## **Program Agenda**



## **A Community on Ecosystem Services**

**December 12-15, 2022** 

Crystal Gateway Marriott Hotel
Greater Washington DC | Arlington, Virginia

ACES is a *dynamic and growing international assembly* of professionals involved with ecosystem services including scientists, practitioners, managers, and policy-makers from government, academia, NGOs, and the private sector who are interested in natural systems and their relationship with human well-being.

ACES provides an open forum to share experiences, methods, and tools for assessing and incorporating ecosystem services into public and private decisions. The purpose of this conference is to link state-of-the-art science, practice, and decision making by bringing together the ecosystem services community and decision makers from around the United States and the globe. Participants included those with interests in resource management, restoration, institutions, policy, government, business, conservation, and urban and non-urban development.

In 2022, we met in the Nation's capital, focusing on previous discussions focused on the future of ecosystem services, to Leveraging Opportunities for Ecosystem Services Implementation.

Thank you for joining us at ACES 2022!

	Monday, December 12, 2022		
11:00am-5:30pm	Conference Registration Open (Skyview Terrace)		
	Space for Impromptu Meetings  Rooms are available for impromptu attendee meetings throughout the week. Take advantage of having your national and international ecosystem services colleagues gathered in the same location to hold briefings or workgroup discussions to spur collaboration and information exchange. To request availability of space for your meeting, email bmt@ufl.edu with the number of people attending your meeting, the start time and ending time, and she will confirm a reservation. NOTE: Audio visual equipment is not provided.		
11:00am-5:00pm	Exhibitors and Poster Presenters Install Displays (A rlington Ballroom Salons 1-3)		
	Welcome Networking Social in the Poster Hall (Arlington Ballroom Salons 1-3)		
5:00pm - 6:00pm	We hope you will plan your travel so you arrive in time to join us for food, libations and networking!  It's been four long years since we last met face-to-face, so don't miss this opportunity to kick off the conference, catch up with colleagues and see who else is there!		
	Tuesday, December 13, 2022		
7:30am-5:30pm	Conference Registration Open (Skyview Terrace) Reminder: Space is Available for Impromptu Meetings		
7:30am-8:30am	Morning Refreshments (Arlington Ballroom Salons 1-3)		
	Opening Plenary Session (Arlington Ballroom Salon IV)  Panel Discussion: From Science to Society – Advancing Ecosystem Services for Decision Making The benefits of systematically considering ecosystem services in decision making are well understood, but finding paths to doing so has at times been challenging. The 2022 ACES opening plenary will feature four speakers offering diverse, state-of-the-art perspectives on the role of ecosystem services in society and decision making – ranging from White House, international, and private-sector efforts to embed ecosystem services in decision making to improving indigenous engagement in natural capital accounting in Australia.  Moderator: Dr. Ken Bagstad, Research Economist		
8:30am-9:45am	U.S. Geological Survey  Plenary Session Schedule: 8:30am Welcome from Organizers 8:40am Introduction and Overview by Moderator 8:45am Moderated Panel Discussion  PANELISTS: Dr. Tania Briceno, Chief Economist, Intrinsic Exchange Group Dr. Stephenne Harding, Senior Director for Lands, White House Council on Environmental Quality Anna Normyle, Ph.D. Student, Australian National University, Fenner School of Environment & Society Dr. Klara Johanna Winkler, Deputy Science Director, NSERC - ResNet, McGill University		
9:45am-10:15am	AM Break (Arlington Ballroom Salons 1-3)		

Tuesday, December 13, 2022					
	Concurrent Sessions				
10:15am-12:00pm	Session 1	Session 2	Session 3	Session 4	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Technical Advances in Natural Capital Accounting in the United States	Ecosystem Services Provided by Wetlands and Floodplains	Partnerships for Climate-Smart Commodities: Testing and Developing New Markets	Implementing Environmental	
Moderator	Lydia Olander	Marzieh Motallebi	William Hohenstein	Kristin Hoelting	
10:15am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
10:20am	Ken Bagstad Lessons Learned and Paths Forward from First-generation SEEA EA Pilots in the U.S.	Kristina Hopkins What Is a Floodplain Worth? Estimating Floodplain Benefits in the Chesapeake and Delaware Watersheds	PANELISTS: William Hohenstein Robert Parkhurst Ryan Smith Dan Yeoman	Lucas Bair Adaptive Management of Regulated Rivers: Eliciting indigenous knowledge and perspectives to inform monitoring and research	
10:40am	Marc Russell Review of EPA Resources for Natural Capital Accounting	Lucas Clay Quantifying Ecosystem Services by Land Cover Change in the Edisto River Basin, SC	Presentations will discuss the potential economic and environmental impacts of efforts to meet the growing consumer demand for climate-smart agricultural products, provide an analysis of the	Kristin Hoelting Retrospective Analysis of Cultural-Benefits-Knowledge: Elwha River Dam Removal and Restoration	
11:00am	Kirsten Oleson Coastal Ecosystem Accounting for Hawai'i	Jacqueline Welles A Method to Assess and Value Floodplain Attenuation Services in the Schuykill Watershed	estimated premiums on goods to enter these markets, the onfarm activities needed to supply climate-smart markets, and the projected environmental and greenhouse gas benefits to be achieved at scale.	Erik Stanfield and Jojo Matson Navajo Resource Monitoring in the Glen Canyon Adaptive Management Program: Using Ecosystem Services Frameworks to Inform Adaptive Management	
11:20am	Katie Warnell Updating Regional Ecosystem Accounts for the U.S. Southeast	Pascal Badiou Understanding the Role of Freshwater Mineral Wetlands in Carbon Cycling in the Prairie Pothole Region - Canada		Pierre Glynn Cultural Ecosystem Services: Interactions of Knowledge, Governance, and Past, Present, and Future Conditions	
11:40am	Travis Warziniack Natural Capital Accounting for the USDA Forest Service	Frances O'Donnell Understanding Ecosystem Services Benefits Provided by Geographically Isolated Wetlands		Discussion	
12:00pm-1:30pm	Lunch on Own  Choose from a variety of restaurants located in the underground shops at Crystal City or from numerous nearby restaurants in the area. Use Uber Eats to expand your options and choose from more than 160 restaurants that deliver to the hotel. (NOTE: The Marriott restaurant is not open for lunch.)  Detailed Dining Options are posted here: https://conference.ifas.ufl.edu/ACES/dining-options.php				

	Tuesday, December 13, 2022				
	Concurrent Sessions				
1:30pm-3:15pm	Session 5	Session 6	Session 7	Session 8	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Ecosystem Services Assessments as a Transferable Tool for Management	From the Trenches: Innovative Ecosystem Service Measurement and Finance by Hook or by Crook	Bringing Cultural Ecosystem Services and Environmental Justice Into Economics for Decision-Making	Recreation	
Moderator	Richard Fulford	Gretchen Greene	Hannah Stroud	lan Luby	
1:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
1:35pm	Susan Yee The Ecosystem Services Gradient: An Integrated Approach for Identifying Benefits of Restoration	Deborah McGrath Carbon, Coffee and Climate Justice: Results from a 10-Year Payment for Ecosystem Services (PES) Project in Haiti	PANELISTS: Charles Goodhue Alison Krepp Kate Quigley Danielle Schwarzmann Pete Wiley	Baishali Bakshi Climate Change, Forest Composition, and Outdoor Recreation in northeastern Minnesota	
1:55pm	Joel Hoffman R2R2R: A Life Cycle Approach to Ecosystem Services Assessments at Contaminated Sites	Andrew Seidl #finance4nature: Identifying, Quantifying and Bridging The Global Biodiversity Finance Gap	This panel will discuss the challenges and opportunities associated with incorporating cultural ecosystem services, environmental justice, and ecosystem service valuation data into economic decisionmaking.	Zach Ancona Social Value Distributions Using Solves for Multiple User Groups Surveyed in a Coastal National Park	
2:15pm	Marc Russell Natural Capital Accounting as a Monitoring Tool for Decision Making	Emily Gaskin What Is the Value of a Coral Reef? A Legal Framework for Valuing Marine Ecosystem Services in Court		Wei-Lun Tsai Measuring Nature-Based Recreation using Human Mobility Data	
2:35pm	Justin Bousquin Comparing Wetland Projects Based on Who Benefits	Seth Brown Innovative Financing, Market-Based and Project Delivery Tools for Green Stormwater Infrastructure		Trygve Madsen How Mobile Device Data Can Inform Outdoor Recreation Management	
2:55pm	Richard Fulford Practical Strategies for Decision Support Based on Structured Decision Making and Ecosystem Services	Florence Amate Motivating Smart Grid Adoption in Chicago		Octavio Valdez Lafarga (Replaced by Jeffery Englin) Bayesian Information Criterion Approaches to Valuing the Environment: An Application to the Boundary Waters Canoe Area Wilderness	
3:15-3:45pm		PM Break (Arlington	Ballroom Salons 1-3)		

		Tuesday, Decemb	er 13, 2022		
3:45pm-5:30pm	Concurrent Sessions				
	Session 9	Session 10	Session 11	Session 12	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	America the Beautiful and the Conservation and Stewardship Atlas	Cultivating Ecosystem Services in Working Croplands	NEPA, Multiple Knowledge Systems, Plural ES Values & Environmental Justice	Species & Habitats	
Moderator	Scott Chiavacci	Amber Campbell	Lucas Bair	Mustapha Alhassan	
3:45pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
3:50pm 4:10pm	Mark Wiltermuth American Conservation and Stewardship Atlas Update  Christopher Hartley What Counts? Building a Framework to Identify Conservation in American Conservation and Stewardship Atlas	Humberto Blanco Managing Cover Crops to Enhance Soil Ecosystem Services in Soils Vulnerable to Environmental Pressures Paul DeLaune Improving Soil Ecosystem Health and Resilience through Cover Crops and Pasture Cropping	PANELISTS: Jared Hautamaki Kristin Hoelting Charles Ka'ai'ai Cheryl Kelly  This panel will focus on how an Environmental Justice-oriented ES approach could support National Environmental Policy Act (NEPA) analyses that more	Non-Traditional Habitat Solution for Native Pollinator Populations in Predominately	
4:30pm	Lydia Olander Tracking Benefits of Natural and Working Lands Over Time.	Sangu Angadi Circular Buffer Strips of Perennial Grasses to Improve Multiple Ecosystem Services in Center Pivot Irrigated Agriculture in the Southern Great Plains	successfully protect traditional, Indigenous, and long, continuous mutually beneficial uses of the environment.	Barbara Jones Wolves, Woodland Caribou and Beaver: Conservation, Ecotourism, and the Branding of Charismatic Fauna in the Era of Climate Change	
4:50pm	Phillip Rodbell Identifying Nature-Deprived Communities	Chia-Hua Lin The Buzz about Soybeans: Improving Pollination Services and Productivity in Soybean Cropping Systems		Matt Weber Valuing Wild Salmon Recovery in Oregon's Most Urbanized Watershed	
5:10pm	Discussion	Sarah Karpanty (cancelled) Assessing the Relationships between Pollinator-friendly Plantings and Wildlife-related Ecosystem Services on Farms in the Mid-Atlantic Coastal Plain		Discussion	
5:30pm	Pollinator Workshop  Bees and other pollinators are critical to ecosystem health and our food supply. We are interested in advancing a science-based conversation that will support better metrics and business models to consider appropriate investments in pollinators. Come prepared to listen and to share your own thoughts on how we can support pollinators while also meeting society expectations for affordable energy, food, and water. <a href="Presenters">Presenters</a> : Jessica Fox, Electric Power Research Institute, Chris Hartley, USDA Office of Environmental Markets, and Lara Drizd, U.S. Fish and Wildlife Service.				
6:30pm	Conservation and Cocktails The Clean Water Act at 50  The Clean Water Act established national water quality standards, restricted pollution, and invested in wastewater treatment and better wetlands management. Today, our waters are dramatically cleaner, yet significant challenges remain. Join us to hear guest speaker, Nancy Stoner, President of the Potomac River Keeper Network, and enjoy spirited conversation and libations.				

		Wednesday, Decen	ıber 14, 2022		
7:30am-5:30pm	Conference Registration Open (Skyview Terrace) Reminder: Space is Available for Impromptu Meetings				
7:30am-8:30am		Morning Refreshments - Arlington Ballroom Salons 1-3			
		Concurren	t Sessions		
8:30am-10:15am	Session 13	Session 14	Session 15	Session 16	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Markets-Payments for Ecosystem Services	Rangeland Ecosystem Services	Approaches & Tools for Conservation		
Moderator	Marc Russell	Amy Ganguli	Zach Ancona		
8:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview		
8:35am	Joan Ureta Ecological Business Profile: A Practical Approach to Establishing Environmental Markets in South Carolina	Alan Knapp How Will Climate Change and Altered Precipitation Regimes Impact Semi-Arid Grasslands?	Daniel Hayden (cancelled) America's Estuaries: Small Places, Big Impact		
8:55am	Pramisha Thapaliya Determinants of Farmers' Willingness to Accept Carbon Payments for Switching to Conservation Management Practices	Melinda Smith Exceeding Extreme Drought Thresholds Magnifies Productivity Losses in Grasslands Globally	Sara O'Brien (cancelled) Cross-Sector Water Collaboratives: A Critical Ecosystem Management Tool in a Rapidly-Changing World		
9:15am	Lívia Madureira Ecosystems Services Supply by Agriculture: Using Choice Experiments to Estimate Trade- Offs Between Monetary and Non-Monetary Incentives	Kristin Hulvey Managing for Multiple Ecosystem Services in Semi- arid Rangelands	Ben Sherrouse An Open-Source GIS Tool to Assess Social Values for Cultural Ecosystem Services		
9:35am	Discussion	Megan Nasto The Effects of Livestock Grazing on Soil Health and Carbon in Semi-arid Rangelands	Kenneth Bagstad Interoperability for Ecosystem Services: The Problem, Solutions, and Paths Forward		
9:55am		Roisin Stanbrook Impact and Value of Dung Beetles in Central Florida Rangelands	Steven Bartell Ecosystem Services Require a Biophysical Economic Context		
10:15am-10:45am		AM Break- <i>Arlington</i>	Ballroom Salons 1-3		

	Wednesday, December 14, 2022				
	Concurrent Sessions				
10:45am-12:30pm	Session 17	Session 18	Session 19	Session 20	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Finding Agency in Developing Natural Capital Accounts	The Final Ecosystem Goods and Services Voltron: An Integrated Set of Tools for Ecosystem Analysis	How Do We Make Benefit-cost Analysis Work for Nature- based Solutions?	Global Perspectives	
Moderator	Stephen Posner	Leah Sharpe	Lydia Olander	Scott Chiavacci	
10:45am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
10:50am	Jane "Carter" Ingram Opportunities for Businesses to Use and Support Development of SEEA-Aligned Natural Capital Accounts	Paul Ringold Where to Start with Final Ecosystem Goods and Services (FEGS): Classification and Metrics	PANELISTS: Todd Bridges Jennifer Helgeson Matthew Oreska Kate Quigley Ariana Sutton-Grier	Panayotis Dimopoulos Mapping and Assessment of Ecosystems and their Services in the European Union: A National Scale Implementation in Greece	
11:10am	Jeffrey Wielgus Assessing the Contribution of Ecosystems to Ocean- Dependent Industries	Christina Horstmann What Ecosystem Services Matter?: The FEGS Community Scoping Tool	This panel will focus on the challenges and opportunities for updating benefit cost analysis (BCA) in federal decision-making processes to level the playing field for nature-	Ioannis Kokkoris Ecosystem Services as a Tool for Protected Areas Integrated Management: Case Studies from the Mediterranean - Greece	
11:30am	Ben Simon Incorporating Ecosystem Services into Natural Resource Decision Making at DOI within a Natural Capital Accounting Framework	Anne Neale How to Map what Matters: EnviroAtlas	based solutions.	Kaysara Khatun The Management of Sargassum in the Yucatan Peninsula, Mexico: Applying a Pluralistic Approach towards Marine Conservation and Regional Development	
11:50am	Kirsten Oleson Experiences from State-Level Natural Capital Accounting in Hawai'i	Tammy Newcomer-Johnson How to Model what Matters: FEGS and the EcoService Models Library		Juan Sebastian Lozano Velasquez Monetization of Hydrological Ecosystem Services for Hydropower Production: Two Study Cases from the Tropical Andes	
12:10pm	Doug MacNair Time to Take Stock: Improving Natural Capital Accounting with More Emphasis on Measuring Stocks	Leah Sharpe The Final Ecosystem Goods and Services (FEGS) Voltron: The Power of Tools Together		Leander Raes Estimating Ecosystem Service Provision to Evaluate and Support Ecosystem-based Adaptation Measures in Guatemala	
12:30pm-2:00pm	Lunch on Own  Choose from a variety of restaurants located in the underground shops at Crystal City or from numerous nearby restaurants in the area. Use Uber Eats to expand your options and choose from more than 160 restaurants that deliver to the hotel. (NOTE: The Marriott restaurant is not open for lunch.)  Detailed Dining Options are posted here: https://conference.ifas.ufl.edu/ACES/dining-options.php				

	Wednesday, December 14, 2022				
	Concurrent Sessions				
2:00pm-3:45pm	Session 21	Session 22	Session 23	Session 24	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Effective Incentives for ES from Urbanizing Agriculture	Coastal and Wetland Restoration	The Importance of Private Land Conservation in Meeting President Biden's 30 by 30 Conservation Goal	Integrating Ecosystem Services into USDA Forest Service Processes and Programs	
Moderator	Lisa Wainger	Carl Taylor	Joe Nicolette	Lara Buluc	
2:00pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
2:05pm	Daniel Read Assessing Effectiveness of Financial and Behavioral Interventions at Promoting Voluntary Conservation Adoption in Agri-Environments	Kristin Byrd An Ecosystem Services Assessment of the Nisqually River Delta, Puget Sound, Washington	Peter Kareiva Value of Conservation of Private Lands	Travis Warziniack Examining Novel Approaches to Account for Ecosystem Services Benefits in National Forest Planning	
2:25pm	<b>Douglas Wrenn</b> Additionality and the Adoption of Riparian Buffers in the Face of Urbanization	Lou Nadeau Estimating the Economic Value of Ecosystem Services from Great Lakes Coastal Wetlands for Restoration Decision- Making	Mark Bailey Field Data Collection for Land Conservation	Kate Marcille Trends in Ecosystem Services Assessment and Evaluation for National Forest Planning	
2:45pm	Wei Zhang Demand for Ecosystem Services: Evidence from the Environmental Quality Incentives Program	Katie Warnell Sea Level Rise Drives Habitat and Carbon Loss in the U.S. Mid-Atlantic Coastal Zone	Mark Rockel Economics of Valuing Public Interest	Jose Sanchez Effects of Climate Change on Ecosystem Services in Southern California	
3:05pm	David Abler Consumer-Driven Markets for Ecosystem Services from Agriculture in Urbanizing Landscapes	Chris Bowles Southport Sacramento River Levee Setback: Adaptive Management of a Floodplain Restoration Project	Michael Rockel Communicating the Value of Private Land Conservation	Katherine Brownson Restoring Chesapeake Forests for Ecosystem Services, Climate Resiliency and Environmental Justice	
3:25pm	Chenyang Hu Improving Ecosystem Services from U.S. Agriculture: Yield Reserve vs. Land Retirement	Yichen Shen Analyzing Ecosystem Benefits of Mangrove Restoration in Liberia	Katie Warnell Geospatial Applications in Land Conservation Connectivity	Sherry Reckler & Nikola Smith Leveraging Conservation Finance and Partnerships with Ecosystem Services	
3:45pm-6:00pm	Poster Session and Networking Social (Arlington Ballroom Salons 1-3)  Poster presentations play a key role in the exchange of information. Considerable time is dedicated to viewing them, giving scientists, policy makers, planners, practitioners and managers valuable opportunities to interact and share details of their work, successes and lessons learned. Don't miss this opportunity to view posters and network with colleagues to learn more about national and global ecosystem services.				

		Thursday, Decemb	ber 15, 2022		
7:30am-4:30pm	Conference Registration Open (Skyview Terrace) Space is Available for Impromptu Meetings				
7:30am-8:30am	Morning Refreshments (Arlington Ballroom Salons 1-3)				
		Concurren	t Sessions		
8:30am-10:15am	Session 25	Session 26	Session 27	Session 28	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Social Factors, Equal Access, and Environmental Justice in Ecosystem Services Science	Recent Advances and Tools in Forest Ecosystem Management for Numerous Ecosystem Services	Ecosystem Services and Offshore Oil & Gas and Wind Structures	The State of Environment Markets	
Moderator	Kristin Hoelting	Diomy Zamora	Nicholas Nelson	Christopher Hartley	
8:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
8:35am	Lisa Wainger Rethinking Social Vulnerability Indices: Separating Household Susceptibility to Flood-Induced Harm from Exposure Risk	Thu Ya Kyaw Multifunctional Ecosystems: Nitrogen Mitigation by Short Rotation Woody Crops in the Lower Mississippi Alluvial Valley	PANELISTS: Larry Johnson Paul Krause Joseph Nicolette Mark Rockel Kristen Strellec	PANELISTS: Christopher Boomsma Stephen Donofrio Christopher Hartley Sara O'Brien	
8:55am	Jeffrey Kline Evaluating the Differential Influence of Perceived Amenities and Access Barriers Affecting Urban Greenspace Use by People of Different Groups	Michael Thompson Optimized Management Strategies to Support Bioenergy Feedstock Yield and Ecosystem Services in Degraded Forest Ecosystems	associated with ecosystem service value as they have been integrated into offshore energy infrastructure commissioning and decommissioning decision- making. Incorporating the flow of ecosystem services over time is critical when considering commissioning and decommissioning alternatives, because decisions will directly and indirectly affect future generations.  Through a combination of case studies, literature review, and subject matter experts, we will demonstrate win-win solutions	Over the past 30 years environmental markets and market-based approaches to conservation have developed from novel concepts into valuable tools to increase conservation on private lands.	
9:15am	Meghann Jarchow Socioeconomic Characteristics Affect Residents' Values Toward Landscapes in the Upper Missouri River Basin	Emily Meineke Urban Heat Islands as Windows into Climate and Ecosystem Service Provisioning by Street Trees		the current state of environmental markets and suggestions for how to improve them.	
9:35am	Hebin Lin Balancing Ecosystem Services, Environmental Justice, and Economic Prosperity In Arizona	Javier Lugo Perez The Importance of Shade Trees in Promoting Carbon Storage in the Coffee Agroforest Systems of Puerto Rico			
9:55am	Klara Winkler How Marginalized Groups Use Nature In Canada	Discussion	for the public, operators, and the government.		
10:15am-10:45am		AM Break- <i>Arlington</i>	Ballroom Salons 1-3		

	Thursday, December 15, 2022				
		Concurren	t Sessions		
10:45am-12:30pm	Session 29	Session 30	Session 31	Session 32	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Green Infrastructure & Nature Based Solutions	Water Quality, Storage, and Management	From Carbon to the Cosmos: How National Marine Sanctuaries Evaluate and Incorporate Ecosystem Services into Meaningful Decision-Making	Stakeholder Informed Approaches to Overcoming Barriers	
Moderator	Zach Ancona	Chris Huber	Steve Gittings	Adam Wilke	
10:45am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
10:50am	Meredith Hovis FloodWise: Using Nature-based Solutions (NBS) for Flood Reduction for Farms and Communities in Eastern North Carolina	Joel Corona Economic Valuation in a Changing Climate: The Implications of Water Quality Index Parameter Selection in the Context of Climate Impacts	Kathy Broughton Nejem Raheem Stan Rogers Danielle Schwarzmann Hans Van Tilburg Natural and social scientists, cultural heritage practitioners, and marine sanctuary managers will consider the policy, legal, and societal benefits of "braiding" modern and traditional knowledge to enhance our understanding of the relationships between people and places of marine sanctuaries, and to improve deliberations and the application of co-management frameworks.  1. What legal frameworks guide	Weston Eaton Advancing Scholarship and Practice of Stakeholder Engagement in Working Landscapes	
11:10am	Megan Rippy Eliciting Cultural Services through Virtual Experiences with Green Stormwater Infrastructure	Jai Singh Eco-FIP: An Enhanced Method for Evaluating Large-Scale, Multi-Objective Floodplain Habitat Restoration Opportunities		Jodi Brandt Farmland Loss in the Western United States: Implications for Ecosystem Services Supply and Demand, and Potential Policy Solutions	
11:30am	Sara Mason Measuring the Impacts of Coastal Restoration on People: How Much is Changing, and for Whom?	Frank Lupi Getting Off the Ladder: Disentangling Water Quality Indices to Enhance the Valuation of Divergent Ecosystem Services		Amy Quandt Land Repurposing in the Southern Central Valley, California: Stakeholder Perspectives and Recommendations	
11:50am	Lauren Krauss Adaptive Strategy Biases in Engineered Ecosystems: Implications for Plant Community Dynamics and the Provisioning of Ecosystem Services to People	Manuel Zamorano Water Storage Strategies in Florida's Northern Everglades		Katherine Nelson Features of Diverse and Productive Agricultural Systems: Biophysical and	
12:10pm	Tibor Vegh Determinants of Landowner Participation in Programs to Deliver Natural Infrastructure as a Watershed Service: A Review	Matt Weber Value of Improved Information for Oyster Aquaculture Adaptations to the Economic Risks of Climate Change		Maureen McCarthy Native Climate: Seeing Climate Resilience Through Native and Western Science Eyes	
12:30pm-2:00pm	Lunch on Own  Choose from a variety of restaurants located in the underground shops at Crystal City or from numerous nearby restaurants in the area. Use Uber Eats to expand your options and choose from more than 160 restaurants that deliver to the hotel. (NOTE: The Marriott restaurant is not open for lunch.)  Detailed Dining Options are posted here: https://conference.ifas.ufl.edu/ACES/dining-options.php				

Thursday, December 15, 2022					
	Concurrent Sessions				
2:00pm-3:45pm	Session 33	Session 34	Session 35	Session 36	
Location	Grand Ballroom Salons A & B	Grand Ballroom Salons C, D & E	Grand Ballroom Salons F, G & H	Grand Ballroom Salons J & K	
	Public Land and Resource Management	Urban Ecosystem Services & Perceptions	Applying Natural Capital Accounts in the European Union and the United States: A Synthesis	Land Ownership, Place, and Local Knowledge	
Moderator	<b>Darius Semmens</b>	Scott Chiavacci	Carl Shapiro	Sophia Liu	
2:00pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
2:05pm	Ryan Calder Integrated Mechanistic and Economic Modeling of Ecosystem Services to Inform Land-use Decisions under Uncertainty	Sophia Green Identifying Barriers to Use of Urban Natural Areas and Trails In a Post-Industrial Waterfront Community	Marialuisa Tamborra Joint Research Centre of the European Commission, The Integrated System for Natural Capital Accounts (INCA): From Piloting to Regulating	Thomas Ochuodho Impacts of Land Ownership and Forest Fragmentation on Forestland's Water-Related Ecosystem Services Provision and Dynamics in Kentucky	
	Mustapha Alhassan	Trygve Madsen	Scott Wentland	James Bays	
	Application of the Ratio Method in Alternative Specific Reservoir	The Ecosystem Services Benefits of Community-driven Green Infrastructure: Insights from the Water Wise Model in New Orleans	Bureau of Economic Analysis, Department of Commerce	Volunteer Action to Restore Ecosystem Services in Urban Lakes: 15 Years of Restoration of Crescent Lake, St. Petersburg FL	
	lan Luby Valuation and Management of Toxic Harmful Algal Blooms at National Parks	Alanna Shapiro Assessing Selected Physical and Socioeconomic Explanatory Factors, Urban Heat, and Ecosystem Services in Miami Metropolitan Area	Giuseppe Ottavianelli European Space Agency: Earth Observation for Ecosystem Accounting	Carl Taylor Updating Land Trust Conservation Strategies for Climate Change Resilience	
3:05pm	Lisa Wainger Broadening Benefits and Anticipating Tradeoffs by Using an Ecosystem Services Framework in USACE Planning	Peter Ibsen An Eight-city Analysis of How Urban Land Cover Drives Heat Mitigation Based on Regional Climate	Jane "Carter" Ingram The Pollination Group	Perry Williams (cancelled) Sustaining Rural Livelihoods, Livestock Grazing, and Sage- Grouse Habitat in Western Sagebrush Systems	
3:25pm	Eric Sant Relevant Landscape Metrics to Support the Development of a Landscape Carbon Market	Discussion	Discussion	Discussion	
3:45pm - 4:30pm	Closing Synthesis & Panel Discussion: Focusing on the Future of Ecosystem Services [Grand Ballroom Salon F, G & H]				
4:30pm - 6:00pm		Exhibitors and Poster Pres	senters Dismantle Displays		
	Conference Concludes				