arnold/Donnelly/Welsh, Ecology and Environment, Inc.*

30 Years of ECI's Vegetation Management Research: From the Well Known to the Unknown – *E. Cunningham, ECI*

**1:50 PM – 2:10 PM**

Technology is Power: Using GIS for effective Transmission line Routing and Public Involvement - *Poorker/Schmidt/Schmidt/Piner/Walter, Great River Energy/HDR, Inc.*

An integrated cooperative approach to reclaiming an electric transmission ROW in a heavily wooded Sierra Nevada forest – *M. Frizzell, Sacramento Municipal Utility District*

Effects Of Tebuthiuron Herbicide On ROW Vegetation in Tennessee – *Clark/Buehler/Fly/Evans, University of Tennessee*

**2:10 PM – 2:30 PM**

Public Participation Alternatives for Environmental Approvals of ROW Facilities Development: What Works, What Doesn't – *P. Prier, Stantec Consulting Ltd.*

Cost-Saving Techniques for Erosion Control & Restoration Projects – *M. Horowitz, Forest City Consulting*

Evaluating Herbaceous cover to inhibit Tree Seedling Establishment and Growth – *Brisson/Boivin/de Blois/Fontaine/Gauthier/Bouchard, Université de Montréal/McGill University/TransEnergie*

**2:30 PM – 2:50 PM**

Stakeholder Engagement in a Post Northeast Blackout Environment – *A. Brown, PECO Energy*

Topsoil Loss Does Not Necessarily Equal Lost Crop Yield Potential: Evaluating Agronomic Characteristics of Surface Soils on a Pipeline ROW – *M.Duncan, Key Agricultural Services, Inc.*

Use of an Automatic Vehicle Management System to Change Tree Crew Behavior – *J. Orr, Asplundh Tree Expert Co.*

**2:50 PM – 3:10 PM**

Presentation to be determined

Ecological Restoration Success in the Mindo-Nambillo Protective Forest In the OCP System ROW Ecuador – *Revelo/Marroquín/Alemán, Entrix*

Restoration of the TMX – Anchor Loop Project in Jasper National Park – *Novak/Fryer/Stevenson, TERA Environmental Consulting/Salix Environmental Services*

**3:10 PM – 3:40 PM**

BREAK ON THE EXHIBIT FLOOR (Lloyd Center Ballroom - First Floor) Sponsored by:



**Public Safety & Land Use**

**Construction**

**Mitigation**

**3:40 PM – 4:00 PM**

Environmental Clearance for Line 108 How Changing Land Uses Can Complicate Pipeline Replacement in an Existing ROW – *Walker/Bacchini, PBSJ*

Coating Material Protects Utility-Pole Crossarms from Pileated Woodpecker Damage – *Tupper/Andelt/Cummings/Weisner/Harness, Nat'l Wildlife Research Ctr, Colorado State University, Brooks Mfr.*

Self-Mitigating Protection for Pipeline Crossings In Degraded Streams: A Case Study From: Woodard Creek, Washington - *Abbe/Aubele/Miller/Blanton, ENTRIX Environmental Consultants/Northwest Pipeline GP*

**4:00 PM – 4:20 PM**

Geohazard Integrity Management System for Operating Pipelines – *M. Leir, BGC Engineering*

Cost-Benefit Analysis of Various Dewatering Methods used on Pipeline Projects – *D. Beno, Bonestroo*

Pipeline Rights-of-Way Issues: Positive Effects of Creative Construction Mitigation Strategies - *B. Booth, TransCanada*

**4:20 PM – 4:40 PM**

Lead-Based Paint: a Systematic Approach to Managing Potential Soil Contamination on Transmission Line ROW – *Howard/Stokes/Erdmann/Smith, American Transmission Co., LLC.*

Proactive Management of Pipeline Construction: National Energy Board of Canada's Approach – *K.Colosimo, NEB Canada*

Screen Plantings for Substations and Other ROW Facilities – *F. Ferrandiz, National Grid*

**5:00 PM – 6:00 PM**

WINE & CHEESE POSTER SESSION RECEPTION, Lloyd Center Ballroom, First Floor  
 See Poster Listing, Page 3

# Educational Sessions - continued

Tuesday, September 29

	Mt. Hood - Second Floor <b>Integrated Vegetation Management</b>	Mt. St. Helens - Second Floor <b>Wetlands</b>	3 Sisters/Mt. Bachelor - Second Floor <b>People and Facility Interaction</b>
<b>8:30 AM – 8:50 AM</b>	IVM and the Wire-Border Method on an Electric Transmission ROW in Central Pennsylvania: Longterm Effects on Flora and Fauna – <i>R. Yahner, Penn State University</i>	Important Considerations for Utility ROW Selection, Routing and Vernal Pool Management – <i>Donohue/Tyrrell/Doyle, TRC Environmental Corp./Spectra Energy</i>	Aesthetic and Planting Design Criteria to Improve Residents of a new Type of Effective and Economic Highway Acoustic Barrier for Narrow ROW – <i>Dagenais/Froment/Roberge/Koudachkina/Durocher/Caya/Clémen - University of Montreal</i>
<b>8:50 AM – 9:10 AM</b>	Outside ROW Tree Risk Along Electrical Transmission Lines – <i>Guggenmoos/Sullivan, National Grid</i>	A Statistical Comparison of National Wetlands Inventory and Field Delineated Wetland Data for Linear Utility Projects – <i>Lake/Benefiel, Natural Resource Group</i>	Mitigation of Powerline Maintenance Activities on Gable Mountain, a Native American Sacred Area on the Hanford Reservation, Washington State – <i>B. Erickson, Bonneville Power</i>
<b>9:10 AM – 9:30 AM</b>	Modeling of Vegetation Dynamics to face the Reliability Challenge at the Span Level – <i>Turgeon/Sarthou/Gauthier, Hydro-Quebec TransEnergie</i>	Using Databases to Manage Wetland Data for Large Linear Projects – <i>Hammer/Arndt/Leppert, Natural Resource Group</i>	Managing and Maintaining Environmental Compliance on Pipeline Projects in Urbanized Areas – <i>Kruger/Hoeting, Parsons</i>
<b>9:30 AM – 9:50 AM</b>	Noxious Weed Control on Two Utility ROW: Ten Years Comparison and Contrast. – <i>Beaver/Larsen/Trainor/Hollow, WESTECH</i>	Recent Developments in Wetland Mitigation Regulations and Implications for ROW Development and Management – <i>Doherty/Arndt, Natural Resource Group</i>	Third Party Agricultural Monitoring Program – A Case Study of Construction of a Dual Pipeline Expansion Project in Wisconsin – <i>D. Beno, Bonestroo</i>
<b>9:50 AM – 10:10 AM</b>	Implications of Global Climate Change on Powerline Corridor Vegetation Management: Literature Review and Field Observations in New York State – <i>Treyger/Nowak, SUNY ESF</i>	A Method for Qualitative and Quantitative Assessment of Wildlife Habitat along Linear Utility Corridors – <i>Kelly/Lake/Thommes/Young, Natural Resource Group</i>	Hazard Tree Analysis and Mitigation Project – <i>C. Layton, WMECO</i>

**10:10 AM – 10:30 AM**

BREAK ON THE EXHIBIT FLOOR (Lloyd Center Ballroom - First Floor) Sponsored by:



	<b>Integrated Vegetation Management</b>	<b>Wildlife</b>	<b>People and Facility Interaction</b>
<b>10:30 AM – 10:50 AM</b>	Performance of IVM on Powerline Corridors Across the United States – <i>Nowak/Goodrich-Mahoney, SUNY ESF/EPRI</i>	An Avian Protection Plan for Utility ROW Management – <i>Best/Money, Pacific Gas &amp; Electric Company</i>	Camouflage of power lines to reduce visual impacts and enhance public acceptance – <i>N. Henrik Johnson, Norwegian Water Resources and Energy Directorate</i>
<b>10:50 AM – 11:10 AM</b>	Regional Vegetation Management Best Practices Case Studies – <i>R. Johnstone, IVM Partners</i>	Herpetofauna use of riparian buffer zones in high voltage powerline ROW in deciduous forests of Québec. – <i>Rioux/Bérubé/Larose/Doucet, GENIVAR/Hydro-Québec TransEnergie</i>	Crossing Organic Farms: An Overview of Measures Required for Pipeline Construction Projects – <i>Johnsen/Bohnenblust, Natural Resource Group</i>
<b>11:10 AM – 11:30 AM</b>	Detection of Rare, Sensitive, and Previously Unmapped Wetland Areas: the Tennessee Valley Authority Wetland Review Process used in Siting and Maintenance of Transmission Line ROW – <i>Dimick/Awl/Hankins/Nabors, Tennessee Valley Authority</i>	Marine Mammal Protection During Construction of Offshore Pipelines in New England – <i>Tyrrell/McLachlan/Barkaszi, TRC Environmental Corp/Spectra Energy/ECOES Consulting</i>	Vaudreuil-Soulanges Substation and Power Line Project. A Challenging Site in an Urban Setting and Wetlands Area – <i>J. Hebert, Hydro-Québec</i>
<b>11:30 AM – 11:50 AM</b>	Sustainability as the Guiding Principle for Vegetation Management on ROW – <i>C. Nowak, SUNY ESF</i>	Spatial Modeling Monk Parakeet Distributions on Electric Utility Structures from 2001-2006/2007 in Broward and Dade Counties, FL – <i>Forcey/Newman/Lindsay, Pandion Systems/Florida Power and Light</i>	Portable Bridges Installed to Reduce Environmental Impacts – <i>W. Whittlesey, Jr., Pacific Gas &amp; Electric Co.</i>

**12:00 PM - 1:15 PM**

LUNCH - WITH EXHIBITORS (Lloyd Center Ballroom - First Floor)

	<b>Integrated Vegetation Management</b>	<b>Wildlife</b>	<b>Erosion</b>
<b>1:20 PM – 1:40 PM</b>	Tree Growth Regulators as a Tool in our IVM Program on ROWs – <i>Massey/Money, Massey Consultants/Pacific Gas and Electric Co.</i>	Testing the Effectiveness of the Colombian designed bird flight diverters – <i>S. De La Zerde, Interconexión Eléctrica</i>	Emergency Erosion Control Work Under a Critical 500kV Transmission Line – <i>E. Magrini, Pacific Gas and Electric Co.</i>

# Educational Sessions - continued

Tuesday, September 29

	Mt. Hood - Second Floor <b>Integrated Vegetation Management</b>	Mt. St. Helens - Second Floor <b>Wildlife</b>	3 Sisters/Mt. Bachelor - Second Floor <b>Erosion Control</b>
<b>1:40 PM – 2:10 PM</b>	Tree Seedling Establishment in a Power line ROW: Relative Influence of Seed Dispersal, Environmental Factors and Vegetation cover – <i>Brisson/Fontaine/Boivin/Gauthier/Bouchard, Université de Montréal/TransEnergie</i>	Presentation to be determined	Utilizing Standardized Environmental Construction Practices to Reduce Environmental Impacts on Linear Transmission Line Projects in the Midwest – <i>Kozisek/Stokes American Transmission Co, LLC</i>
<b>2:10 PM – 2:30 PM</b>	ROW Revegetation Performance Criteria: Successes, Challenges, and Permitting Implications – <i>J. Beaver, WESTECH</i>	Habitat Fragmentation effects on Grasslands by Vertical Structures such as Transmission Lines – <i>Pruett/Ball, The Nature Conservancy/ Edison Electric Institute</i>	Predicting Percent Yield Loss On Post-Construction Pipeline ROWs – <i>Duncan/Wesley/Meinke, Key Agricultural Services, Inc.</i>
<b>2:30 PM – 2:50 PM</b>	Electric Transmission ROW Reclamation – A Joint Project – <i>M. Frizzell, Sacramento Municipal Utility District</i>	Sprague's Pipit Research Project: Spring/Summer 2009 – <i>L. Pittaway, TERA Environmental Consultants and Enbridge Pipelines Inc.</i>	BEMP for Pipeline Construction: A Western Canadian Perspective – <i>T. Petter, TERA Environmental Consultants</i>

**2:50 PM – 3:20 PM**

BREAK ON THE EXHIBIT FLOOR (Lloyd Center Ballroom - First Floor) Sponsored by:



	<b>Cultural Resources Management</b>	<b>Routing/Siting</b>	<b>Geographic Information Systems</b>
<b>3:20 PM – 3:40 PM</b>	How does Cultural Resources Legislation impact ROW Planning? – <i>Ketz/Ketz, The 106 Group Ltd.</i>	Influence of Wind – Southwest Minnesota Wind Transmission Line Development – <i>Piner/Rasmussen/Bissonnette, HDR Engineering, Inc.</i>	Assessing Soil Characteristics and Limitations along Pipeline Rights-of-Way using GIS Spatial and Attribute Data Integration and Management – <i>Arndt/Flannery, Natural Resource Group</i>
<b>3:40 PM – 4:00 PM</b>	Multi-State Greenfield Utility Corridors: Meeting the Cultural Resources Challenge Through NEPA and NHPA – <i>Demuth/Ranzetta, ENTRIX, Inc.</i>	Least-Impact ROW Siting Methodology Alberta Case Study – <i>Holmes/Squire, TERA Environmental Consultants</i>	TVA Natural Heritage Database and GIS tools in the Conservation of Threatened and Endangered plant species in Transmission Line ROW – <i>A. Dattilo, Tennessee Valley Authority</i>
<b>4:00 PM – 4:20 PM</b>	Cultural Resources Management Strategies for pipeline ROW Siting and Permitting – <i>J. Bloemker, Williams Gas Pipeline Transco/URF</i>	Routing Offshore Pipelines in New England – Challenges, Influence on Construction Method Selection, Stakeholders Input and Unique Variability – <i>Tyrrell/McLachlan/Gourgeot, TRC Environmental Corp/Spectra Energy/ Project Consulting Services</i>	Utilizing GIS Geodatabase Technology for Efficient and Dynamic ROW Management – <i>Khitrik/Breier, Gomez and Sullivan Engineers, P.C.</i>
<b>4:20 PM – 4:40 PM</b>	5000-Mile Cultural Resource Survey in Arizona: A Proactive Approach to Managing Cultural Resources in Transmission ROW Corridors – <i>J. Shumaker, Arizona Public Service</i>	Applying a Scenario Modeling Approach with ALCES® for Pipeline Cumulative Effects Assessment: TMX-Anchor Loop Project, Jasper National Park, Canada – <i>Antoniuk, Smith, Salmo Consulting/ TERA Environmental Consulting</i>	APS Transmission Vegetation Management State Wide Project: APS realizes multiple infrastructure management benefits from an aerial survey of its ROW, transmission lines and facilities – <i>Neal/Moore, Arizona Public Service</i>
<b>4:40 PM – 5:00 PM</b>	Cultural Resources outside the Federal Regulatory Environment – <i>Justin/Madson, HDR Engineering</i>	EPRI-GTC Transmission Line Siting Methodology – <i>J. Glasgow, Photo Science</i>	Comprehensive GIS System to Streamline Regulatory Requirements along Transmission ROW – <i>T. Murphy, Aspen Environmental</i>

Wednesday, September 30

	Mt. Hood - Second Floor <b>Restoration</b>	Mt. St. Helens - Second Floor <b>Project Planning</b>	3 Sisters/Mt. Bachelor- Second Floor <b>Wildlife</b>
<b>8:30 AM – 8:50 AM</b>	Effective Environmental Mitigation Measures of Gas Pipeline Constructions ROW: Experienced & Lessons Learned from Thailand – <i>Yaowalak/Artit/Sawate/Kitipon/Penrug, PTT Public Company Limited</i>	Environmental Protection Planning for Pipeline Abandonment: A Case Study of an 80+ Year Old Southern Alberta Pipeline – <i>Kunicky/Swanson, TERA Env. Consultants</i>	Migratory Bird Treaty Panel Session will be held from <b>8:30 AM – 11:40 AM</b>
<b>8:50 AM – 9:10 AM</b>	Effects of Wood Chips on Revegetation Following ROW Clearing and Construction – <i>Walden/Carroll, BSC Group</i>	Transmission lines Impacts and Benefits – <i>J. Pruet, The Nature Conservancy</i>	Panel Details - continue to Page 8

# Educational Sessions - continued

Wednesday, September 30 - continued

	Mt. Hood - Second Floor <b>Restoration</b>	Mt. St. Helens - Second Floor <b>Project Planning</b>	3 Sisters/Mt. Bachelor- Second Floor <b>Wildlife</b>
<b>9:10 AM – 9:30 AM</b>	Restoration Vegetation Establishment Challenges at a Unique Site on Kinder Morgan's TMX Pipeline through Jasper National Park – <i>Schultz/Stevenson/Fryer, TERA Environmental Consultants/Salix Environmental Services</i>	Presentation to be determined	Migratory Bird Treaty Panel Session will be held from <b>8:30 AM – 11:40 AM</b>
<b>9:30 AM – 9:50 AM</b>	National Energy Board of Canada's Approach to Reclamation of Pipeline ROW – <i>K. Lien, National Energy Board</i>	Integrating the Migratory Bird Treaty Act into Linear Energy Project Planning – <i>Paul Schmidt, US Fish and Wildlife</i>	8:30-8:50 Introductory presentation Stu Buchanan
<b>9:50 AM – 10:10 AM</b>	Application of North American Environmental Best Management Practices for Pipeline Stream Crossings in the Russian Far East – <i>Hamilton/Bröker/McLeod/Lowings, Golder Associates Ltd.</i>	Planning and Permitting a 36" Pipeline through a UNESCO World Heritage Site: Jasper National Park and Mount Robson Provincial Park, Canada – <i>Smith/Mears, TERA/Kinder Morgan Canada</i>	8:50-9:10 USFWS perspective: Jeff Gosse
			9:10-9:30 Overview of The MBCA Katia Opalka
			9:30-9:50 APLIC overview and progress Peggy Jelen
			9:50-10:10 Introductory panel members statements

**10:10 AM – 10:40 AM**

BREAK ON THE EXHIBIT FLOOR (Lloyd Center Ballroom - First Floor) Sponsored by:



**10:40 AM – 11:00 AM**

Potential opportunity for Adoption of a Closed Chain of Custody System for Herbicides Used in the Utility Vegetation Management Industry – *J. Goodfellow, BioCompliance Consulting, Inc.*

Working Successfully with Regulators to Develop and Implement Rare Species Management Procedures – *M. Anderson, GRAEF*

10:40 -11:40 Panel Discussion  
Panelists:

**11:00 AM – 11:20 AM**

Evaluation of Stream Crossing Construction Methods and Temporal Considerations for Pipeline Construction – *S. Knabe, Bonestroo*

Taming The Wild Side: Invasive Species Resources – *D. Moorhead, University of Georgia*

Stu Buchanan (Moderator), Natural Resource Group  
  
Karen Etherington, TransCanada  
  
Carmen Holschuh, Westland Resource Group

**11:20 AM – 11:40 AM**

The Effect of the Installation of Submarine Cables on the Growth of Eelgrass in Foreshore Areas in British Columbia, Canada – *W. Poirier, BC Hydro*

Paul Schmidt, US Fish & Wildlife Service  
  
Medha Kochhar, FERC  
  
Peggy Jelen, Avian Power Line Interaction Committee

**11:50 AM – 12:50 PM**

LUNCH - WITH EXHIBITORS (Lloyd Center Ballroom - First Floor)

**1:00 PM – 1:20 PM**

Have you ever known regulations to loosen up? How this trend in Vegetation Regulations affects you and your company. - *Heffley/Shankland, GeoDigital Intl.*

**Wildlife**

Short Course from the Avian Powerline Interaction Committee will be held from **1:00 PM – 3:00 PM** – *Best/Jelen*

Stakeholder Engagement and Public Outreach Panel will be held from **1:00 PM – 3:00 PM**

**1:20 PM – 1:40 PM**

Mitigating the Environmental Impact of Compliance with NERC FAC-003-1; a Working Methodology for Intelligent Vegetation Hazard Detection using Aerial LiDAR Technology – *Ferguson/Lee/Richardson/Ryder, Network Mapping*

Carey Johannassen (Moderator), Enbridge

**1:40 PM – 2:00 PM**

Growing Concerns: Vegetation Inspection - Innovative technical advancements reduce time and money to meet NERC regulations increasing ROI over traditional methods of inspection – *Jenkins/Shankland, GeoDigital Intl.*

Doug Sipe, FERC

Kevin O'Connor, Natural Resource Group

**2:00 PM – 2:20 PM**

APS Initiates a Programmatic Project within its Service Territory – *Neal/Paulsen, Arizona Public Service*

Susan Waller, Spectra

Art Cunningham, Trans Canada Pipelines

Michael Benson, The National Energy Board