### Session Information

**Oral Sessions**  
Sessions are being held in the Convention Center (CC) and Marriott Marquis (MM)

**Poster Sessions**  
Posters are on display in the following venue throughout the week: Hall A-C (Poster Hall)

### Session & Paper Numbering

Paper Numbers - A paper number designates the section, or other sponsoring group, and chronology of the presentation. Example: **A21A-01** = Atmospheric Sciences, Tuesday, AM, concurrent session A, first paper in that session.

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The program is current as of 05 December 2018. An omitted abstract ID number in the presentation order indicates that the abstract has been withdrawn by the presenter from the session. Please refer to the online program at [https://agu.confex.com/agu/fm18/meetingapp.cgi/Home](https://agu.confex.com/agu/fm18/meetingapp.cgi/Home) for updates.

### Monday A.M.

**PA11A  (MM) Marquis 3-4**

**Monday 0800h**

**Aligning the Technical Analysis to the Needs of a Decision Maker for Water Resources Planning Under Deeply Uncertain Futures I** *(joint with GC, H, SI)*

**Presiding:** Guillermo Mendoza, US Army Corps of Engineers; John Matthews, Alliance for Global Water Adaptation;

0800h **PA11A-01** Instationarity and time - the multiple challenges for deciding about adaptation: **H von Storch**

0810h **PA11A-02** Climate Change Risks Faced by the California Central Valley Water Resource System: **P A Ray**, S Wi, A M Schwarz, C Brown
0821h PA11A-03 The Evaluation of Climate Adaptation Investments: J Kucharski, E Batty
0843h PA11A-05 Glacier changes and its spatial differences in across country catchments at marginal Tibetan Plateau: Q Ye
0854h PA11A-06 Establishing a national water resources system model to inform policy decisions about resilience of water supplies: J W Hall, H Gavin, M Mortazavi-Nacini, J Dennis, P Hickey, J Spencer
0905h PA11A-07 Water Resource Planning Under Future Climate and Socioeconomic Uncertainty in the Cauvery River Basin in Karnataka, India: A G Bhave, D Conway, S Dessai, D A Stainforth
0916h PA11A-08 Navigating a Flood of Information: An Evaluation Framework for Integrating Climate Data and Uncertainty into Water Planning: G Persad, T Moran, J Christian-Smith, G Smith, L Szepytki
0938h PA11A-10 Learning from Ecosystem-Based Science and Management to Inform Water Resource Planning and Policy in a Changing Environment: F B Schwing, R S Pulwarty

PA11B (CC) eLighting Theater II

Monday 0800h

Communicating Science in the Social Media Age I eLightning (joint with ED, IN)

Presiding: Charles Perry, USDA Forest Service; Sudhir Shrestha, ESRI; Christopher Oswalt, USDA Forest Service;

0800h Introductory Remarks:
0801h PA11B-21 Communicating Science in the Social Media Age Utilizing Twitter, Facebook and a Digital Newsletter: H A Geller
0807h PA11B-23 Sharing the Scientific Process: Communications from an Icelandic Field Expedition: M L Wasser, N Whelley, C A Nixon, J A Richardson, P Whelley, J E Bleacher, D Ladd, N N Jones, L Shekhtman
0810h PA11B-24 Sharing Your Scientific Research: Inform, Engage and Inspire Others with Your Story: C Menzel
0816h PA11B-26 Forests in Focus: Engaging Multinational Brands in Data-Driven Conservation Initiatives: C H Perry, C Oswalt
0822h PA11B-28 An Uncertainty Quantification Approach for Social Media Based Decisions: S Singh

0825h Concluding Remarks:

PA11C (CC) eLighting Theater II

Monday 0800h

Moving Science into Practice: Communicating, Implementing, and Informing Action eLightning (joint with ED)

Presiding: Justin Li, American Association for the Advancement of Science Washington DC; Brian Gray, American Association for the Advancement of Science Washington DC; Scott Sellars, American Association for the Advancement of Science Washington DC; Amina Schartup, Harvard University;

0800h PA11C: Communicating Science in the Social Media Age I eLightning Session:
0826h Introductory Remarks:
0827h PA11C-29 Experiments in the Practice of Communicating Science to Policymakers: The AAAS Center for Scientific Evidence in Public Issues: K Koizumi
0833h PA11C-31 Resilient infrastructure decisions: putting scientific and technical analyses in action for international development: J Lawson, M Tkach
0836h PA11C-32 Strategies from the Front Lines of Linking Science with Action: K Fallon Lambert, M Weiss, C T Driscoll, G M Lovett
0839h PA11C-33 Synthesizing and communicating ecosystem responses to air pollution for federal resource management: M D Bell, L H Pardo, C Clark, L Geiser, J A Lynch, W A Jackson
0845h PA11C-35 Pathway to Developing a Roadmap for Geothermal Research: R Rozansky, A McKittrick
0848h PA11C-36 Improving NOAA's transition of Research and Development through policy, programming, and performance management tools: L A Newcomb, I R Kroll, C S Moses, G C Matlock
0900h Concluding Remarks:

PA11D  (CC) Hall A-C (Poster Hall)

Monday  0800h
Climate Services Research and Development: Adapting to Climate Today Posters (joint with GC)
Presiding: Lisa Goddard, Columbia University of New York; James Buizer, University of Arizona; Lisa Vaughan, NOAA Ocean and Atmospheric Research;

0800h PA11D-0818 POSTER Regional Climate Change Adaptation Policy Network in Southeast Florida: T L Kirby, A I Henry, J Bolson, M C Sukop
0800h PA11D-0820 POSTER The ENACTS Approach: Transforming Climate Services in Africa, One Country at a Time: T Dinku

PA11E  (CC) Hall A-C (Poster Hall)

Monday  0800h
Communicating Climate Change: Informing Politicians and Policy Makers Posters (joint with GC)
Presiding: Donald Wuebbles, University of Illinois at Urbana Champaign; Robert Ward, London School of Economics; Bud Ward, Yale Climate Connections; Susan Hassol, Climate Communication;

0800h PA11E-0822 POSTER From USENET to Twitter the adventures Eli Rabettt: J B Halperrn
0800h PA11E-0823 POSTER Developing Congressional ocean acidification champions by sidestepping climate partisanship: S R. Cooley
0800h PA11E-0824 POSTER One hundred years of sea-level rise discussions in politics and media: F Baart, R de Winter, R Nicolai, M Haasnoot
0800h PA11E-0825 POSTER Beyond Dueling Experts: Communicating the Importance of Knowledge-Based Consensus to Policymakers: P Jacobs, J Cook, A Huertas

PA11F  (CC) Hall A-C (Poster Hall)

Monday  0800h
From a Moment to a Movement: Building Infrastructure to Sustain Scientist Engagement Posters
Presiding: Melissa Varga, Union of Concerned Scientists Washington DC; T. Zelikova, 500 Women Scientists; Timia Crisp, American Geophysical Union; Katherine White, Geological Society of America;

0800h PA11F-0827 POSTER Building Science Advocacy from the Grass Roots: Success Stories from the Heartland: M W Hamburger, A B Keller, S Vigdor, J T Londergan
0800h PA11F-0828 POSTER The Intersection of Science and Policy: Getting (and Keeping) Scientists Elected: P Zornio
0800h PA11F-0830 POSTER Establishing science as civic leadership in Colorado: how nurturing solidarity and social capital across institutions gets you a seat at the table: S Lichtin, E Cohen, E J Golden, M Druckenmiller, D Powers
0800h PA11F-0831 POSTER The Climate Science Rapid Response Team – A Effective Model for Engaging Media and Policymakers: S A Mandia, J P Abraham, M Ashley, J W Dash
0800h PA11F-0832 POSTER Bridging the Gap Between Scientists and Policymakers: AGU as a Resource: E A Landau, T A Crisp
0800h PA11F-0833 POSTER Incentives, Opportunities, and Success? AAAS Members’ Experiences Communicating with Policymakers: E T Cloyd, E Suhay
0800h PA11F-0834 POSTER From five to 500 to 50,000 - women scientists rise up.: T J Zelikova, K S Ramirez
0800h PA11F-0835 POSTER Science Rising: A Collaborative Approach to Mobilizing Scientists around the 2018 Mid-Term Elections: M Varga, M Heid
0800h POSTER We will have a discussion in a pod either before or after our poster session:
0800h PA11F-0837 POSTER Improving process representations in models: An exercise in scientific exploration or a societal need?: M Kumar, X Chen, B Seyednasrollah, T Zi, T E Link, B L McGlynn, J D Albertson
PA11G  (CC) Hall A-C (Poster Hall)
Monday  0800h
Interdisciplinary Perspectives on Drought and Drought Decisions Posters  (joint with B, GC, H)
Presiding: Aparna Bamzai, USGS North Central Climate Adaptation Science Center; Amanda Cravens, USGS Fort Collins Science Center; Dennis Ojima, Colorado State University; Adam Wilke, USGS Fort Collins Science Center;

PA11H  (CC) Hall A-C (Poster Hall)
Monday  0800h
Open-Source Energy Data and Modeling Posters  (joint with A, GH)
Presiding: Aaron Kressig, World Resources Institute; Johannes Friedrich, World Resources Institute; Sadie Cox, National Renewable Energy Laboratory Golden; Rajan Gupta, Los Alamos National Laboratory;

0800h  PA11H-0840 POSTER The AGCI Energy Table: A Comprehensive, Open-Access Reference for Global Energy Data: E Jack-Scott
0800h  PA11H-0841 POSTER Open Energy Infrastructure Data Through Automated Assessment Using Satellite Imagery: K Bradbury, J Malof, M A Jeuland, B Huang, B Wong, T Johnson, L Collins
0800h  PA11H-0843 POSTER Rapid Core Characterization: S R Brown, D Crandall, J Moore, P R Mackey, T Paronish
0800h  PA11H-0844 POSTER TEMBA, SAMBA and OSEME, the energy model bases for Africa, South America and EU-28 respectively. Included are individual open models of each country woven together to account for trade. We discuss key results and continental initiatives currently taking place to support teaching and capacity building for open source energy modelling and planning.: M I Howells

PA11I  (CC) Hall A-C (Poster Hall)
Monday  0800h
Planning for Extremes and Long-Term Change in the Built Environment: Scientist-Stakeholder Research and Engagement Posters  (joint with GC, NH)
Presiding: Caitlin Simpson, NOAA Washington DC; Claudia Nierenberg, NOAA; William Solecki, city university of new york - hunter college;

0800h  PA11I-0845 POSTER The NOAA RISA Program: Building a Culture of Resilience Underpinning Sustainable Economic Growth: S Bath, C Combset-Friedman, C F Simpson
0800h  PA11I-0847 POSTER Addressing Flooding and Sea Level Rise Risks in Collaboration with Communities in the Greater Charleston Metro Area: K Dow, S Watson
0800h  PA11I-0848 POSTER Vulnerability Assessment Tool for Cities Preparing for Climate Change: K Channell, M Stults, R Esselman, O Gates, P Gude, M Naud, J L Jorns
0800h  PA11I-0849 POSTER Integrated, Participatory Planning to Evaluate Coastal Resilience Investments in Jamaica Bay, New York: J R Fischbach, D Knopman, H Smith, P M Orton, N Moray, A Parris

PA11J  (CC) Hall A-C (Poster Hall)
Monday  0800h
Science in the News: Innovative Research and Programs to Improve the Quality and Quantity of Science Journalism Posters  (joint with ED, GC, SI)

0800h  PA11J-0850 POSTER Journalism collaborations and climate science: J Upton
0800h  PA11J-0851 POSTER A Study of the Geographic Variances in Water Salience using Local Newspapers: A Witte, G M Hornberger, T Gunda, J M Gilligan
0800h  PA11J-0852 POSTER Empowering Scientists, Media, and the Public to Stimulate Interest, Action, and Results: What Do We Know and What Don’t We Know?: J E Ballmann, B A Bartel, W Bohon
0800h  PA11J-0853 POSTER Getting Out of Comfort Zones: A Case Study in Science Communication Outlines Lessons Learned During Practical Experience Conducted With Undergraduate Communication Students Reporting About Science and Climate Change Issues for Their Journalism Courses at George Mason University (USA): C T Wenks, M D de Araujo Vianna, E Maibach
0800h  PA11J-0854 POSTER Learn Locally: Showcasing Local Scientific Research through Scientist-Science Writer Collaborations: G Serrato Marks, F Husain
0800h  PA11J-0855 POSTER RIS4E Science Journalism Program: N Whelley, I Bleacher, A P Jones, J E Bleacher, T D Glotch, K Young
0800h PA11J-0856 POSTER University of Oregon’s Media Center for Science and Technology: Reflections on opportunities for interdisciplinary science journalism training in higher education: H M Smith, M Blaine

0800h PA11J-0857 POSTER “I didn’t know how much I didn’t know”: Training journalists to cover scientific complexities yields positive changes in news coverage and multiplier effects: H M Smith, S Menezes

PA11K (CC) Hall A-C (Poster Hall)
Monday 0800h
Science to Action: Best Practices and Lessons Learned from Interdisciplinary Research II
Posters (joint with GC, GH, H, NH)
Presiding: Thushara Gunda, Sandia National Laboratories; Margaret Garcia, Arizona State University;

0800h PA11K-0858 POSTER Forest thinning in dry forests: improving the resilience of forest health and streamflow in the Pacific Northwest: R J Niemeyer, C Tague, J C Adam, C Schnepf, A B Perleberg, T T Nguyen

0800h PA11K-0859 POSTER Building a better model for self-organized snow: lessons from a computer/geoscience collaboration: K Kochanski, B Rountree

0800h PA11K-0860 POSTER Interdisciplinary Graduate Education in Water Resources: Successes and Challenges and a Case Study Research Project from an IGERT Program: A M Marshall, J Duffin, T E Link

PA11L (CC) Hall A-C (Poster Hall)
Monday 0800h
Working with Unusual Suspects at the Science, Policy, and Community Nexus Posters (joint with ED)
Presiding: Nicholas Weller, Arizona State University; Mahmud Farooque, Arizona State University; David Sittenfeld, Museum of Science;

0800h PA11L-0861 POSTER Back to Rio: Reinstate the Public in Public Participation in Global Environmental Governance: B Bedsted, M Farooque, Y Mathieu


0800h PA11L-0864 POSTER Mapping Public Values about Climate Adaptation and Resilience Using Deliberative Forums: N Weller, D Sittenfeld, E Hostetler, K Todd

0800h PA11L-0865 POSTER The Collaboratory to Advance Methane Science (CAMS): A New Scientific Framework to Rise to the Methane Challenge in the Oil and Gas Industry: K Wiley

0800h PA11L-0866 POSTER Science-policy Imaginaries to Tackle Complex Environmental Challenge of 21st Century: The Case of Global Deliberative Discussions on Climate and Energy: R Ghimire, N Chhetri, M Wagner, M Wang

0800h POSTER Discussion:

PA12A (MM) Marquis 3-4
Monday 1020h
Addressing Societal Challenges Through Science Diplomacy I
Presiding: Yekaterina Kontar, Tufts University; Ester Sztein, National Academy of Sciences;

1020h Introductory Remarks: E Sztein, Y Y Kontar
1021h PA12A-01 Science Diplomacy: The Next Ten Years: E W Colglazier
1029h PA12A-02 The Role of Geological Surveys in Addressing Societal Challenges Through Science Diplomacy: J N Ludden, M Smith
1037h PA12A-03 Science Diplomacy with Informed Decision-Making for Global-Local Sustainability: P A Berkman
1045h PA12A-04 Science Diplomacy for Resilience to Natural Disasters: the Italian Experience,(Dr. Stefano Lami, Science Counselor, Embassy of Italy, Washington DC): S I Moscheni
1053h PA12A-05 Training Next Generation Leaders to Address Societal Challenges Through Science Diplomacy: An Inclusive Approach: M B Burkins
1101h Discussion: E Sztein, E W Colglazier, J N Ludden, P A Berkman, S L Moscheni, M B Burkins
1120h PA12A-06 Ocean Science, Diplomacy, and Africa: Outcomes from a year in the life of the Science Envoy for the Ocean: K A Kryc, J Lubchenco
1128h PA12A-07 Arctic research and pragmatic science diplomacy: A perspective from the International Arctic Research Center: H Eicken, O A Lee, A L Lovecraft, V A Alexeev, I Polyakov
1136h PA12A-08 Opportunities and challenges of international scientific cooperation in the field of disaster risk reduction – experiences from IRDR, IPPC-SREX and concrete projects in post disaster regions: J Birkmann
1144h PA12A-09 GNSS Enhanced Tsunami Early Warning and the Role of Scientific Diplomacy: J L LaBrecque
1152h **PA12A-10** International Scientific Cooperation to Address Challenges Facing Society: **A Ismail-Zadeh**

1200h Panel Discussion: **Y Y Kontar**, K A Kryc, H Eicken, J Birkmann, J L LaBrecque, A Ismail-Zadeh

1219h Concluding Remarks: **Y Y Kontar**, E Sztein

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**PA12B**  
(MM) Marquis 1-2

**Monday  1020h**

**Integrating Socioeconomics and Governance into Studies of Food and Water Systems I (joint with GC, H, SI)**

**Presiding:** **Keyvan Malek**, Washington State University;  
**Kirti Rajagopalan**, Washington State University;  
**Jennifer Givens**, Utah State University;  
**Brian Chaffin**, University of Montana;

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1020h **PA12B-01** A Richter scale reveals the magnitude of global food disruptions: **M J Puma**, Y Wada, S Y Chon, B I Cook, J M Nordbotten

1035h **PA12B-02** Evaluating Prospects for Oil Palm Expansion Across Latin America: **E Benami**, P Furumo

1050h **PA12B-03** Exploring impacts of socioeconomic and climate change on agriculture and food to 2050 at global and regional scales: **K Wiebe**, D Mason-d’Croz, N Cenacchi, S Dunston, T Sulser

1105h **PA12B-04** Do water policies encourage or impede agricultural adaptation to climate variability? Integrating hydrology, remote sensing, and economics to model farmer decision-making in irrigated and dryland agriculture: **K M Cobourn**, X Ji, M P Maneta

1120h **PA12B-05** IIASA’s Water Futures and Solutions (WFaS) Initiative: A continental-scale hydro-economic model for integrating water-energy-land nexus: **Y Wada**

1135h **PA12B-06** Linking Global Crop Markets to Local Water Constraints: **I Haqiqi**
Monday P.M.

**GH13A  (MM) Independence F-H**

**Monday  1340h**  
Developing Climate, Public Health, and Citizen Science Services to Predict and Prevent Climate-Sensitive Health Risks and Serve the Public Good *(joint with GC, PA, SI)*  

*Presiding: Lisa Vaughan, NOAA Ocean and Atmospheric Research; Juli Trtanj, NOAA; Jeffrey Greenberg, Wheaton College; Jeff Morgan, Joint Research and Development (JRAD)*;  

1340h Introductory Remarks: J Trtanj  
1345h GH13A-01 The intersection between climate, health, and migration in Hawai‘i and the Republic of the Marshall Islands: V W Keener, L Brewington, M J Widlansky  
1355h GH13A-02 The development of climate-informed decision-support tools for the prevention and control of Aedes-borne diseases in the US and transboundary regions: A Munoz, M C Thomson  
1400h GH13A-03 Supporting health strategic planning through mosquito-abundance predictions: H E Brown, J Lega, B Roberto, M Roach  
1420h GH13A-04 Real time climate information for health-care early warning for Africa: W M Thiaw  
1445h GH13A-06 Using Global Seasonal Forecasts to Map Chikungunya Risk: R P Soebiyanto, A Anyamba, W M Thiaw, R Danoa, K J Linthicum  
1500h GH21C-1082 The International Science Council: Advancing Science as a Global Public Good: M B Burkins  
1515h GH21C-1083 The NIEHS Climate Change and Human Health Literature Portal: From Prediction to Prevention: T Castronio, K Thigpen Tart, J M Balbus, S Holmgren  
1527h GH21C-1085 Center for Leadership in Environmental Awareness and Research (CLEAR): Bridging the elements of ecology, health, education, and outreach in an urban context: C J Miller, B F O’Leary, D Kashian, I Guerra-Lopez  

1533h Discussion:  
1535h Concluding Remarks: J Morgan  

**PA13A  (MM) Marquis 3-4**

**Monday  1340h**  
Climate Services Research and Development: Adapting to Climate Today I *(joint with GC)*  

*Presiding: Lisa Goddard, Columbia University of New York; James Buizer, University of Arizona; Lisa Vaughan, NOAA Ocean and Atmospheric Research*;  

1340h PA13A-01 Bridging the Gaps between Science, Society and Policy: Institutional Innovations for Maximizing the Use of Climate Services in Coastal Bangladesh: S Ahmed, J L Buizer  
1350h PA13A-02 Adopting an Engaged, Holistic Approach to Identifying Climate Change Adaptation Needs in Localized Environments: A Blueprint for Interdisciplinary Success Between the Sciences and Social Sciences: J Eise, N White  
1400h PA13A-03 Climate service warnings: Cautions about producing and commercializing climate science for adaptation in the developing world: S D Donner, S Webber, K Findlater, M Kandlikar  
1415h PA13A-04 Climate Services for Clean Energy: L Lledó, I Jiménez, A Manrique-Suárez, V Tarralba, N González Reviriego, F J Doblas-Reyes, A Soret  
1420h PA13A-05 Bridging the methodological divide: A mixed methods approach for climate information service design, monitoring, and evaluation: E R Carr, S N Onzere, H M Rosko  
1450h PA13A-07 Assessing the Association between ENSO and Entomological Inoculation Rates in Kenya and Tanzania using ENACTs to Inform Malaria Prevention and Control Interventions: N Ganjian, M C Thomson, A Owusu  
1500h PA13A-08 Impacts of Climate Information on Coffee Farms in Jamaica: M Madajewicz, E Johnson, Z Guido
PA13B  (CC) Hall A-C (Poster Hall)

Monday  1340h

**Addressing Societal Challenges Through Science Diplomacy Posters**

*Presiding: Yekaterina Kontar, Tufts University; Ester Sztein, National Academy of Sciences;*

- **1340h** PA13B-0867 *POSTER* Sharing Geodetic Observations for Disaster Preparedness, Warning, Mitigation and Response: **L R Rowan**
- **1340h** PA13B-0868 *POSTER* A Diplomat's Perspective on Science Diplomacy: **J Kolker**
- **1340h** PA13B-0870 *POSTER* Science Diplomacy: Not an Add-on, but a Core Value: **W H Hooke**
- **1340h** PA13B-0871 *POSTER* International Organizations in Science Diplomacy: **G A Mcbean**
- **1340h** PA13B-0874 *POSTER* Geology, Theology, and Foreign Policy: Addressing Global Issues at the Intersection of Science, Religion and Foreign Affairs: **M W Hamburger**

PA13C  (CC) Hall A-C (Poster Hall)

Monday  1340h

**Aligning the Technical Analysis to the Needs of a Decision Maker for Water Resources Planning Under Deeply Uncertain Futures Posters** *(joint with GC, H, SI)*

*Presiding: Guillermo Mendoza, US Army Corps of Engineers; John Matthews, Alliance for Global Water Adaptation*

- **1340h** PA13C-0876 *POSTER* Constraining cryospheric contributions to streamflow through international collaborations and scientific capacity building: **F M Fetterer**, A M Wilson, R L Armstrong, M J Brodzik, A F Hill, R B Kayastha, A Racoviteanu, B R Armstrong, A P Barrett, J L Fluri, S J S Khalsa, A L Khan, H A Miller, C Minbaeva, B H Raup, K Ritter
- **1340h** PA13C-0878 *POSTER* Impact of Spatial Scale Choice on Informing Decision-Makers on Changing Characteristics of Rainfall in the United States: **T P Lopez-Cantu**, C Samaras

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PA13D  (CC) Hall A-C (Poster Hall)

Monday  1340h

**Behind the Scenes on the Front Lines of Science Communication: How Institutions Can Support and Reward Scientists Who Do Public Engagement Work**

*Presiding: Anne Jefferson, Kent State University Kent Campus; Tessa Hill, University California Davis; Melissa Kenney, University of Maryland College Park;*

- **1340h** PA13D-0880 *POSTER* Pathways to Diversity and Inclusion in the Geosciences: ASPIRE (Active Societal Participation in Research and Education): **C Garza**, J Parrish, L Harris, J Posselt
- **1340h** PA13D-0881 *POSTER* Promoting climate change outreach in an undergraduate atmospheric sciences program: **J Hanrahan**, J Shafer
- **1340h** PA13D-0883 *POSTER* Theories of institutional change: Integrating feminist philosophy into engagement, communication training, and structural support: **S E Myhre**
- **1340h** PA13D-0884 *POSTER* Collaborations with the Royal Society of Canada to Develop National-Scale Engagement Tools for Arctic Sustainability in Canada: **M R Turatsky**
- **1340h** PA13D-0886 *POSTER* Scientific society support for scientists working to build institutional capacity for public engagement: Examples from the AAAS Leshner Leadership Institute: **E T Cloyd**

PA13E  (CC) Hall A-C (Poster Hall)

Monday  1340h

**Bridging the Gaps Between Science and Science Policy Posters**

*Presiding: Tai-Yin Huang, Pennsylvania State University Penn State Lehigh Valley; Susan Bates, National Center for Atmospheric Research; Rafael Loureiro, Blue Marble Space Institute of Science / Winston-Salem State University; Kimberly Duong, University of California Irvine;*

- **1340h** PA13E-0889 *POSTER* The 2019-2025 National Weather Service Strategic Plan: Building a Weather-Ready Nation by connecting accurate and timely observations, forecasts, and warnings to life- and property-saving decisions: **J E Ten Hoeve III**
1340h **PA13E-0890 POSTER** The Development Chronology of South Korean Compressed Growth as a Reference: C Song, S J Kim, W K Lee  
1340h **PA13E-0891 POSTER** Developing Framework to Assess Supply and Demand of Climate Regulating Ecosystem Services in South Korea: C Song, M Kim, E Park, J Kim, W K Lee  
1340h **PA13E-0893 POSTER** The hazard/risk separation principle in volcanology: W Marzocchi, P Papale  
1340h **PA13E-0894 POSTER** The Chesapeake Bay TMDL 2017 Midpoint Assessment: C Wu, L Linker, G Shenk, R Tian, G Bhatt  
1340h **PA13E-0895 POSTER** Climate Advisor to Vermont: A K Betts  
1340h **PA13E-0896 POSTER** Critical Minerals: Opportunities for Geoscience and Policy Partnerships: S J Ryker  
1340h **PA13E-0897 POSTER** Bridging Science to Science Policy - Why it Matters with Geologic Energy Research: D J Hills, B Bearden  
1340h **PA13E-0898 POSTER** Assessment of user-driven requirements in term of Earth Observation products and applications for institutional operational services: A Tornato, E Valentini, A Nguyen Xuan, A Taramelli, E Schiavon  

**PA13F** (CC) Hall A-C (Poster Hall)  
Monday 1340h  

**Communicating Freshwater Health Through a Social–Ecological Lens: Models, Indicators, Apps, and Engagement Posters** *(joint with H, SI)*  

*Presiding: Kashif Shaad, Conservation International; Helen Regan, University of California Riverside; Raymond Wang, Sun Yat-Sen University; Lina Serrano, Monterey Institute of Technology and Higher Education;*  

1340h **PA13F-0899 POSTER** Vegetation in Cities: Urban Ecolhydrological Modelling as a Quantitative Tool to Assess the Effects of Urban Vegetation on Selected Ecosystem Services: N Melli, G Manoli, P Burlando, S Fatichi  
1340h **PA13F-0900 POSTER** Diversity of movement patterns of juvenile salmonids in headwater streams of Southcentral Alaska: A Bang, C Walker, J Maurer  

1340h **PA13F-0902 POSTER** Hydrological modelling and future scenarios to support decision making in the Alto Mayo basin, Peru: F D Hernandez Salinas Sr, R Montelongo, A I Ramírez, J L Del Castillo Castillo, L Serrano, E Mendoza, A Boveda, I Encomenderos, M Ometto Bezerra, D Vollmer, K Shaad  
1340h **PA13F-0904 POSTER** Downscaling of GCM Information to Support Water Availability Assessment in Bogotá, Colombia: J L Del Castillo Castillo, E Y Torres, A I Ramírez, L Serrano, M Ometto Bezerra, D Vollmer, K Shaad, L Zuluaga, N Acero, L Cusgúen, Y Gómez, P Bejarano  
1340h **PA13F-0905 POSTER** Water resource evaluation of the Guandu river basin, Brazil: current state and future scenarios: R González-Bravo Sr, A I Ramírez, F D Hernandez Salinas Sr, B Coutinho, M C Marques, F Ribeiro, Y Valverde, L Serrano, J L Del Castillo Castillo, M Ometto Bezerra, D Vollmer, K Shaad  

**PA13G** (CC) Hall A-C (Poster Hall)  
Monday 1340h  

**Integrating Socioeconomics and Governance into Studies of Food and Water Systems Posters** *(joint with GC, H, SI)*  

*Presiding: Keyvan Malek, Washington State University; Kirti Rajagopalan, Washington State University; Jennifer Givens, Utah State University; Brian Chaffin, University of Montana;*  

1340h **PA13G-0906 POSTER** Climate Impacts on Agricultural Productivity: Estimation using Matching: K Rajagopalan, N Potter, M Brady  
1340h **PA13G-0907 POSTER** Estimating the Sustainability of Rural and Urban Areas by Using Sustainable FWE Index: C Fan, C Y Lin
1340h  **PA14G-0908** POSTER Examining Agricultural Cost Components in the Mississippi Alluvial Plain for Integration into a Decision Support System: C Lawrence, M Alhassan, E Pindilli, S Richardson

1340h  **PA14G-0910** POSTER Incorporating Social System Dynamics in the Columbia River Basin: Food-Energy-Water Resilience and Sustainability Modeling in the Yakima River Basin: J Givens, J Padowski, C Guzman, K Malek, R Wittinok-Huber, B Cosens, M Briscoe, J Boll, J C Adam

1340h  **PA14G-0911** POSTER Modeling coupled natural and human systems in lake catchments reveals feedbacks among land-management decisions, water quality degradation, and altered property values: K M Cobourn, C Carey, K Boyle, C Duffy, H A Dugan, K Farrell, L Fitchett, P C Hanson, V R Henson, M Sorce, A Kemanian, L Shu, W Weng, K C Weathers, Y Zhang

1340h  **PA14G-0912** POSTER Technology for Trade: A Conceptual Framework to Improve Water Use for Agriculture and Beyond: K Rajagopal, J Yoder, J T Ahatzoglou, J C Adam, K Allen, M Brady, M E Barber, J H Cook, D Haller, L Khot, C E Kruger, M Liu, B Nijssen, J Padowski, T Peters, N B Pickering, C Schuman, C Stockle, G Yorgey, R Young

1340h  **PA14G-0913** POSTER Water Crises in Northeastern Part of India: Possible Causes and Measures: N Borah, U Dadhich

1340h  **PA14G-0914** POSTER Yield Gaps of Rice and Wheat Crops over India – Present and future Climate: S N Pillai

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**PA14A (MM) Marquis 3-4**

**Monday 1600h**

**Communicating Climate Change: Informing Politicians and Policy Makers I (joint with GC)**

*Presiding: Donald Wuebbles, University of Illinois at Urbana Champaign; Robert Ward, London School of Economics; Bud Ward, Yale Climate Connections; Susan Hassol, Climate Communication;*

1600h  **PA14A-01** Telling the Good News, Too: R B Alley

1615h  **PA14A-02** The Relationship Between Climate Communication, Public Opinion, and Policy Change: J Taylor

1630h  **PA14A-03** Building Public and Political Will for Climate Action: A Leiserowitz

1645h Panel Discussion:

1700h  **PA14A-04** Communicating climate science to inform policy in Oregon: K Dello

1710h  **PA14A-05** "I Don't Believe in Climate Change" - Moving Beyond Political Polarization to Agreement on Actionable Science: K Marvel, K Hayhoe

1720h  **PA14A-06** Explaining Climate Change to Politicians and Children: M E Mann

1730h Panel Discussion:

**PA14B (MM) Marquis 1-2**

**Monday 1600h**

**Interdisciplinary Perspectives on Drought and Drought Decisions I (joint with B, GC, H)**

*Presiding: Aparna Bamzai, USGS North Central Climate Adaptation Science Center; Dennis Ojima, Colorado State University; Adam Wilke, USGS Fort Collins Science Center; Amanda Cravens, USGS Fort Collins Science Center;*

1600h  **PA14B-01** Misunderstanding conservation agriculture: Challenges in communicating and measuring sustainable and drought-resilient farming: K Findlater, M Kandlikar, T Satterfield

1610h  **PA14B-02** Who, what, where, why, and how? A typology of drought decision making in the north central United States: T A Beeton, S McNeely

1620h  **PA14B-03B** Developing a Framework to Link Drought Impacts and Drought Severity State by State: M Noel, D J Bathke, T Haigh, K H Smith, M D Svoboda, M J Hayes

1630h  **PA14B-04** Designing Drought Indicators: A J Purdy, J Fisher, J Kawata, G Om, M Reynolds, Z M Ali, J Babikian, C Roman, M Sikk

1640h  **PA14B-05** Emerging Disparities in Community Resilience to Drought Hazard in South-Central United States: V Mihunov

1650h  **PA14B-06** Identifying and Responding to Drought in the Coffee-Growing Regions of Northwestern Nicaragua: I T Stewart, E P Maurer, C M Bacon, W Sundstrom

1700h  **PA14B-07** Does adapting increase adaptive capacity? A case study of decision-making patterns of South Platte River Basin water providers and implications: A Childress-Runyon

1710h  **PA14B-08** How Refusal to Accept Inconvenient Science Contributed to the Over-Development of the Colorado River: B H Udall, E Kuhn, J Fleck, D Kanzer

1720h  **PA14B-09B** Modelling the water-food-energy nexus during agricultural drought in Sweden: P E Campana, J Zhang, T Yao, S M Andersson, T Landelius, F S Melton, Yan
1730h **PA14B-10** A stakeholder-focused approach to characterising drought risk and adaptation pathways in the middle Himalaya: **N D Forsythe, H J Fowler, D Walker, M Smigaj, D Pritchard**

1740h **PA14B-11** Dynamics of socioeconomic drought for farmworkers and rural communities in California’s San Joaquin Valley: **C Greene**

1750h **PA14B-12** Balancing human and ecological needs in drought preparedness and response: a case from Montana’s Upper Missouri Headwaters: **A E Cravens, J McEvoy, S Crausby, A Ramirez, D Zoanni**

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**U14A  (CC) 202A**

**Monday  1600h**

**Can We Manage Earth’s Future? (Virtual Session) (joint with B, GC, PA, SI)**

**Presiding:** Ariel Anbar, Arizona State University;
**Stephen Romaniello,** Arizona State University; **Hilairy Hartnett,** Arizona State University; **Linda Rowan,** UNAVCO, Inc.;

1600h Introductory Remarks: **A D Anbar**
1605h Opening Remarks: **A C Revkin**
1615h **U14A-01** Can we manage Earth’s future?: **K Caldeira**
1630h **U14A-02** Integrated human-earth system modeling: **K V Calvin,** B P Bond-Lamerty
1645h **U14A-03** Managing Earth’s Land: From Parcels to Planet: **E C Ellis**
1700h **U14A-04** MANAGING OR ’BUILDING RELATIONSHIPS’? ENVIRONMENTAL HUMANITIES CONTRIBUTIONS TO THE DESIGN OF DESIRABLE FUTURES: **J L Adamson**
1715h Panel Discussion and Q&A: **A C Revkin**