Technical Program

Monday, August 30

7:00 - 8:00 a.m.	**Student Breakfast** (Castle Peak III)
7:00 a.m. – 5:00 p.m.	**Registration** (Conference Center Lobby)
7:00 a.m. – 5:00 p.m.	**Speaker Ready Room** (Castle Peak II)
7:30 – 9:30 a.m.	**Plenary Breakfast & Order of the Engineer Ceremony** (Red Peak/Shavano Peak)
8:00 a.m. - 5:00 p.m.	**Student Tech Presentations & Speed Networking** (Castle Peak III)
9:30 – 10:00 a.m.	**AM Networking Break in the Exhibit Hall,** *Sponsored by:* Insituform
9:30 a.m. – 5:00 p.m.	**Exhibit Hall Hours**

Track A **Infrastructure Assessment / Monitoring** Chair: John Galleher, P.E., M.ASCE *Crestone Peak I*	Track B **Infrastructure Assessment / Monitoring** Chair: Mike Kenny, Aff.M.ASCE *Crestone Peak II*	Track C **Construction** Chair: Rick Deremiah, P.E., M.ASCE *Crestone Peak III*	Track D **New and Emerging Technology** Chair: Tim Kennedy, P.E., M.ASCE *Crestone Peak IV*	Track E **Design** Chair: Rich Mielke, P.E., M.ASCE *Torreys Peak III* *Sponsored by:* AECOM	Track F **Planning** Chair: Ralph Carpenter, M.ASCE *Torreys Peak IV*
10:00 – 11:30 a.m.	**Technical Sessions—1**				
Moderator: Joe Castronovo *Failure of Cement-Mortar Lining in 144-Inch ID Pipeline* **Michael McReynolds** *Use of Surface Potential and Other Electrical Measurements for Corrosion Assessments of Large-Diameter Transmission Pipes* **Steve Fox** *Advances in CCTV Technology for In-Service Water Mains* **Kevin Laven**	**Moderator: Ken Lowrey** *Emergency Action Plan for Failed Pipelines: A Proactive Solution* **Gregory Henry** *Measurement and Analysis of PCCP Wire Breaks, Slips, and Delaminations* **Graham Bell** *Live Inspection of Large-Diameter PCCP Using a Free-Swimming Tool* **Xiangjie Kong**	**Moderator: Sam Arnaout** *Rapid Emergency Pipeline Repairs Utilizing CFRP* **Anna Pridmore** *Steel Selection and Pipe Fabrication Challenges of a 120-Inch-Diameter High-Strength-Steel Tunnel Liner Project* **Henry Bardakjian** *Lessons from an HDD Project That Was Awarded for $ 1.74 Million with 90 Days to Complete and Took in Excess of 6 Million and More Than 1,000 Days* **Dr. Jey Jeyapalan**	**Moderator: Jim Tully** *An Assessment of the Performance of Corrugated HDPE Pipe in Shallow Fills Under Railroads* **Michael Pluimer** *GIS Asset Management of New Capital Projects* **Brian Foredyce** *Transient Pressure Monitoring Program – Nacimiento Water Project* **Will Worthington**	**Moderator: Rusty Gibson** *National Survey of Current Practices on Trench Bedding, Backfill, and Shoring* **Randy Hill** *Understanding Pipe Standard Specifications and Their Applications* **Xiangquan Li** *Pipe Zone Bedding and Backfill: A Flexible Pipe Perspective* **Brent Keil**	**Moderator: Kevin Meador** *Innovative Design of Large-Diameter Fittings for the Lake Fork Interconnect Vault* **Robert Card** *Design and Construction of the Lake Fork Pipeline* **Albert C. Petrasek** *Plan, Finance, Design & Deliver: How to Implement a Citywide Sanitary Sewer Improvement Program* **Robert Carley**
11:30 a.m. – 1:00 p.m.	**Lunch in the Exhibit Hall** (Columbine Ballroom)				
1:00 – 2:30 p.m.	**Technical Sessions—2**				
Moderator: Andy Romer *Process for Evaluating Sanitary Sewer Pipe and Manhole Condition Assessment Data* **Richard Nelson** *Pipe Wall Evaluation Using Acoustic Pulses* **Vinh Nguyen** *Establishing an Evaluation Matrix for Condition Assessment of Water Mains* **Andrew Hunt**	**Moderator: Ken Lowrey** *Damage Identification Based on Vibration Response of Prestressed Concrete Pipes* **Ali Alavinasab** *Detecting Deteriorating Thinning PCCP Pipe Mortar Coating* **Paul Fisk** *Condition Assessment of 108-Miles of Water Transmission Laterals* **Alison Ratliff**	**Moderator: Sam Arnaout** *Experimental Investigation of the Effect of Microfibers on the Tensile and Flexural Strength of Low-Viscosity Grouts* **Md. Alam** *Pipe Joint Integrity: Cementitious and Metallic Pressure Pipes* **Roger Beieler** *Joint Integrity of Plastic Pressure Pipes in Municipal Service* **Shah Rahman**	**Moderator: Bob Walker** *Advancements in FRP Repair of Prestressed Concrete Cylinder Pipe (PCCP)* **Rudy Loera** *Testing and Evaluation of a New Potable Water Pipe Renewal Product* **Mohammad Najafi** *Lateral Loading Experiment on Buried Pipe Using Liquefied Stabilized Soil as Backfill Material for Thrust Restraint* **Satoshi Okuno**	**Moderator: Rafael Ortega** *Directional Drilling Design with ASTM F1962: A Decade of Success* **Larry Petroff** *Maxi-HDD Pull Loads for Non-Level Grade for Polyethylene Pipe* **Lawrence Slavin** *Trenchless Crossing of the South Platte River: A Case Study in Risk Management* **Aaron T. Burns P.E., M.ASCE**	**Moderator: Andrew Sneed** *City of Modesto Takes a Proactive Approach to Avoid Sanitary Sewer Spill in Dry Creek Constructing the Dry Creek / El Rio Sewer System* **Larry Tolby** *A Successful Strategy for Environmental Permitting of an Aggressively Scheduled Major Water Supply Project* **Sadie Russo** *Planning, Design, and Construction of the Central Utah Water Conservancy District Water Development Project – CWP Pipeline* **Stanley Postma**
2:30 – 3:00 p.m.	**PM Networking Break in the Exhibit Hall,** *Sponsored by:*				

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3:00 – 4:30 p.m.	**Technical Sessions—3**				
Moderator: Randy Randolph *Detecting Wire Breaks from the Outside of PCCP* **Allison Biggar** *Prestressed Concrete Cylinder Pipe Decay* **John Marshall** *Predictability and Preventability Indices for PCCP Water Mains* **S.K.Sinha**	**Moderator: Shah Rahman** *Application of Decision Support Models in Asset Management of Sewer Networks* **Huu Tran** *Head-to-Head Comparison of Large-Diameter Leak Detection methods in Denver, Colorado* **Matt Turney** *Condition Asssessment of a Pre-Stressed Concrete Cylinder Pipe While in Service* **Mike Larsen**	**Moderator: Jason DeLaet** *One Project, Four Trenchless Methods* **Marc Gelinas** *New Application for Fiber Wrap Strengthening of Buried Pipelines* **Anis Somani** *Implementing an Aquifer Storage and Recovery Project* **Robert Beamer**	**Moderator: Joel Olmos** *Innovative Application of Leak Detection Technology on a Combined Sewer System* **Bryon Livingston** *Field Demonstration of Innovative Leak Detection/Location Technologies in Conjunction With Pipe Wall Thickness Testing For Water Mains* **Lili Wang** *Field Demonstration of Emerging Pipe Wall Integrity Assessment Technologies for Large Cast Iron Water Mains* **Lili Wang**	**Moderator: Warren Green** *Pipeline Appurtenance Alternatives* **Jody Henry** *Design and Specification of Bolted Flange Joints in Water/ Wastewater Practice* **John Plattsmier** *Mechanical Property Changes in Steel During the Pipe Making Process* **Brent Keil**	**Moderator: Charles Marsh** *Extending the Life of Iron Pipe in Corrosive Soils* **Dale Lindemuth** *Raw Sewage Through Steel Pipe: A Unique Application on the Pima County Plant Interconnect* **Jaime Rivera** *The Logistics of Large-Diameter Waterline Shutdowns* **Melissa Henderson**

Tuesday, August 31

7:00 – 8:00 a.m.	**Continental Breakfast in the Exhibit Hall** (Columbine Ballroom)
7:00 a.m. – 5:00 p.m.	**Registration** (Conference Center Lobby)
7:00 a.m. – 5:00 p.m.	**Speaker Ready Room** (Castle Peak II)

8:00 – 9:30 a.m.	**Technical Sessions—4**				
Moderator: Heath Carr *Polyethylene Encasement for External Corrosion Control for Iron Pipelines – A Fifty Year History* **Allen Cox** *An Unexpected Christmas Present – Failure of a 48-Inch Water Line* **James Crook** *Asset Management of a Failing 36" Ductile Iron Sewage Force Main* **Paul Noran**	**Moderator: Randy Hill** *Condition Assessment of In-Service Ferrous Mains* **Kevin Laven** *Alternatives for Condition Assessment of Small Diameter Sewage Force Main* **Dan Ellison, PE, M.ASCE** *Laboratory Investigations of Corrosion Mechanisms and Control for Ductile Iron Pipe in Simulated Polyethylene Encasement (AWWA C105)* **Julie Bell**	**Moderator: Kevin Brown** *P.I.P.E. Solutions of the South Mainland Water Transmission Main* **Tom Kleppe** *Protecting Existing PCCP Subject to External Transient Loads* **James Johnson** *Managing Challenges Building the Aurora Prairie Waters Project* **Mark Smith**	**Moderator: Richard Nichols** *Experimental Research on Ductile Iron Pipes with Rubber Gasketed Joints* **Han Yang** *Numerical Modeling of Flow Around Pipe Line in Currents* **Abolghasem Pilechi** *HDD Crossing of Lake Austin Generates Data and New Model for Calculating Pull Force for Ductile Iron Pipe* **Ralph Carpenter**	**Moderator: Brent Keil** *Collecting and Converting 2-D Utility Mapping to 3-D* **James Anspach** *Seismic Design of Ring Girders* **Christian Sundberg** *Seismic Design of Ring Girders (2 of 2)* **Christian Sundberg**	**Moderator: Andy Cronberg** *Establishing an Evaluation Matrix for Water Main Rehab* **Rafael Ortega** *Managing Project Budget Expectations Through the Monitoring and Reporting of Pipeline Material Costs* **Troy Matsuura** *Applicability of Restrained Joint PVC Pipe in Horizontal Directional Drilling* **Abhay Jain**
8:00a.m. - 5:00 p.m.	**Student Tech Presentation & Job Fair** (Castle Peak IV)				
9:30 – 10:00 a.m.	**AM Networking Break,** *Sponsored by:* PARSONS BRINCKERHOFF				
7:00 a.m. – 3:30 p.m.	**Exhibit Hall Hours** (Columbine Ballroom)				

Tuesday, August 31

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10:00 – 11:30 a.m.	**Technical Sessions—5**				
Moderator: Graham Bell *Condition Assessment of Pressure Water Mains – Is it Worth Doing ?* **Philip Ferguson** *Implementation of a Risk-Based Asset Management Program; Aurora Water's Story* **Gregory Chol, P.E.** *Measuring Energy Efficiency of Water Utilities* **Leon Gay**	**Moderator: Walt Schwarz** *Acoustic Wall Thickness Assessment of Large-Diameter Mains* **Angie Wu** *Structural Condition Assessment for Long-Term Management of Critical Sewer Pipelines* **Sandra Rolfe-Dickinson** *Leading the Way: the Washington Suburban Sanitary Commission's Comprehensive PCCP Management Program* **Travis Wagner**	**Moderator: Scott Allen** *Interceptor Construction in Urban Areas – How Aurora Managed Competing Interests Through Considerations of Constructability and Routing* **Jacqueline Wesley** *Twenty-One Foot Flexible Pipe - Design* **Amster Howard** *Twenty-One Foot Diameter Flexible Pipe – Construction* **Randy D. Randolph**	**Moderator: Russ Weber** *Super Laminates: The Next Generation of Carbon FRP Products for Repair of Pipelines* **Mo Ehsani** *Targeted HDD Design Under Critical Structures to Reduce the Potential for Hydraulic Fracture* **Andrew Sparks** *Improved Flexible-Expansion Joint Design Simplifies Pipeline Protection* **Dennis Shumard**	**Moderator: Bob Card** *Historic Development Adds Challenge to Storm Drain Tunnel Under Railroad* **Nathan Soule** *Importance of Blowoffs and Design Considerations* **Ethan Ford** *Capacity Issues in CUWCD Aqueducts* **Nathaniel Jones**	**Moderator: Wayne Geyer** *How Reclaimed Water Makes Cents* **Clete Martin** *Understanding Your Manholes – Translating Inspection Data to Design* **Vinta Varghese** *Hydraulic Transient Modeling and Mitigation for a 100 Well – 146 MGD Aquifer Storage and Recovery System* **Christopher Ott**
11:30 a.m. – 1:15 p.m.	**Awards Luncheon and Bechtel Lecture** (Columbine Ballroom), *Sponsored by:* Hanson				
1:15 – 2:45 p.m.	**Technical Sessions—6**				
Moderator: Mark Holley *Bechtel Award Winner Presentation* *New Design Methods for Structural Rehabilitation of Rigid Pipes* **George McAlpine** *Update on the U.S.-China Collaborative Research Directions on Trenchless Technology and Critical Underground Infrastructure Issues* **Mohammad Najafi**	**Moderator: Randy Hill** *Pipeline Case Histories with 2D and 3D Underground Imaging* **Steven Dibenedetto** *Lessons Learned From the Goleta West Rehabilitation Program* **Bruce Corwin**	**Moderator: Mark Smith** *CSO Conveyances Project – Selection, Analysis, Design and Specifications with Multiple Competitive Pipe Materials* **Dr. Jey Jeyapalan** *Development and Construction of the Nation's Largest Water Main Rehab Project* **Michael Ambroziak**	**Moderator: Showri Nandagiri** *No-Dig Solution to Major Sewer Line in St. Louis* **William Shook** *Critical Factors to Consider in Designing and Implementing Effective Carbon Fiber Repairs of Pressure Pipelines* **Mark Geraghty**	**Moderator: Russ Snow** *Reduction of Damage and Hindrance to Wastewater Transmission Systems Caused by Air Pockets by Deployment of Air Valves* **Naftali Zloczower** *Pipe Bursting Repair of the City of Tallahassee Capital Circle 36-Inch Hobas Force Main* **Brian LaMay**	**Moderator: Ralph Carpenter** *Evaluation, Inspection, and Rehabilitation of a Major Storm Sewer in the City of Aurora, Colorado* **Joseph Kleiner** *Landfill Gas Pipeline Project Targets Significant Energy Savings for Milorganite Production* **Clay Tappan**
2:45 – 3:00 p.m.	**PM Networking Break,** *Sponsored by:* LinLay				

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3:00 – 4:30 p.m.	**Technical Sessions—7**				
Moderator: Graham Bell *Innovative Inspection of Critical Large-Diameter PCCP Pipelines Without Completely De-Watering and Under a River Crossing for Dallas Water Utilities* **Randall Payton** *Metropolitan Water District of Southern California PCCP Condition Assessment and Comparison and Blind Test of RFTC and P-Wave* **Pamela Harren** *Forensic Anaysis of Oxidative Embrittlement in Failed HDPE Potable Water Pipes* **Donald Duvall**	**Moderator: Walt Schwarz** *Safety And Waste Management Of Asbestos Cement Pipes* **Dunling Wang** *Condition Assessment Methods for AC Pipe and Current Practices* **Rudaba Chowdhury** *Acoustic-Based Condition Assessment of Asbestos Cement Water Transmission Laterals* **Marc Bracken**	**Moderator: Nate Soule** *Hueneme Outfall Confronts Unique Challenges in Horizontal Directional Drilling and Marine Construction for New Ocean Outfall* **Kristine McCaffrey** *Tunneling Saves Money and the Environment* **Thomas Kalkman** *Project Management Information Systems for Pipeline Design and Construction – PrairieNet* **Rod Brauer**	**Moderator: Jacob Sauer** *The Rehabilitation of a Crude Oil Cased Crossing by the Insertion of a Self-Monitoring Layered Thermoplastic Composite Pipe with High Pressure Capability: A Case Study* **Kyle Bethel** *Rehabilitation of High Pressure Pipelines by an Innovative New Self Monitoring Internal Reinforcement Technology* **Kyle Bethel** *Alignment Geohazard Evaluations Using Interactive GIS* **Mathew Francis**	**Moderator: Phil Ryan** *Surge Control – When and Where in the Life of a Pipeline System* **David McPherson** *Simplifying Diamond Fork System Hydraulic Operations* **Nathaniel Jones** *Design of the Colorado Ocean Relief Sewer Project* **Andrew Stanton**	**Moderator: Mike Gossett** *Baton Rouge, Louisiana Sanitary Sewer Overflow Program Conveyance Design Requirements* **Charles Jenkins** *Sanitary Sewer Rehabilitation Using Cured In Place Pipe (CIPP) in the City of Aurora: a Municipal Owner's Perspective* **Ronald Degenhart** *Development of Dynamic Deterioration Model for Sewer Pipes* **David Jeong**
6:00 – 10:00 p.m.	**Rocky Mountain Evening at Der Fondue Chessel,** *Sponsored by:* Schiff Associates, pure Technologies, CH2MHILL				

Wednesday, September 1

7:00 – 8:00 a.m.	**Continental Breakfast** (Conference Center Lobby)
7:00 – 11:30 a.m.	**Speaker Ready Room** (Castle Peak II)
7:00 a.m. – 2:00 p.m.	**Registration** (Conference Center Lobby)

8:00 – 9:30 a.m.	**Technical Sessions—8**				
Moderator: Shah Rahman *Trenchless Water Main Rehabilitation Design Considerations* **V. Firat Sever** *When to Intervene? Using Rates of Failure to Determine the Time to Shut Down Your PCCP Line.* **Mike Wrigglesworth** *PCCP Damage During Depressurization/ Pressurization Cycles* **Allison Stroebele**	**Moderator: Kyle Couture** *Use of Trenchless Technologies for a Comprehensive Asset Management of Culverts and Drainage Structures* **Baris Salman** *Large-Diameter RCP Condition Assessment Program – A Progressive Approach* **Mark Wade** *Interactive GIS Tools for Sewer Assessment, Sewer Rehabilitation and I/I Reduction* **John Schroeder**	**Moderator: Rick Lawhun** *General Services Contracting for Sewer Construction* **Walt Schwarz** *A Variety of Construction Methods and Pipeline Materials Help Create a New Sewer System* **John Correa** *Demanding HDD Installation of Fusible 24-Inch PVC Pipe Sets New Record* **Jerry Shae**	**Moderator: Mike Heitmann** *Experimental Evaluation of Soil Pipe Friction Coefficients for Fusible PVCTM Pipe* **Shaurav Alam** *FRP Repair of a Large-Diameter, Mile-Long Pipeline with Minimum Downtime* **Carlos Peña** *Performance of 120-Inch PressureCast™ Steel Pipe Under 120° Sand-Bearing and Installed Condition* **David Tantalean**	**Moderator: Tom Charles** *Contribution of Frictional Resistance to Restrain Unbalanced Thrust in Buried Pipelines* **K. Sri Rajah** *Thrust induced Movement of Pipe Bends for Differing Pipe Materials* **Stephen Shumaker** *Materials Handling During Utilities Construction in Areas of Known Soil and Groundwater Contamination* **Kay Dry**	**Moderator: Brian Dorwart** *"How Do You Spell Rehabilitation Success? - SSERP (A Program Approach to Comprehensive Wastewater Collection System Rehabilitation)"* **Bill Landin** *Integrated Decision-Support Framework for Municipal Infrastructure Assets* **Tarek Zayed** *Current Issues in the Rehabilitation of Water Mains* **Saumil Maniar**
9:30 – 10:00 a.m.	**AM Networking Break**				

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10:00 – 11:30 a.m.	**Concurrent Technical Sessions—9**				
Moderator: Myron Shenkiryk *Research and Development Needs for the Inspection of Pressure Pipelines* **Henry Derr** *Considerations for Selecting Conveyance System Performance Measures* **Reggie Rowe**	**Moderator: Doug Biglen** *Classifying Structural Condition of Deteriorating Stormwater Pipes Using Support Vector Machine* **Huu Tran** *Operations, Maintenance and Capacity Improvements to the Papillion Creek Interceptor Sewer; Omaha, Nebraska* **Kyle Tonjes** *Installation for a Large Diameter Reclaimed Water Transmission: Design and Construction Challenges* **Martin Rumbaugh**	**Moderator: Ryan Franks** *Design-Build of Wastewater Force Main in North Bay Village* **Ricardo Viera** *A Study On the Seismic Behavior of Buried Steel Pipelines Crossing Active Faults* **Vahab Bolvardi**	**Moderator: Matt Foster** *Analysis of Interaction Mechanism Between Slips and Drill Rod* **Biao Shu** *A Study on the Effects of Surface Transverse Waves on Buried Steel Pipelines Considering the Nonlinear Behavior of Soil and Pipes* **Mehrzad Tahamouliroodsari** *Installation of a Large-Diameter Reclaimed Water Transmission Main: Design and Construction Challenges* **Martin Rumbaugh** *Carbon Fiber Reinforced Polymer (CFRP) As a Long-Term Repair Solution* **William Sleeper**	**Moderator: John Bambei** *Knoxville Utilities Board Goose Creek Inverted Siphon Replacement* **Robert Cook** *Design Features of the Lake Powell Pipeline to Minimize Hydraulic Transients* **Jerry Waugh**	**Moderator: Randy Worden** *Dynamic Simulation for Optimal Facility Sizing as Part of the Eastern New Mexico Rural Water Supply Project* **Wendy Christofferson** *Adfreeze Behavior Between Chilled Gas Pipeline and Surrounding Frost Bulb* **Shunji Kanie** *Emergency Assessment and Repair of a Sanitary Sewer by Trenchless and Traditional Open-Cut Methods* **Juan Pulido**
12:30 – 5:30 p.m.	**Technical Tour - USBR Hydraulics and Materials Testing Laboratories,** *Transportation sponsored by:* BTC				
2:00 – 8:00 p.m.	**Golf Tournament (Optional)**				

Committee Meeting Schedule

Saturday, August 28, 2010

8:00 a.m. - 4:00 p.m.	Condition Assessment of the Sewer Collection System (Torreys Peak II)
8:00 a.m. - 5:00 p.m.	Pipe Bedding, Backfill and Trench Shoring System (BBT) (Crestone Peak III)
8:00 a.m. - 5:00 p.m.	Executive Committee (Boardroom)
9:00 a.m. - 5:00 p.m.	Thrust Restraint Design of Buried Pipelines (Day 1) (Crestone Peak IV)
12:00 - 2:00 p.m.	Pipelines 2010 Conference (Crestone Peak I)
1:00 - 4:00 p.m.	PINS Committee Meeting (Crestone Peak II)

Sunday, August 29, 2010

8:00 a.m. - 1:00 p.m.	MOP 108 - TIPS (Crestone Peak I)
8:00 a.m. - 5:00 p.m.	Executive Committee (Boardroom)
9:00 a.m. - 5:00 p.m.	MOP 79 - Steel Penstocks (Castle Peak IV)
9:00 a.m. - 12:00 p.m.	Trenchless Installation of Pipes (Crestone Peak II)
10:00 a.m. - 1:00 p.m.	Design Discussion on MOP Methods for the Renewal of Potable Water Pipelines (Castle Peak I)
1:00 p.m. - 7:00 p.m.	Water Pipe Condition Assessment (Crestone Peak I)
1:00 p.m. - 7:00 p.m.	Pipeline Planning & Design (Crestone Peak II)
1:00 p.m. - 5:00 p.m.	Thrust Restraint Design of Buried Pipelines (Day 2) (Crestone Peak III)
1:00 p.m. - 4:00 p.m.	Pipeline Location & Installation (Crestone Peak IV)
2:00 p.m. - 7:00 p.m.	MOP 108 - Microtunneling Standards (Castle Peak I)
3:30 p.m. - 5:30 p.m.	ASTM F36 (Torreys Peak I)
5:00 p.m. - 9:00 p.m.	Pipelines Research (Crestone Peak III)

Monday, August 30, 2010

8:00 a.m. - 12:00 p.m.	Construction Institute Board Meeting (Castle Peak IV)