

In partnership with:



**naaee**

North American Association  
for Environmental Education



# 46<sup>TH</sup> ANNUAL CONFERENCE

October 18-21, 2017

# 14<sup>TH</sup> ANNUAL RESEARCH SYMPOSIUM

October 17-18, 2017



SAN JUAN **2017**

IMAGINE A WORLD



Check daily schedules (starting on page 44) for detailed information.

EXHIBIT FAIR: WEDNESDAY 5:00 PM-6:30 PM; THURSDAY 9:00 AM-5:00 PM; FRIDAY 9:00 AM-2:30 PM						
TIME	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
7:30		RESEARCH SYMPOSIUM				
8:00		GRADUATE STUDENT/EARLY CAREER BREAKFAST				
8:30	ee360 STATE LEADERSHIP WORKSHOP 8:30-4:30	7:30-9:00	CONCURRENT SESSIONS	CONCURRENT SESSIONS	CONCURRENT SESSIONS	
9:00			8:30-10:00	8:30-10:00	8:30-10:00	
9:30						
10:00						
10:30	RESEARCH SYMPOSIUM	RESEARCH SYMPOSIUM	30 MINUTE COFFEE BREAK	30 MINUTE COFFEE BREAK	30 MINUTE COFFEE BREAK	
11:00	9:00-4:00	9:00-5:00	CONCURRENT SESSIONS 10:30-11:10	CONCURRENT SESSIONS 10:30-11:10	CONCURRENT SESSIONS 10:30-12:00	
11:30		WORKSHOPS (Full day, morning, and afternoon)	KEYNOTE <b>Carmen Guerrero Pérez</b> 11:30-12:30	KEYNOTE <b>Climate Change, Education, and Hope</b> 11:30-12:30		
12:00		FIELD TRIPS (Start and end times vary)			AWARDS LUNCHEON 12:00-2:30	
12:30		WORKSHOP/ RESEARCH SYMPOSIUM LUNCH 12:00-1:30	EXHIBIT LUNCHEON Poster Sessions, Affiliates' Welcome, Silent Auction, and Raffle 12:30-2:00	LUNCH (on your own) 12:30-2:15		
1:00				eePRO GROUP MEETINGS 1:00-2:00		
1:30					PLENARY PANEL <b>30 UNDER 30: Young Leaders Making a Difference</b>	
2:00			CONCURRENT SESSIONS 2:15-3:45	CONCURRENT SESSIONS 2:15-3:45		
2:30						
3:00						
3:30						
4:00	RESEARCH SYMPOSIUM RECEPTION		CONCURRENT SESSIONS 4:00-5:30	CONCURRENT SESSIONS 4:00-4:40		
4:30						
5:00	4:00-6:00	OPENING RECEPTION Exhibits, Share Fair, and Authors' Corner 5:00-6:30		MEETINGS 5:00-6:00		
5:30			FILM SCREENING: <i>How Lizards Find Their Way Home</i> 5:30-6:45			
6:00						
6:30		OPENING CEREMONY 6:30-8:30				
7:00			RUM RUN 7:00-10:30	ANNUAL GALA AND AUCTION 7:00-9:30		
7:30		KEYNOTE <b>Jane Goodall</b>				
8:00						
8:30						





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**SAN JUAN 2017**

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Please note that this program was written before Hurricane Maria hit Puerto Rico with devastating impacts, forcing us to cancel the conference and turn our attention to supporting our colleagues at Para la Naturaleza and across the island. We have left the program intact as a matter of record, recognizing that it fails to reflect our collective heartache for the people and places of Puerto Rico.

On behalf of the board, staff, and conference planning team, welcome to the 46th Annual NAAEE Conference. We're thrilled you could be here and hope you enjoy everything the conference and Puerto Rico have to offer. This year's theme, *Imagine a World*, builds on more than four decades of work to think creatively and collectively about how we can create a more sustainable future.

We are also glad to be here now to help support our friends and the people of Puerto Rico, after the devastation left by Hurricane Irma. As you know, many parts of the island were hit hard by high winds and flooding, and power is still being restored to some parts of the island. We have been so heartened by the resilience and spirit we've seen in all of our partners here. And we hope that the conference will contribute positively to the island's recovery. (Please see page 6 for ideas about how you can help.)

This program is designed to help you navigate the conference and find the workshops, field trips, poster sessions, symposia, keynotes, and other presentations that best meet your needs and interests. You can also get the NAAEE 2017 conference app on your mobile device: download "CrowdCompass AttendeeHub" from your app store and then search for NAAEE. If you have questions about the program or anything else, please see one of the many volunteers, wearing the bright NAAEE t-shirts, or come to the registration area for personal assistance.

#### Here are some highlights of the week:

- The welcome reception, including the Share Fair, Authors' Corner, and the start of our Exhibit Fair, is the prelude to an exciting opening night featuring Dr. Jane Goodall, founder of the Jane Goodall Institute and UN Messenger of Peace (Wednesday)
- Our annual Research Symposium, highlighting current research in the field (Tuesday and Wednesday)

Out of difficulties grow miracles.

—Jean de la Breyere

# BIENVENIDOS WELCOME

- The Exhibit Fair, showcasing new resources and programs in environmental education. We'll celebrate with a buffet luncheon on Thursday, which will also include the Affiliates' Welcome and the conference poster presentations
- Plenary sessions with Carmen Guerrero Pérez, Director of the Caribbean Environmental Protection Division of the US Environmental Protection Agency (Thursday), and an outstanding panel of presenters speaking on Climate Change, Education, and Hope (Friday)
- Networking at eePRO Group brown bag meetings (Friday lunch) where you can focus on the issues you care about most
- Our annual gala and auction on Friday evening, at the incredible El Cuartel de Ballajá, an infantry barracks building completed in 1864
- NAAEE's annual business meeting on Saturday morning, where you can learn more about the Association and have a chance to provide input
- An Awards Luncheon featuring the presentation of the Jeske Award, NAAEE's highest honor, and an inspiring panel of young leaders selected from NAAEE's "EE 30 Under 30" program

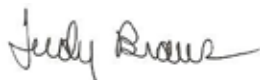
Thanks to everyone who has made this conference possible—our committee chairs, the NAAEE board, Advisory Council, and staff, our amazing Affiliate network, hundreds of volunteers, our funders, and so many other supporters. Para la Naturaleza has been an incredible host and partner, and we especially appreciate the dedicated work of our conference co-chairs, Thel Santos-Díaz and Elizabeth Padilla Rodriguez.

A final thank you goes to all of you for attending—we know it's a big commitment. We hope you develop long-lasting personal and professional relationships and a chance to engage in many meaningful conversations throughout the week. When you bring a committed group together, magic happens—and we are looking forward to creating that magic together in San Juan!

With warm regards from your conference leadership team:



**Charlotte Clark**  
President



**Judy Braus**  
Executive Director



**Christiane Maertens**  
Deputy Director



**Lori Mann**  
Conference Manager



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In partnership with:

**para la  
Naturaleza**

**SAN JUAN 2017**  
IMAGINE A WORLD



Tenga en cuenta que este programa fue escrito antes de que el huracán María golpeó Puerto Rico con devastadores impactos, obligándonos a cancelar la conferencia y volviendo nuestra atención a apoyar nuestros compañeros en Para la Naturaleza y en toda la isla. Hemos dejado el programa intacto como cuestión de registro, reconociendo que no refleja nuestro dolor colectivo por las personas y lugares de Puerto Rico.

A nombre de nuestra junta de directores, nuestro equipo de trabajo y el comité organizador de nuestra conferencia, les doy la bienvenida a la edición número 46 de la Conferencia Anual de la Asociación Nacional Americana para la Educación Ambiental. Nos alegra que estén compartiendo con nosotros y esperamos que disfruten todas las experiencias que la conferencia y Puerto Rico les puedan ofrecer.

También, estamos contentos de estar en la isla apoyando a nuestros amigos y a muchas otras personas luego de la devastación que dejó el huracán Irma. Como saben, muchas partes de Puerto Rico fueron golpeadas fuertemente por el viento y las inundaciones y todavía en muchos lugares los servicios de electricidad están siendo restablecidos.

Nos inspira la resiliencia y espíritu que hemos visto en todos nuestros compañeros de Puerto Rico. Esperamos que la conferencia contribuya positivamente a la recuperación de sus islas. (Vea página 6 para ideas sobre cómo puedes ayudar).

Este año, como resultado de más de cuatro décadas de trabajo y pensamiento creativo y colectivo- sobre cómo podemos crear un mundo más sustentable- nuestra conferencia será dedicada al tema, *Imagina un Mundo*.

Toda la información del evento estará al alcance de sus manos al descargar la aplicación "CrowdCompass AttendeeHub" e ingresar en el ícono de búsqueda "NAAEE". A través de esta herramienta, podrás navegar y encontrar los talleres, viajes de campo, presentaciones de investigaciones, simposios, oradores y otros eventos que se ajusten a sus necesidades e intereses.

Si tiene alguna pregunta sobre la aplicación digital o cualquier tema relacionado, por favor, contacte a uno de nuestros voluntarios, quienes estarán vestidos con una camisa brillante que dice "NAAEE". De igual forma, puede pasar por el área de registro para asistencia profesional.

#### **A continuación, algunas de las actividades que se estarán realizando:**

- Participaremos de la recepción de bienvenida, incluyendo el Share Fair, el Rincón de los Autores y el inicio de nuestra Feria de Exhibiciones, que será el preludio a una emocionante noche inaugural con la doctora Jane Goodall, fundadora del Instituto Jane Goodall y miembro de los Mensajeros de la Paz de la Organización de las Naciones Unidas (miércoles).
- Realizaremos nuestro Simposio de Investigación Anual en el que se destacarán las investigaciones actuales en el campo de la Educación Ambiental (martes y miércoles).

# WELCOME BIENVENIDOS

- Comenzará la Feria de Exhibiciones que mostrará nuevos recursos y programas en educación ambiental. Habrá un almuerzo "buffet" en el que se le dará la bienvenida a nuestros afiliados y habrá presentaciones de investigaciones (jueves).
- Tendremos sesiones plenarias con: Carmen Guerrero Pérez, directora de la División de Protección Ambiental del Caribe de la Agencia de Protección Ambiental de Estados Unidos (jueves) y un destacado panel de ponentes sobre el Cambio Climático, la Educación y la Esperanza (viernes).
- Trabajaremos con la plataforma de eePRO Group. Mientras, podremos discutir los temas que más le interesen (almuerzo de viernes).
- Celebraremos nuestra gala anual y una subasta en el increíble Cuartel de Ballajá, edificio de cuarteles de infantería terminado en 1864 (el viernes por la noche).
- Se llevará a cabo la reunión anual de negocios de la NAAEE donde usted puede aprender más sobre la asociación y tener la oportunidad de exponer sus ideas (sábado por la mañana).
- Habrá un almuerzo de premiaciones donde se otorgará el Premio Jeske, el más alto reconocimiento de la NAAEE, y contaremos con un inspirador panel de jóvenes líderes seleccionados del programa "EE 30 Under 30" de NAAEE.

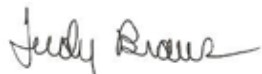
Agradecemos a todos los que han hecho posible esta conferencia incluyendo a: los presidentes de nuestro comité organizador, a la junta de directores de la NAAEE, nuestro consejo asesor y el equipo de trabajo, a nuestra increíble red de afiliados, a cientos de voluntarios, a todos nuestros donantes y a muchos otros colaboradores. También, agradecemos a Para la Naturaleza que ha sido un anfitrión y aliado increíble, sobre todo, nuestros codirectores de la conferencia: Thel Santos-Díaz y Elizabeth Padilla Rodríguez.

Finalmente, agradecemos a todos ustedes por asistir y demostrar su gran compromiso. Esperamos que desarrollen relaciones interpersonales y profesionales duraderas y que disfruten la oportunidad de participar en muchas conversaciones importantes a lo largo de la semana. Sabemos que cuando hay personas comprometidas trabajando juntas algo mágico sucede. ¡Estamos deseando crear esa magia en San Juan!

Afectuosamente,



**Charlotte Clark**  
Presidenta



**Judy Braus**  
Directora Ejecutiva



**Christiane Maertens**  
Directora Adjunta



**Lori Mann**  
Gerente de la Conferencia

# T GETHER FOR PUERTO RICO JUNTOS PARA PUERTO RICO

When Hurricane Maria slammed into Puerto Rico, life changed for every living thing on the island. Today, communities throughout the island are facing the biggest humanitarian crisis in modern history, with **very limited access to clean water, food, health care, and other basic services**. At the same time that the hurricane has turned people's lives upside down, the island's rich biodiversity—from the coastal habitats to the central mountains—has also been hit hard.

For more than a year, **NAAEE has worked hand-in-hand to plan the conference with our nonprofit partner and conference co-chair, Para La Naturaleza (PLN)**. They have been a tireless force for education and nature, with a mission to preserve the island's beauty and educate about the importance of conservation and stewardship. By maintaining more than 50 natural areas, conducting environmental education programs, and serving as conservation champions, PLN is protecting the island's unique natural resources and ensuring that all residents and visitors have access to the amazing wild places that make Puerto Rico one of the Caribbean's most beautiful islands.

Join us as we come ***Together for Puerto Rico*** to support not only the staff and families of Para La Naturaleza as they recover and rebuild, but also their work to protect the island—from restoring and reopening their properties to rebuilding urban forests and educating people about how to adapt to a changing climate and revitalize communities. Together, we can bring hope to our incredible colleagues as they face this tremendous challenge for the island's future.

***Juntos Para Puerto Rico y Para La Naturaleza!***



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**DONATE  
TODAY.**

*Click here.*

All donations are tax deductible!





# The Cal Water H<sub>2</sub>O Challenge is coming back for **YEAR 4!**

A FREE, educational competition tackling California's water issues

In addition to our annual project-based learning classroom competition for grades 4-6, Cal Water is excited to announce a **NEW** challenge:

**NEW**  
THIS YEAR!

## A media competition about caring for water

Open to students in grades 4-12 and accepting:

Visual Art  
Photography  
and Video

Learn more at

**[challenge.calwater.com](http://challenge.calwater.com)**



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# ROOT OUR CHILDREN IN NATURE

and we'll grow lifelong stewards ready to care for our beautiful Oregon home.

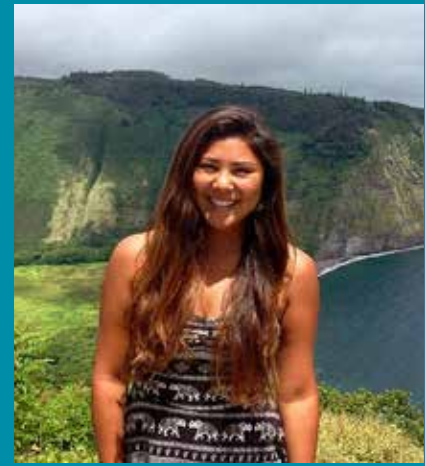
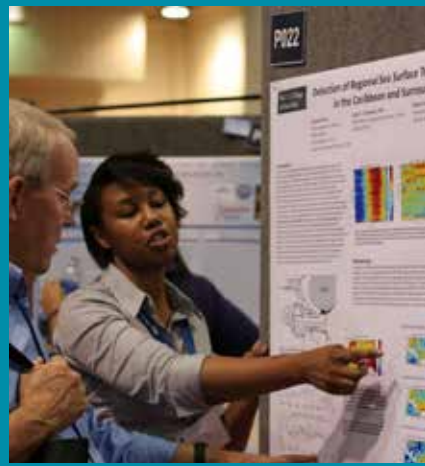
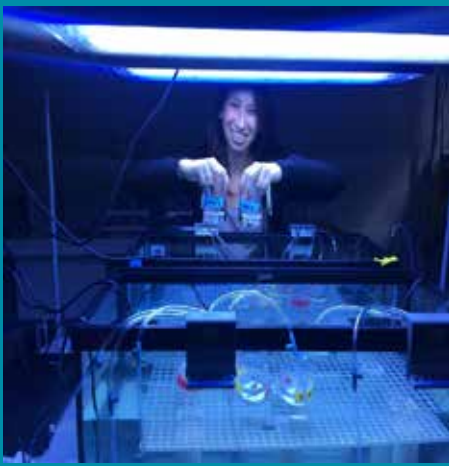
We start by getting kids outside.

GRAY FAMILY FOUNDATION



www.grayff.org

## NOAA UNDERGRADUATE AND GRADUATE OPPORTUNITIES



The National Oceanic and Atmospheric Administration (NOAA) offers many scholarships, internships, fellowships, and post docs for undergraduate and graduate students. To learn more about these opportunities, please visit [noaa.gov/students](http://noaa.gov/students).

[WWW.NOAA.GOV/STUDENTS](http://WWW.NOAA.GOV/STUDENTS)

THIS ANNOUNCEMENT WAS SUPPORTED THROUGH FUNDING PROVIDED BY THE NATIONAL MARINE SANCTUARY FOUNDATION

# THANK YOU

PLATINUM



GOLD



PISCES FOUNDATION



SILVER



GREEN



BLUE



IN KIND





## Education we need for the world we want.

There has never been a greater need for environmental education—or a greater opportunity. The world is facing unprecedented environmental, social, and economic challenges—from a changing climate and loss of species and habitats, to decreasing access to nature, the unequal distribution of resources, and other threats to our well-being. Environmental education has the potential to transform lives and society by addressing these challenges through helping to create a motivated and committed citizenry. Environmental education informs, inspires, and enlightens. It builds human capacity, influences attitudes, and can lead to action. And most importantly, it can help people make informed decisions about the environment that lead to informed stewardship and a more sustainable society.



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North American Association  
for Environmental Education

Over 40 years of inspiring leadership  
and excellence in environmental education

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## NAAEE: Be the Change

For more than four decades, the North American Association for Environmental Education has worked to strengthen and expand the field of environmental education, with a growing network of support including:

- **More than 20,000 members and supporters**
- **56 state and regional Affiliate organizations**
- **30 countries around the world**

Today, as we build on this foundation, NAAEE looks forward to strengthening our core and stimulating new partnerships and new thinking that will best meet the environmental and social challenges of the next decade.

### Building a Network

**Annual Conference:** NAAEE has convened an annual conference for environmental education professionals since 1972. Averaging more than 1,000 participants each year, the event is designed to promote innovation, networking, learning, and dissemination of effective practices.

**Early Childhood and Environmental Education:** In 2013, NAAEE launched the Natural Start Alliance—a coalition of educators, parents, and organizations focused on linking early childhood education with EE to connect young children with nature and enhance opportunities for creative play and learning.

### Strengthening the Field

**EE Advocacy:** Since its inception, NAAEE has helped lead policy and outreach efforts on behalf of the field. NAAEE sponsors a monthly Action Network Call to highlight key opportunities to get involved in supporting EE at all levels, from advocating for federal legislation and State Environmental Literacy Plans to implementing local, state, provincial, and regional strategies to strengthen public support for environmental education.

**EE Resources:** NAAEE’s National Project for Excellence in EE has produced the Guidelines for Excellence series, the most widely accepted guidelines for effective practice in environmental education around the globe. NAAEE’s newly designed website, including eePRO, provides up-to-date environmental education research, curriculum guides, monthly webinars, professional development opportunities, job postings, and more.

**Research and Practice:** NAAEE and Stanford University are working with several partners to highlight existing research that demonstrates the impact of EE and helps translate research into practice.

### Inspiring Innovation

**Building STEM Skills:** Through a partnership between UL and NAAEE, the UL Innovative Education Award is a first-of-its-kind initiative, investing \$250,000 in recognition grants to increase the impact of innovative nonprofit programs that use the environment as a pathway for STEM learning, creating more sustainable communities, and empowering youth.

**Broadening the Conversation:** ee360 is NAAEE’s newest initiative supporting innovative environmental education across the country. NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading an ambitious five-year initiative to support a diverse cadre of environmental education leaders that are better prepared to increase environmental literacy to everyone, everywhere.

Connect with NAAEE today and join the movement to create a more sustainable future together.



*Education We Need for the World We Want*



## Stay connected!



Want the latest on all things #NAAEE2017? Follow @NAAEEStaff on social media!



Follow us on Facebook to stay connected to #EnviroEd trends and events!



Follow @NAAEEStaff on Instagram for #NAAEE2017 photos and videos!



Access our conference mobile app via your app store: Download "CrowdCompass AttendeeHub" and search for "NAAEE"!



## EMPOWERING FUTURE LEADERS TO MAKE A DIFFERENCE IN LOCAL AND GLOBAL COMMUNITIES FOR OVER 50 YEARS.

Prescott College offers affordable experientially centered bachelors, masters, and doctoral degrees through on campus and distance learning programs

Scholarships Available. Discounts for AmeriCorps, City Year, and NOLS members and alumni.

**GLOBAL LEARNING OPPORTUNITIES IN NORWAY, KENYA, AND KINO BAY, MEXICO**



### GOOD TO KNOW

#### The Shining Star of the Caribbean

The Puerto Rican flag was designed in 1895, before the United States claimed Puerto Rico as a territory. It was modeled after the Cuban flag as a tribute to the Free Cuba Movement. In 1952, the flag was modified to make the original light blue the same dark blue as found on the American flag.



## Conference Basics

### Registration & Check-In Hours

Monday	10:00 AM-11:00 AM; 5:00 PM-6:30 PM
Tuesday	7:30 AM-9:30 AM; 5:00 PM-6:30 PM
Wednesday	7:30 AM-10:30 AM; 12:00 PM-6:30 PM
Thursday	7:30 AM-10:30 AM; 1:30 PM-6:00 PM
Friday	7:30 AM-10:30 AM; 1:30 PM-4:00 PM
Saturday	8:00 AM-10:30 AM

**Location:** San Gerónimo Foyer

### Information Station

Wednesday	10:30 AM-6:30 PM
Thursday	10:00 AM-6:00 PM
Friday	10:00 AM-5:30 PM
Saturday	10:00 AM-12:30 PM

Have questions about the conference?  
Located next to the registration counters in the San Gerónimo Foyer, volunteers at the **Information Station** are here to help.

### General Information

#### Auction Items

Please bring auction items to Boardroom 2, where volunteers will be ready to accept your donation. (If the office is not open, please leave donations at the registration desk.)

Bidding on silent auction items begins during the opening reception on Wednesday evening in the San Cristóbal Ballroom. The live auction will be held and the silent auction will close during the special event on Friday evening.

#### Audio-Visual Equipment Problems

If presenters experience any audio-visual issues during your sessions, please ask the volunteer room monitor to report it to any staff member or the NAAEE office. Any staff member will help connect you with our audio-visual experts as quickly as possible.

#### Authors' Corner

Authors will be available to sign and sell books during the opening reception on Wednesday. See page 36 for more information.

#### Breakfast

Two hotel restaurants are open for breakfast service starting at 6:00 AM, and quick breakfast items are available for purchase at the hotel Starbucks.

#### Coffee Breaks

There will be 30-minute coffee breaks at 10:00 AM on Thursday, Friday, and Saturday mornings in the San Gerónimo Foyer.

#### Community Service Project

Each year, NAAEE participates in a Community Service Project to give back to our host community, an effort that is especially meaningful this year. See page 25 for details, and sign up to volunteer at the Information Station.



GOOD TO KNOW

### Coquí

The coquí is one of the most common frogs in Puerto Rico with more than 16 different species found within its territory, including 13 in the El Yunque National Forest.



## Continuing Education Units and Graduate Credit

NAAEE has partnered with the University of Wisconsin-Stevens Point (UWSP) to offer CEUs or 1 graduate credit for attending the Conference and Research Symposium. Applications are available at the Information Station. See details below.

### Exhibit Fair

Wednesday 5:00 PM–6:30 PM  
Thursday 9:00 AM–5:00 PM  
Friday 9:00 AM–2:30 PM

We'll celebrate the Exhibit Fair with a full buffet lunch on Thursday from 12:30 PM–2:00 PM in the San Cristóbal Ballroom and Foyer. In addition to exploring the wealth of resources that our exhibitors have on display, be sure to visit the conference poster presentations from 1:00 PM–2:00 PM in the San Gerónimo Ballroom and find out what's happening with the NAAEE Affiliate in your state or province at the Affiliates' Welcome.

See page 118 for a list of exhibitors.

### Field Trips

If you are registered for a field trip, please meet your bus at the main entrance to the Caribe Hilton. See page 47 and 101 for start times.

### Jobs and Resumes

You can upload your resume, build your eePROfile, search for jobs, or post job listings in eePRO, NAAEE's online hub for professional development in EE. Visit NAAEE's exhibit in the San Cristóbal Ballroom for more information or a demonstration.

### Mobile App

Our conference mobile app allows you to search the conference program, build your own schedule, network with other attendees, and more. Download "CrowdCompass AttendeeHub" from your app store and then search for "NAAEE." Need support? Ask at the Information Station.

## TICKETED EVENTS

These events are included with conference registration with an RSVP. If space allows, you can add an RSVP or purchase guest tickets at the registration desk until the deadlines noted.

**Opening Reception and Ceremony**, Wednesday, 5:00 PM–8:30 PM. Includes hors d'oeuvres, exhibits, Share Fair, Authors' Corner, and Dr. Jane Goodall keynote. Add by Monday 11:30 AM.

**Exhibit Fair Luncheon**, Thursday, 12:30 PM–2:00 PM. Includes a full buffet luncheon, exhibits, poster presentations, and the Affiliate Welcome. Add by Tuesday 11:30 AM.

**Annual Gala and Stapp Auction at the El Cuartel de Ballajá**, Friday, 7:00 PM–9:30 PM. Includes authentic Puerto Rican fare, live music by a local favorite—Sin Prisa—and dancing, artisan craft vendors, and the silent and live auctions. Additional tickets can be purchased until Wednesday at 11:30 AM as space allows.

**Awards Luncheon and Closing Plenary**, Saturday, 12:00 PM–2:30 PM. Includes luncheon, awards ceremony, and the inspiring 30 Under 30 plenary panel. Add by Thursday at 11:30 AM.

### Volunteer Check-In

The Volunteer Office is in Boardroom 2. Registered volunteers should check in at the office 15 minutes prior to the start of their shifts.

### WiFi Access

Free Wi-Fi is available in the hotel's public areas and meeting rooms. Take advantage of the access to send a few tweets using #NAAEE2017 to share your favorite session or let folks know what you think of the conference!

## Earn Continuing Education Units (CEUs) or Graduate Credit for Conference Attendance

NAAEE has partnered with the University of Wisconsin-Stevens Point (UWSP) to offer CEUs for attending the Conference and Research Symposium. Participants can receive a certificate documenting their continuing education units by completing an application form that verifies session attendance and submitting the form, along with a \$30 processing fee, to UWSP Continuing Education and Outreach. You can pick up an application form at the registration desk. Ten contact hours of professional development equals one CEU.

For more information, contact **Dr. Kendra Liddicoat** at [Kendra.Liddicoat@uwsp.edu](mailto:Kendra.Liddicoat@uwsp.edu).



Wisconsin Center for Environmental Education  
College of Natural Resources  
University of Wisconsin-Stevens Point



Continuing Education and Outreach  
University of Wisconsin-Stevens Point

## Conference Strands

Six cutting-edge thematic strands characterize this year's conference:



### Applying Research to Increase Our Impact ●

Using research to inform how we design, develop, refine, and promote environmental education programs—including methods to engage new and under-represented audiences—for maximum effectiveness

Strand Leaders: Justin Hougham and Steve Kerlin

### Building Leadership for Environmental Literacy ●

Strategies for building leadership and infrastructure to further EE on the state and provincial levels, and for advancing efforts to motivate the public to take informed actions on environmental and other civic issues

Strand Leader: Dave Chase

### Conservation and Environmental Education ●

Achieving conservation goals through education, communication, social marketing, and ecotourism strategies, including public participation in scientific research (PPSR) and place-based community action

Strand Leader: Cheryl Calastro

### Educating for Sustainable Communities ●

Creating sustainable and equitable communities through informed partnership building, informed civic engagement and personal decision making, developing sense of place, systems thinking, connecting community and environment, and understanding historical impacts on communities of color

Strand Leader: Elaine Andrews

### Green Schools ●

Using environmental education to transform education, enhance student achievement, conserve resources, support national and international education trends, link schools and communities, and build support for environmental education on K-12 campuses

Strand Leader: Sharon Jaye

### Inspiring Connections to the Outdoors ●

Cultivating partnerships and providing outdoor education experiences that connect people of all ages and backgrounds to nature

Strand Leader: Nicole Jackson



## 2017 Research Symposium

NAAEE's annual Research Symposium brings the academic community together to explore the current state and future directions of environmental education research and to advance the use of practices proven to be effective. Join new and experienced researchers from around the globe to converse on emerging and traditional areas of environmental education research.

At this milestone year of Tbilisi +40, the Research Symposium encourages reflection on the evolution of our field and its trajectory in light of today's trends, challenges, and opportunities. Through keynote panels, facilitated discussions, poster sessions, and workshops, we explore new ideas and approaches to advance our work and consider how emerging issues, methods, and theories might inform current and future EE research.

Chair: Nicole Ardoin, Stanford University

Co-Chair: Alan Reid, Monash University

## Concurrent Session Formats

Conference participants will see a wide variety of session types listed in the conference program. The different formats help us maximize the diversity and number of presenters. Session formats vary in length and degree of depth and interaction.

### Workshop (full or half day)

Workshops are in-depth sessions that actively develop specific professional competencies and have widespread potential for implementation. Workshops are scheduled on Wednesday, prior to the formal start of the conference. Onsite registration is accepted as space allows; fees apply.

### Symposium (90 minutes)

Symposia are panel discussions presenting different perspectives on a topic or question related to one of the focus points for each strand. Panels generally include at least three panelists and a moderator.

### Hands-on Presentation (90 minutes)

Hands-on sessions provide participants with an opportunity to engage in teaching activities and interactive discussions about a particular topic.

### Traditional Presentation (40 minutes)

Traditional presentations focus on a single topic or program, typically including a talk or media presentation followed by a short discussion.

### Roundtable Discussion (40 minutes)

Roundtables emphasize spirited discussion between the presenter(s) and session attendees. Presenters briefly introduce the baseline question they wish to explore, and then open the discussion for input and exchange of ideas. Multiple roundtable discussions occur simultaneously in one large room.

### Poster Presentation (40 minutes)

Posters are two-dimensional printed presentations illustrating research studies, programs, or other work. Posters are fixed to bulletin boards for conference participants to review at leisure. In addition, all poster presenters will be available during the Exhibit Fair Luncheon on Thursday to share their posters, answer questions, and interact with attendees.

### Bright Spot (10 minutes)


Bright spots are succinct talks that celebrate specific triumphs and showcase things that work. Each presenter has 10 minutes to highlight important research findings, and successful and innovative family programs, school programs, community partnerships, conservation achievements, and more. Two or three bright spots, generally related, are presented back-to-back during one 40-minute time block.

## Finding Sessions of Interest



### Diversity, Equity, and Inclusion

NAAEE strives to dedicate at least 15 percent of our concurrent sessions within each strand to advancing diversity, equity, and inclusion in EE. These sessions explore ways to strengthen our field through strategies and programs that, among others, help diversify our audiences as well as our workforce, build cultural competence, support environmental justice, engage with new audiences, forge new and lasting partnerships, honor traditional knowledge, and increase our reach and relevance throughout society.

Sessions marked with this icon  have been identified using criteria developed by a team from NAAEE's Diversity and Inclusion eePRO group as helping to meet this goal.

### Spanish (S) and Bilingual (B) Sessions

Sessions marked with these icons will be presented in Spanish or in Spanish and English.

### Keywords

In addition, look for color-coding in the daily listings or search on these tags in the mobile app to find sessions of particular interest in these areas:

*Adult education*  
*Affiliates*  
*Arts*  
*Capacity building*  
*Early childhood*  
*ee360*  
*Elementary school programs*  
*Gardening*  
*International EE*  
*Middle & high school programs*  
*NGSS/Common Core*  
*Spirituality*  
*STEM*  
*Traditional knowledge*  
*Underserved audiences*  
*Young professionals*

# Networking Opportunities

## Stay Connected through eePRO!



NAAEE's professional development hub, eePRO, is the online place to connect, share, and learn! You can find resources, learn about new ideas and professional development opportunities, connect with people with similar interests, and continue the inspiring conversations that get started here at the conference. You can also attend NAAEE's monthly webinars, and discover new workshops and other training opportunities, the latest research, and much more.



## Upcoming eeWEBINARS

Bringing new ideas and innovation to the field of EE

**eeWORKS: Demonstrating the Power of Environmental Education from Anecdotes to Evidence**

**Tuesday, November 14, 2017, 1:00 PM EST**

with Judy Braus, NAAEE;

Dr. Nicole Ardoin, Stanford University;

Alison Bowers, Virginia Tech University

**Using NAAEE's Community Guidelines for Social Change**

**Tuesday, December 12, 2017 4:00 PM EST**

with Curtis Ogden, Interactive Institute for Social Change



eeJOBS: Leading EE Job Listing Service



eeLEARN: Online Learning Modules



eeNEWS: Latest News from NAAEE and the EE Community



eeRESEARCH: Connecting Research and Practice



eeWEBINARS: Bringing New Ideas and Innovation to the Field of EE



eeWORKS: Research Reviews and Communication Tools

## Join the Discussion: eePRO Groups

At the center of eePRO's group discussion platform are the 16 eePRO Groups—special interest groups created by and for our members and supporters. These forums offer the opportunity to discuss important subjects with experts, peers, budding environmentalists, and more. Enthusiastic moderators keep the discussions active, positive, inclusive, and informative.

Several of the eePRO groups will meet during Friday's lunch break and—whether you're a current member or want to develop new networking opportunities—you are encouraged to bring your lunch and join in!

**You can also sign up for any of the eePRO groups at the NAAEE exhibit booth.**



### Brown Bag Lunch Meetings: Friday, 1:00 PM–2:00 PM



**Advocacy**  
Salon Del Mar



**Climate Change Education**  
Caribe



**Diversity, Equity, and Inclusion**  
Garita



**Early Childhood Education**  
Flamboyán



**Global EE**  
Las Olas, Table 1



**Green Schools**  
Magüey



**Guidelines for Excellence**  
Executive Boardroom



**Higher Education**  
Las Olas, Table 2



**Research and Evaluation**  
Las Olas, Table 4



**Technology and EE**  
Las Olas, Table 5



**naaee**  
North American Association  
for Environmental Education



United States  
Environmental Protection  
Agency

Thanks to the US Environmental Protection Agency for supporting the development of eePRO through EECapacity.

## Meetings & Gatherings

### Accreditation Advisory Board Business Meeting Friday 5:00 PM–6:00 PM, Executive Boardroom

Working meeting for members of the Accreditation Advisory Board, Accreditation Review Panel, and State EE Certification Program representatives. By invitation.  
Coordinator: Tom Marcinkowski

### Affiliates Network Dinner

Tuesday, 5:30 PM, Caribar Lounge

Informal networking dinner for Affiliate leaders.

### Diversity Dinner

Thursday, 7:00 PM, El Mercado

Informal dinner gathering for those interested in diversity, equity, and inclusion in EE. Open to all. Meet at the entrance to the Caribe Hilton for the five-minute walk to El Mercado, an upscale food court with about 15 vendors to choose from.

### eePRO Group Meetings

Friday, 1:00 PM–2:00 PM

Several eePRO Groups are meeting over a brown bag lunch. See page 19 for groups and locations.

### Environmental Professionals of Color Business Meeting

Thursday, 4:00 PM–5:30 PM, Las Olas

The EPOC business meeting is open to all EPOC members and potential members. We will build community connections, discuss lessons learned, and identify potential priority areas for the next year. EPOC is a program of the Center for Diversity & the Environment.

Coordinator: Queta Gonzales

### Environmental Education Research Editors Meeting

Thursday, 7:15 AM–8:15 AM, Tropical B

Working meeting for journal editors. Breakfast included. By invitation.

Coordinator: Alan Reid



#### GOOD TO KNOW

#### Coffee / Cafe

Puerto Rico is one of the only places in the US Territories where coffee is grown, processed, and sold for local and international consumption.



SHARE. NETWORK. INNOVATE.

**GeEP** GLOBAL ENVIRONMENTAL EDUCATION PARTNERSHIP

### Global Environmental Education Partnership

#### Welcome & Check-In

Sunday, 6:30 PM–8:30 PM, Caribar Lounge

By invitation.

#### GEEP Meeting

Monday, 8:30 AM–5:00 PM, Las Olas

By invitation.

### H<sub>2</sub>O Challenge Business Meeting

Thursday, 2:30 PM–4:30 PM, Tropical B

By invitation.

### NAAEE 2018: Share Your Ideas!

Saturday, 10:30 AM–11:10 AM, Conference 8-9

How can we improve on this year? We'd love to hear your thoughts. Come share your ideas and suggestions for our 47th annual conference, scheduled for October 9–13 in Spokane, Washington.

Coordinator: Lori Mann

### NAAEE Business Meeting

Saturday, 9:20 AM–10:00 AM, Conference 6-7

Join NAAEE's president, executive director, board, and staff for a discussion on the current state of the organization and future directions for NAAEE. Topics will include strategic planning, a financial report, and your questions. We welcome your input!

Coordinators: Charlotte Clark, Judy Braus

### Southeastern Environmental Education Alliance Meeting

Friday, 5:00 PM–6:00 PM, Magüey

Members of SEEA and other affiliates in the southeastern United States will meet to discuss current activities.

Coordinator: Beth Cranford

### UL Innovative Education Award Business Meeting

Thursday, 8:30 AM–5:00 PM, Tropical B

By invitation.

Coordinators: Christiane Maertens, Chris Hutton

PLT AND SFI JOIN FORCES  
TO EXPAND

# YOUTH ENVIRONMENTAL EDUCATION PROGRAMS



## PLT is Growing!

- New online units constructed around NGSS for grades K-2, 3-5, and 6-8
- More online professional development courses
- Diverse workshops and outreach through ee360
- A growing GreenSchools program
- New national and state partnerships
- PLT Canada – coming soon!

**Together with SFI,  
we are furthering  
our commitment to  
getting kids outside,  
connecting youth  
to forests, and  
building sustainable  
communities.**

Come to one of our sessions.  
Visit us in the exhibit hall.

Learn more:  
[plt.org](http://plt.org) & [sfiprogram.org](http://sfiprogram.org)





## ee360 at the Conference

ee360 is NAAEE's newest initiative supporting innovative environmental education across North America. NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading an ambitious five-year initiative to support a diverse cadre of environmental education leaders who are better prepared to increase environmental literacy for everyone in their communities.

NAAEE is strengthening the field, advancing environmental literacy, and building a more inclusive movement that we hope will have both short- and long-term impacts. Together with our partners and advisors, NAAEE is bringing more than four decades of expertise to our effort to grow, strengthen, and diversify the field of environmental education.

ee360 builds on 25 years of US EPA's long-standing commitment to support a nationwide effort to strengthen the field and support professional development. This effort supports innovative leaders in the environmental education field through leadership training, state-of-the-art education materials and research, networking opportunities, and an online hub where educators can share new approaches and best practices.

ee360 is powered by collaboration, and we couldn't do this work without the support of our amazing partners and advisors. As we kick off the first year of this project, we're excited to share what we've collectively learned so far. To learn more about ee360's work, we invite you to participate in one or more of these sessions and visit [ee360.org](http://ee360.org).

## Tuesday

**ee360 Leadership Team Workshop**  
**8:30 AM-4:30 PM, Flamboyán**  
 By invitation.

## Wednesday

**Earth Force Training**  
**8:30 AM-4:30 PM, Executive Boardroom**  
 By invitation.

**The Road to NAAEE Higher Education Accreditation: A Map for Success**  
**8:30 AM-4:30 PM, Conference 2**  
 Registration required.

**Train-the-Trainer Workshop: NAAEE's Environmental Education Guidelines for Community Engagement**  
**8:30 AM-4:30 PM, Garita**  
 Registration required.

**Building a Stronger, More Inclusive Movement**  
**1:00 PM-4:30 PM, Conference 3-4-5**  
 Registration required.

**Ideate, Innovate! Connecting Research and Practice in Environmental Education**  
**1:00 PM-4:30 PM, Magüey**  
 Registration required.

## Thursday

**Project Learning Tree GreenWorks! Environmental Service-Learning Grants**  
**9:20 AM-10:00 AM, Flamingo D**

**Reaching Educators Online: PLT's Dive into Online EE Workshops**  
**9:20 AM-10:00 AM, Flamingo D**

**Create Healthier Schools & Communities with PLT GreenSchools Program**  
**4:00 PM-5:30 PM, Caribe**

**Certification: eeLEARN Modules**  
**4:50 PM-5:30 PM, Tropical A**



# Friday

Certification Clinic: Developing State  
EE Certification Programs

8:30 AM-10:00 AM, Conference 3-4-5

NAAEE's Newest Collaboration with EPA

9:20 AM-10:00 AM, Tropical C

EE Certification: The Benefits of Being a Certified  
Environmental Educator

10:30 AM-11:10 AM, Las Olas

Personalizing the Community Engagement  
Guidelines (Real Talk)

10:30 AM-11:10 AM, Conference 2

Unlocking E-Units: PLT's New Online Curriculum

2:15 PM-2:55 PM, Conference 2

Identify and Practice Interrupting Micro/Macro  
Aggressions

2:15 PM-3:45 PM, Flamboyán

New Directions for EE Certification Programs

4:00 PM-4:40 PM, Tropical C

K-12 Learner Guidelines Update: We Want  
Your Input

4:00 PM-4:45 PM, Las Olas



## GOOD TO KNOW

### Invention of the Piña Colada

In 1954, Hilton Caribe bartender Ramón "Monchito" Marrero created a special cocktail that mixed rum, coconut cream, and pineapple juice—and the delicious Piña Colada was born! The drink was served personally by the creator for 35 years while he worked as a bartender at the hotel, and in 1978, the Piña Colada was declared the official drink of Puerto Rico. In 2004, Caribe Hilton was presented with a proclamation signed by Puerto Rico's Governor Sila María Calderón, supporting the celebration of the 50th Anniversary of the Piña Colada.

### Original Piña Colada Recipe

Ingredients:

2 ounces white rum  
1 ounce coconut cream  
1 ounce heavy cream  
6 ounces fresh pineapple juice  
½ cup of crushed ice

Method:

Add the rum, coconut cream, heavy cream and pineapple juice in a blender. Add the ice and blend until smooth for about 15 seconds. Serve in a 12-ounce glass. Garnish with a fresh pineapple wedge and a maraschino cherry.

Be a part of the parks.

### Zion National Park

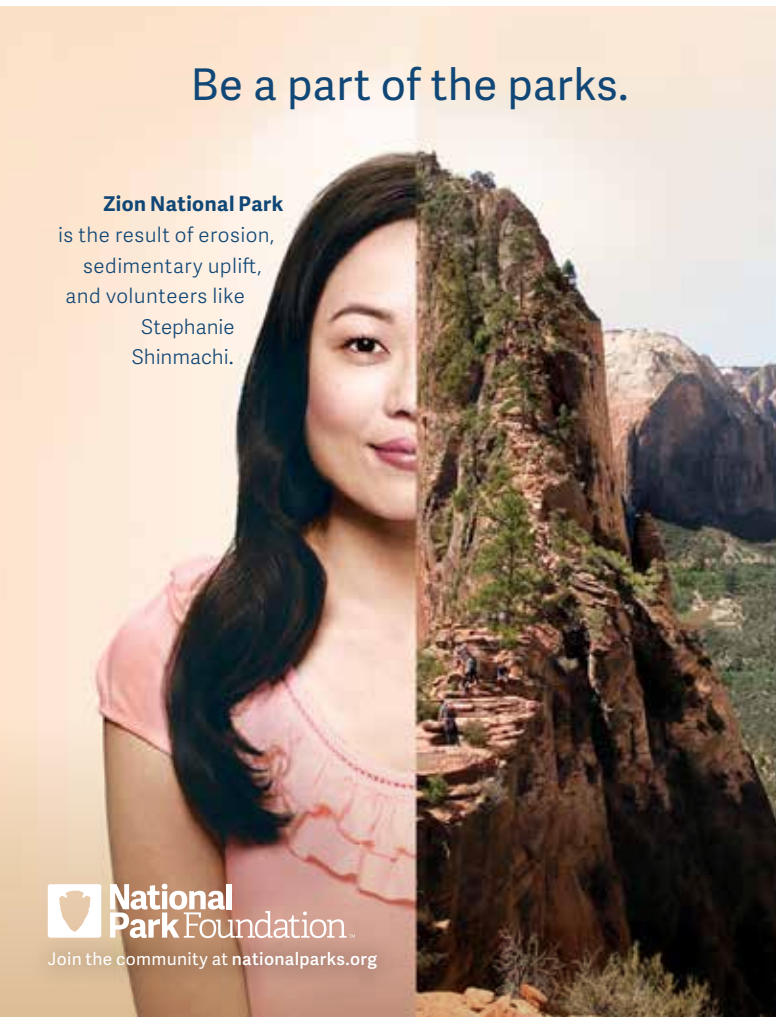
is the result of erosion,  
sedimentary uplift,  
and volunteers like

Stephanie  
Shinmachi.



National  
Park Foundation

Join the community at [nationalparks.org](http://nationalparks.org)



## NAAEE and the Affiliates: A Force for Nature



NAAEE's Affiliate Network is a powerful collective for environmental education and capacity building in the field. The network represents 56 organizations, each affiliated with NAAEE, that work together to support environmental education professionals through the United States, Canada, and Mexico. Since the partnership began in 1998, NAAEE and the Affiliates have created a more unified voice for EE on all levels, promoting collaborative learning, professional development, and resource development.

Throughout the conference, a number of sessions focus on strengthening Affiliate organizations, sharing best practices, and building capacity at all levels of the field. Check out these sessions to learn more.

### Wednesday

**Affiliate Network Workshop**  
8:30 AM-4:30 PM, Gran Sal3n Los Rosales B  
(Registration required)

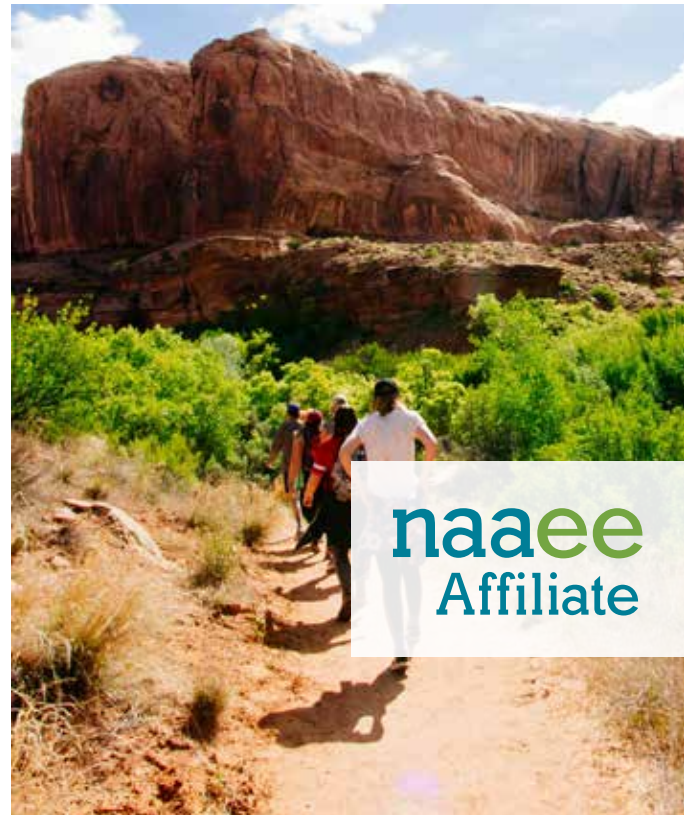
### Thursday

**Messaging and Marketing for EE Affiliates**  
8:30 AM-10:00 AM, Garita

**Collaborating for Impact: Stories from Two States**  
10:30 AM-11:10 AM, Las Olas

**Green Play to Green Pay: Fostering Careers in Natural Resources**  
2:15 PM-2:55 PM, Tropical A

**Set Yourself Up for Success: Principles of Nonprofit Management for Affiliates**  
4:50 PM-5:30 PM, Conference 2



### Friday

**Fundraising for Success-Tips and Tricks for Diversifying Affiliate Revenue**  
9:20 AM-10:00 AM, Conference 2

**The E Guidelines: Scaffolding Environmental Literacy**  
10:30 AM-11:10 AM, Las Olas

**Developing Effective Collaborations with State-Level Agencies**  
2:15 PM-3:45 PM, Guayacan

**Help! We Are All Volunteers! How Can We Be Successful?**  
4:00 PM-4:45 PM, Conference 6-7

### Saturday

**Affiliates' Regional Collaboration-What's in It for You?**  
8:30 AM-9:10 AM, Las Olas

**Strategies for Affiliate Capacity Building**  
9:20 AM-10:00 AM, Las Olas

**The E Movement: Making Environmental Literacy Systemic Countywide**  
9:20 AM-10:00 AM, Conference 8-9

## Community Service Project

Urban Restoration in San Juan  
Friday, 12:45 PM-2:15 PM

Each year, NAAEE works with a local organization to develop a community service project through which conference participants can give back in a meaningful way to our host community. While this year is no exception, current circumstances in Puerto Rico have never made the service project a more important part of NAAEE's commitment to helping our host.

Puerto Rico hasn't been affected by hurricanes as strong as Maria and Irma since 1932, and never have two Category 4 and 5 hurricanes made direct contact with the island in one season. September left Puerto Rico with devastating wind and flooding in the aftermath of Irma and Maria. And with this, urban areas are left without one of their most important allies: trees. Among the many services they provide, native trees help control surrounding temperatures and air quality.

In collaboration with our conference partner, Para la Naturaleza, we have identified high density areas that have lost much of their urban forest, and selected native species that will thrive in urban conditions. To contribute in a small but significant way to Puerto Rico's recovery, you can join this effort to replant trees and help restore beauty and natural services to San Juan.

para la  
Naturaleza



## Evaluation Clinic

Fourth Annual Environmental  
Education Evaluation Clinic  
Friday, 8:30 AM-10:00 AM, Las Olas

Do you have questions about evaluation or assessment? Bring them to NAAEE's fourth annual Evaluation Clinic, where you can ask questions of the experts and contribute your own relevant experience. Learn from evaluation experts as well as peers through informal, roundtable conversations.



GOOD TO KNOW

### Climate

The climate is Tropical Marine with average temperatures year round, near 80 °F (26.7 °C) in lower elevations and 70 °F (21.1 °C) in the mountains.



**naaee**

North American Association  
for Environmental Education

In partnership with:

**para la  
Naturaleza**

**SAN JUAN 2017**  
IMAGINE A WORLD



This conference wouldn't be possible without the dedication of all the people on this list, as well as their employers and families. These amazing volunteers gave generously of their time and talents. There are also hundreds of others, not listed here, who pitched in to help along the way. **Thanks to all of you for your hard work and willing spirits. You've brought this conference to life!**

### Conference Co-Chairs



#### **Theres Santos-Diaz**

*Coordinador de Programación Interpretativa*  
Interpretive Program Coordinator  
Para la Naturaleza



#### **Elizabeth Padilla Rodriguez**

*Coordinadora de Proyectos Educativos y Especiales*  
Education and Special Projects  
Coordinator  
Para la Naturaleza

### Conference Committees

#### **Auction**

Nancy Hotchkiss

#### **Awards**

Brenda Metcalf

#### **Diversity, Equity, and Inclusion**

Darryl Ramos-Young  
Amesha Morris

#### **Field Trips**

Theres Santos-Diaz

#### **Research Symposium**

Nicole Ardoin  
Alan Reid

#### **Scholarships**

Billy Bennett  
Yarib Dheming  
Becca Franzen  
Jennifer Hubbard-Sanchez  
Bob Jickling  
Ruth Kermish-Allen  
Lori Kiesser  
Sue McGuire  
Elizabeth Padilla Rodriguez  
Betsy Parker  
Darryl Ramos-Young  
Adam Ratner  
Gladys Ruiz  
Dottie Shuman  
Renee Strnad  
Elena Takaki

#### **Volunteers**

Elizabeth Padilla Rodriguez  
and our incredible team of  
more than 70 onsite volunteers

### Strand Leaders

#### ● **Applying Research to Increase Our Impact**

Justin Hougham  
Steve Kerlin

#### ● **Building Leadership for Environmental Literacy**

Dave Chase

#### ● **Conservation and Environmental Education**

Cheryl Calastro

#### ● **Educating for Sustainable Communities**

Elaine Andrews

#### ● **Green Schools**

Sharon Jaye

#### ● **Inspiring Connections to the Outdoors**

Nicole Jackson

### Conference Proposal Reviewers

Thank you to 112 colleagues who took the time to diligently review nearly 650 proposals submitted for this year's conference. If you would like to volunteer to review the 2018 proposals, watch for announcements in eeNEWS, NAAEE's email bulletin. We look forward to working with you to create another outstanding program in Spokane!

# NAAEE Partners & Supporters

## Conference Scholarships

NAAEE is proud to have provided funds to help enable more than 200 professionals and students attend the 2017 conference in San Juan.

Our thanks to the following organizations, whose support made this possible.



We are especially grateful to the many NAAEE members who contribute to scholarships through their Stapp Scholarship Auction purchases and as part of their conference registration.



**The Environmental Education Scholarship for Academic Study** is awarded to two college or university

students in each year's conference host state. Recipients are selected based on their understanding of and commitment to environmental education and their potential for future contributions to the field. This year, NAAEE recognizes **Melissa Gonzalez**, University of the Sacred Heart, San Juan, and **Eduardo M. Llegus-Santiago**, University of Puerto Rico-Ponce.



**The Columbia Sportswear Teacher/Administrator Scholarship** recognizes a teacher's

achievement in environmental education in the classroom and the administrator who supported these endeavors. This year's recipients are first grade teacher **Nakeia Wimberly** and **Sarah Sterling-Laldee**, Supervisor of Science, of Paterson Public School #2 in Paterson, New Jersey. Nakeia and Sarah have been working together for the past seven years teaching students about the environment.

**The Young Professionals Scholarship** provides support to help six young professionals advance their careers by attending the 2017 NAAEE Conference. Join **NAAEE** and the **US Forest Service**, who share the important goal of increasing diversity, equity, and inclusion in the field, in congratulating these outstanding recipients: **Freddy Anyakora**, **GINNA MALLEY CAMPOS**, **Elizabeth Rael**, **Seng Saechao**, **Alejandro Soto**, **Janet Xochicuicatl Valenzuela**.

## Cal Water H<sub>2</sub>O Challenge



NAAEE has also joined with the **California Water Service** to create the **4th Annual Cal Water H<sub>2</sub>O Challenge**, a classroom competition that teaches kids to care for water and empowers them to make a difference through project-based learning.

We are proud to recognize the 2017 grand prize winner: **Miss Emily Akimoto's 5th grade classroom** at **Sierra View Elementary** in Chico, CA.

Miss Akimoto's class was inspired by recent water concerns in Flint, Michigan. Students decided to test the water quality and contamination levels at Sierra View Elementary by researching the different ways water can become contaminated. After collecting and testing the water at a local lab, students determined that the water was safe to drink! Miss Akimoto's class received a \$3,500 grant and the opportunity to camp in the Santa Monica Mountains with NatureBridge.

For more information, visit [challenge.calwater.com](http://challenge.calwater.com)



## The UL Innovative Education Award

Over the past three years, NAAEE is proud to have teamed with Underwriters Laboratories to invest in thinkers and leaders within STEM and environmental education by developing the UL Innovative Education Award. This collaboration offers recognition and support to existing nonprofits that are addressing environmental problems with active creativity. Please join UL and NAAEE in congratulating the five exemplary recipients of this year's ULIEA awards.

Grand Prize Winner:  
\$100,000 Recognition Grant

### Chicago Botanic Gardens Science Career Continuum

As a part of the Daniel F. and Ada L. Rice Plant Conservation Science Center, the Chicago Botanic Garden Science Career Continuum paves the way for middle school and high school students in the environmental and conservation science fields. By starting with the Science First and College First programs, students from Chicago Public Schools participate in a summer science immersion program that puts them on the path to college to study science. Science Career Continuum has served over 600 students in the past 20 years and over 120 public high schools in Chicago.



Second Tier Winners  
\$50,000 Recognition Grants

### Hurricane Island Center for Science and Leadership

Hurricane Island Center for Science and Leadership uses project-based science to encourage the next generation of leaders to explore science and conservation technology. Students work with research scientists and experts in the field to learn about ecology, marine science, and citizen science initiatives. Hurricane Island is completely remote and relies on environmentally sensitive technology to operate, which contributes to education initiatives and program demonstrations.

### Design Squad Global

In the Design Squad Global community, middle school students solve real problems by working with other students across the world. The students choose a challenge or activity and are partnered with another group of students in a different part of the world. Together, they collaborate with their engineering ideas and address global challenges. As of fall 2016, there are 436 clubs, 32 countries, and 5,208 kids involved.

Third Tier Winners  
\$25,000 Recognition Grants

### Chicago Eco House

Focusing on the South Side neighborhood of Englewood, the Chicago Eco House uses sustainability to alleviate poverty. By housing an afterschool program, Chicago Eco House's students revitalize the community through urban agriculture, green building, and green energy solutions. Different activities such as gardening, 3D printing, and carpentry promote students to use sustainable thinking to support community development.

### Re-Energy

With exciting and engaging lesson plans, middle school and high school students learn a hands-on application of energy sciences through Alberta, Canada based Re-Energy. Working models exhibit how to build a wind turbine or a hydroelectric generator. The program fuses technology and nature together so students can consider the weather and its impact on their projects. Re-Energy's curriculum and advice-packed website help students grasp applied science techniques to help create a more sustainable future.

For more information, visit [naaee.org/ulinnovativeeducation](http://naaee.org/ulinnovativeeducation)

# EE 30 Under 30: Young Leaders Making a Difference



**NAAEE**, in partnership with the **US Forest Service**, the **Global Environmental Education Partnership**, **United States Environmental Protection Agency**, and **Environmental Protection Administration Taiwan**, put out a search for 2017's top "EE 30 Under 30" individuals from around the world, 30 years old or younger, who are using environmental education in their communities to create change. These young people are taking on leadership positions to make a difference for the planet. They're engaging their peers, building relationships, and using the power of education to create more sustainable communities. They're also recognizing the importance of diversity, equity, and inclusion and they're applying those values to their work. NAAEE has brought together four of these exceptional individuals to share their accomplishments, stories, and plans for the future during the closing luncheon on Saturday. (See pages 33 and 40.)



2016's 30 Under 30: Young Leaders Making a Difference

- Nina Andrascik, 17, Ottawa, Canada
- Elham Nasr Azadani, 29, Isfahan, Iran
- Ilesha Baldwin, 20, Atlanta, Georgia
- Saymanti Bandyopadhyay, 28, Ahmedabad, India
- Lowery Becker, 26, Warsaw, Virginia
- Ankita Bhalla, 19, Delhi, India
- Fadwa Bouhedda, 23, Fremont, California
- Connel Bradwell, 26, Victoria, British Columbia, Canada
- Lauren Brois, 27, Bedford, New York
- Lucila Belén Castro, 29, Cordoba, Argentina
- Ya-Ling Chang, 28, Kaohsiung City, Taiwan
- Davy Clark, 28, Olympia, Washington
- Leah Davidson, 23, Washington, DC
- Danielle Diuguid, 28, San Francisco, California
- Nicola Fitzsimons, 30, Belfast, Northern Ireland
- Marquese Fluellen, 17, Jacksonville, Florida
- Ciarra Greene, 28, Lapwai, Idaho, Nez Perce Nation
- Martin Huber, 28, Vienna, Austria
- Karlee Jewell, 24, Eureka, California
- Carlos Lerma, 26, Lafayette, Colorado
- Xoni Kwan Ki Ma, 30, Hong Kong
- Hanna MacDonald, 21, Alpena, Michigan
- Adam Ratner, 29, Mill Valley, California
- Roland "Tony" Richardson, 28, Washington, DC
- Maria Alicia Rodriguez, 26, Ponce, Puerto Rico
- Quinn Runkle, 26, London, United Kingdom
- Kayla Soren, 19, Louisville, Kentucky
- Leandra Taylor, 25, Albuquerque, New Mexico
- Cade Emory Terada, 18, Anchorage, Alaska
- Luisa Martinez Zarate, 25, Mexico City, Mexico

Thanks to the author's generous donation, all 2017 EE 30 Under 30 finalists will receive a copy of *Saving Wild: Inspiration from 50 Leading Conservationists* by Lori Robinson.



For more information, go to: [naaee.org/our-work/programs/ee-30-under-30](http://naaee.org/our-work/programs/ee-30-under-30)

# Keynote Speakers



The distinguished group of keynote speakers for our 2017 conference includes a key player in establishing the Sierra Club’s first Spanish-speaking chapter, a TED speaker whose talk has been viewed more than 1 million times, a scientist who made extensive use of *What Color is Your Parachute?* in choosing a career path, a soap maker for an organic body care company, a former staff attorney for the Ninth Circuit Court of Appeals, a recipient of a prize for best presentation by a young scientist from *Journal of Biological Research–Thessaloniki*, and a Dame of the British Empire who has a stuffed chimpanzee named Jubilee.

In keeping with our conference theme—Imagine a World—each of these compelling speakers can help us reflect on past accomplishments and think creatively about meeting today’s challenges and creating a more sustainable future. They have inspired and empowered countless individuals, and you will find yourselves among them.

## Wednesday



### Jane Goodall, PhD, DBE

**Tomorrow and Beyond: An Evening with Dr. Jane Goodall**  
**6:30 PM–8:30 PM,**  
**San Gerónimo Ballroom**

In July 1960, Jane Goodall began her landmark study of chimpanzee behavior in what is now Tanzania. Her work at Gombe Stream would become the foundation of future primatological research and redefine the relationship between humans and animals.

In 1977, Dr. Goodall established the Jane Goodall Institute, which continues the Gombe research and is a global leader in the effort to protect chimpanzees and their habitats. The Institute is widely recognized for innovative, community-centered conservation and development programs in Africa, and Jane Goodall’s Roots & Shoots, the global environmental and humanitarian youth program.

Dr. Goodall founded Roots & Shoots with a group of Tanzanian students in 1991. Today, Roots & Shoots connects hundreds of thousands of youth in more than 130 countries who take action to make the world a better place for people, animals, and the environment.

Dr. Goodall travels an average 300 days per year, speaking about the threats facing chimpanzees, other environmental crises, and her reasons for hope that humankind will solve the problems it has imposed on the earth.

Dr. Goodall’s honors include the French Legion of Honor, the Medal of Tanzania, and Japan’s prestigious Kyoto Prize. In 2002, Dr. Goodall was appointed to serve as a United Nations Messenger of Peace and in 2003, she was named a Dame of the British Empire. For more information about Dr. Goodall and the work of the Jane Goodall Institute, please visit [www.janegoodall.org](http://www.janegoodall.org).



## Thursday



### **Carmen Guerrero Pérez**

**Protecting an Island:  
What We've Learned About  
Natural Resource Management,  
Community Outreach, and  
Education in Puerto Rico**  
**11:30 AM-12:30 PM,  
San Gerónimo Ballroom**

**Carmen Guerrero Pérez** is the Director of the Caribbean Environmental Protection Division (CEPD) at the US Environmental Protection Agency (EPA). Before assuming her current post, Carmen was Secretary of the Puerto Rico Department of Natural and Environmental Resources (DNER) from 2013 to 2016.

Carmen started her career in 1995 at the Office of Policy and Planning of the Environmental Protection Agency in Washington, DC. She returned to Puerto Rico to join the San Juan Bay Estuary Program as a Project Coordinator. For more than 15 years, she served as environmental and conservation planner and consultant to numerous organizations and government entities, among them: Puerto Rico Conservation Trust, El Yunque National Forest, Corporación ENLACE del Caño Martín Peña, University of Puerto Rico, Banco Popular Foundation, and The Nature Conservancy. Carmen also founded an environmental nongovernmental organization that provided volunteer advisory services on environmental and sustainable development issues to local communities across Puerto Rico.

She obtained her Bachelor's Degree in Environmental Public Policy at the University of Michigan in Ann Arbor. She has a Master's Degree in Environmental Planning from the Graduate School of Planning at the University of Puerto Rico and a Master's Degree in Environmental Management from the School of Forestry and Environmental Studies at Yale University in Connecticut. She also participated in sustainable development study programs in Costa Rica and at the University of California in Berkeley. She is a licensed professional planner in Puerto Rico.

## Friday



### PLENARY PANEL

**Jennifer Hubbard-Sánchez,  
Dr. William Spitzer, Vernard Williams**  
**Moderated by Vicki Arroyo**

**Climate Change, Education, and Hope**  
**11:30 AM-12:30 PM, San Gerónimo Ballroom**

**Jennifer Hubbard-Sánchez** serves as the State Specialist for Sustainable Programs and the Manager of the Environmental Education and Research Center, a 307-acre forest, for Kentucky State University (KSU) in Frankfort. She holds an MS Degree in Environmental Studies, an MA Degree in Mexican Anthropological Studies from the Universidad de las Américas in Puebla, Mexico, and a BA in Spanish from Saint Michael's College in Colchester, Vermont. Her work at KSU focuses on creating and implementing sustainability and environmental education opportunities for diverse and multilingual audiences so that all people can have access to culturally relevant ways to live greener, healthier lives, while appreciating and learning more about the physical environment that sustains us.

Jennifer serves as Chair of the Kentucky Association for Environmental Education and is a member of the leadership team of the Southeastern Environmental Education Alliance. She is proud to be a member of the 2014 EECapacity Community Climate Change Fellowship family. She lives in Lexington, Kentucky, with her husband Richard, her children Diego and Kaira, and their dog, Cuzco.

**Dr. William Spitzer** is the Vice President for Programs, Exhibits, and Planning at the New England Aquarium in Boston, Massachusetts. He is responsible for the development of mission-driven exhibits and programs, including oversight of exhibit design and animal husbandry as well as volunteer and education programs. He has served as Principal Investigator for a number of informal science education projects funded by the National Science Foundation.

Prior to coming to the New England Aquarium in 1996, Billy gained seven years of experience at TERC, an educational research and development firm in Cambridge, Massachusetts. There, he directed research and development in science education. For several years, he directed the LabNet project, an electronic community that served over 1,500 science teachers with forums for professional discussion, resource sharing, and collaborative projects. Billy holds a PhD in Oceanography from MIT and the Woods Hole Oceanographic Institution and a BA in Chemistry and Physics from Harvard University.

**Vernard Williams** served as a founding member of the Alliance for Climate Education's (ACE) New York City region in 2009 before establishing its Las Vegas region in 2011. As former Director of Equity and Inclusion for ACE, Las Vegas, Vernard spearheaded initiatives to improve ACE's understanding of how social issues intersect with climate change so its programming best assists youth in infusing their values into the climate movement. He is also skilled at supporting young people to discover their authentic selves, which he believes best allows them to offer solutions for their communities.

Vernard's days as a 4-H youth in Brooklyn fostered this passion. While competing against some of the best basketball players in New York City, Vernard planted trees, grew a community garden, and engaged in beautification projects alongside fellow 4-H youth. The lessons Vernard learned working alongside peers to improve his community spearheaded his commitment to earning a JD from Howard University School of Law—an institution noted for its leadership in civil and social rights causes.

Vernard is also an engaging speaker and facilitator who has served the United States Court of Appeals as a staff attorney.

**Moderator Vicki Arroyo** is the Executive Director of the Georgetown Climate Center at Georgetown Law, where she also serves as the Assistant Dean of Centers and Institutes and a Professor from Practice. She oversees the Center's work at the nexus of climate and energy policy, supervising staff and student work on climate mitigation and adaptation at the state and federal level. She teaches "experiential" environmental law courses to both law and public policy students.

Vicki previously served at the Pew Center on Global Climate Change, including serving as the Pew Center's Vice President for Domestic Policy and General Counsel. For more than a decade, she directed the Pew Center's policy analysis, science, adaptation, economics, and domestic policy programs. She also served as Managing Editor of the Center's book and oversaw publication of numerous reports and policy briefs.

In addition to teaching at Georgetown Law, she has taught courses on environmental policy and climate change at Catholic University, George Mason University's graduate public policy program, and Tulane Law School. Previously, she practiced environmental law with Kilpatrick Stockton and other private firms and served in two offices at US EPA: the Office of Air and Radiation and the Office of Research and Development where she reviewed development of standards under the Clean Air Act. From 1988 to 1991, she created and directed the Louisiana Department of Environmental Quality's policy office, and served during some of that time as Governor Buddy Roemer's environmental advisor.

Professor Arroyo has served on several federal panels and boards, currently including the Executive Committee of the National Transportation Research Board of the National Academy of Sciences and the editorial boards of the Climate Policy journal and the Georgetown Environmental Law Review.

She holds a BS in biology, high honors, from Emory (double major in philosophy); a Master's in Public Administration from Harvard (receiving the Don K. Price award for academic achievement and commitment to public service, the top honors in her program), and a JD, Magna Cum Laude, from Georgetown Law, where she was Editor-in-Chief of *The Georgetown International Environmental Law Review*.



GOOD TO KNOW

### *Borinquen*

Taíno Indians who inhabited the territory, called the island Boriken or Borinquen which means: "the great land of the valiant and noble Lord" or "land of the great lords".

# Saturday



## PLENARY PANEL

**Ankita Bhalla, Connel Bradwell,  
Lucila Belén Castro, Leandra Taylor**  
Moderated by Ana María García Blanco

**EE 30 Under 30: Young Leaders Making a Difference**  
12:00 PM-2:30 PM, San Gerónimo Ballroom

NAAEE, in partnership with the US Forest Service, the Global Environmental Education Partnership, US Environmental Protection Agency, and Environmental Protection Administration Taiwan, put out a search for 2017's top "EE 30 Under 30" individuals from around the world, 30 years old or younger, who are using environmental education in their communities to create change. These young people are taking on leadership positions to make a difference for the planet. They're engaging their communities, building relationships, and using the power of education to create more sustainable communities. They're also recognizing the importance of diversity, equity, and inclusion and they're applying those values to their work. To close the conference on a high note, NAAEE has brought together four of these exceptional individuals to share their accomplishments, stories, and plans for the future.

**Ankita Bhalla**, 19, is a sophomore at Washington University in St. Louis, majoring in finance, international and area studies, with a minor in French. A social entrepreneur and a nature enthusiast who loves trekking and scuba diving, Ankita enjoys any opportunity to explore diversity. These academic interests and aspirations reflect her upbringing; growing up in nine cities over 19 years has stimulated her love for adventure and an appreciation for cross-cultural learning. Being amid new ideas and challenges drives her mind to seek synergies and connect the dots in the world around her through shared experiences.

It is with this perspective that Ankita launched *Jagriti*, an environment education program in the predominantly rural union territory of Dadra and Nagar Haveli, India. After researching the territory over months, she designed an activity-based curriculum to revive an environment degraded by industrialization

but integral to rural livelihoods. Ankita first worked with 20 schools to test a Carbon-Handprint Point System and weekly activities on traditional techniques, like *johads* (soak pits for irrigation). Encouraged by the overwhelming response, she partnered with the Department of Education to expand the project to all 72 villages of the territory. She then lobbied 56 companies to support students and teachers for fieldtrips and events under their Corporate Social Responsibility (CSR) policies. By coordinating the CSR funds with nonprofits, Jagriti organized the region's first Eco-Fair, attended by more than 30,000 people and provided scholarships to teachers to pursue certifications in Environment Education from the Indian Centre for Environment Education. Seeing over 18,000 students and teachers striving towards carbon neutrality in a territory that has seen tremendous restoration in just three years, Ankita is constantly reaffirmed of the value of sustainability in accelerating development, and driven to continue spreading its impact.

**Connel Bradwell**, 26, is a British/Canadian conservationist currently living in British Columbia, Canada. He works as a Wildlife Education Manager for Northwest Wildlife Preservation Society, where he has set up and now runs free wildlife education programs and nature walks for young people on Vancouver Island; his programs have reached over 35,000 people.

Connel graduated with a BS (honors) in Wildlife Conservation from Nottingham Trent University. While at university he conducted research looking into the impact of boat distance on orca surface behaviour. He started volunteering at the Leicestershire and Rutland Wildlife Trust when he was 12 years old. He has also volunteered with the Rocky Point Bird Observatory, and with bird and orca conservation programs.

Connel is a founding member of a new youth conservation organisation, Youth for Wildlife Conservation, and was chosen as part of a youth delegation for outstanding youth conservation leaders at the 2016 CITES in South Africa.

Additionally, he is a keen wildlife blogger, and has contributed to a number of websites including Wildlife Articles, Gay Star News, A Focus on Nature, and the International Fund for Animal Welfare. His personal blog, Talk of the Wild, was highly commended by BBC Wildlife Magazine in their Wildlife Blogger of the Year awards in 2015 & 2016. In 2017 he received an Outstanding Youth Leadership award from the Canadian Network for Environmental Education and Communication and was included in Canada's Top 25 Environmentalists Under 25 by the Starfish Canada.

**Lucila Belén Castro**, 29, completed her biology degree at the National University of Cordoba, Argentina and is currently pursuing a PhD at the Institute of Ecology and Animal Diversity at the University of Cordoba. She received an Argentinian government fellowship to fund her studies in conservation biology.

Lucila grew up in central Argentina on the shores of Mar Chiquita, one of the largest inland water bodies in South America. She has been engaged in wetland protection since the age of 15 and studied flamingo migration patterns on Mar Chiquita for her undergraduate degree. Lucila has worked with a wetland and flamingo conservation group since 2010 and has served as a young scientist on the board of the International Society for Salt Lake Research since 2014.

Lucila is head of the Pacific Biodiversity Institute's South American office, working on the political and scientific prerequisites for three new national parks, including one at Mar Chiquita. She has almost single-handedly motivated whole communities and high-level stakeholders around the shared vision of new national parks in Argentina.

Despite her youth, Lucila has quickly blossomed into a seasoned and skilled educator, negotiator, and scientist who has presented her work internationally at top congresses around the world. She is a vibrant and dynamic force in education, research and conservation. She has worked extensively in environmental education, giving talks and participating in social campaigns with students and local communities in both South America and North America.



#### GOOD TO KNOW

#### Government

Puerto Rico is a self-governing commonwealth in association with the United States. The chief of state is the President of the United States of America. The head of government is an elected Governor. There are two legislative chambers: the House of Representatives, 51 seats, and the Senate, 27 seats.

**Leandra Taylor**, 25, is Coordinator for the Merge Alliance, a community alliance based in Albuquerque, New Mexico bringing together multicultural groups working to ensure equitable access to New Mexico's natural resources. She is a graduate of Baylor University with previous experience working in wildlife data management for the US Fish and Wildlife Service for two years. After coming to the realization that her true passion is ensuring outdoor access for others like herself, and for getting all people of color into the outdoors; she shifted her career path to the human dimensions of conservation.

Leandra identifies strongly as a military child, a black outdoor enthusiast, an artist, and an avid birder. She is an active member of the Environmental Education Association of New Mexico, and was also recently selected as an Outdoor Afro Leader for New Mexico. Leandra is an alumni of SHIFT's Emerging Leader's Program, the first cohort of national young environmental and outdoor recreation leaders. Through her work and her varied social enterprises, she continues to inspire other young people to become more involved in the environmental education field.



#### Moderator Ana María García Blanco

helped found the first Montessori program in Puerto Rico and oversaw the growth of the initiative to include several thousand students and more than fifty schools. Through this program schools have reduced violence and increased academic success. She earned her PhD from Harvard University, in addition to her Bachelor's and Master's degrees in Education. Her PhD thesis was an ethnographic analysis of the community school in the Juan Domingo neighborhood of Guaynabo, Puerto Rico.

She has published many books and academic articles on education, race, and culture. Currently, she directs training of new Montessori teachers at El Instituto Nueva Escuela. She is a professor at the Universidad Sagrado Corazón and sits on the governing board of the University of Puerto Rico where she advises committees on academics, research and student affairs, and development.

# Protecting Human Health and the Environment Through Education

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Over **3700** grant projects in all states and territories since 1992

Recognizing Youth Stewardship Projects and Innovative Educators



2017 President's Environmental Youth Award winners Karen Ayoub, Layaly Saleh, and Karen Mateo (aka The Traposquitoes) with Acting Deputy Administrator Mike Flynn.



From Inspiration to Impact

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Calumet Is My Back Yard



2017 winner of the Presidential Innovation Award for Environmental Educators, Daniel Delcher, is an environmental science and sustainable agriculture educator in New Jersey.



ee360 Leadership Clinic



Master Watershed Stewards

**Visit us at booth #304 and come to our presentations:**

**EPA Education Office Strategic Plan: A Paradigm Shift for EPA**

Thursday, 10:30 AM to 11:10 AM, Conference 2

**Assessing the Results for EPA's Environmental Education Grant Program**

Thursday, 4:00 PM to 4:40 PM, Conference 2

**The Best of EPA's Environmental Education Grant Program**

Friday, 3:05 PM to 3:45 PM, Conference 3-4-5

# Special Events

## Wednesday

### Opening Reception with Exhibits, Share Fair, and Authors' Corner

5:00 PM-6:30 PM, San Cristóbal Foyer

**Welcome!** Whether this is your first NAAEE conference or your thirty-first, it starts here! Meet new colleagues and greet returning ones as you enjoy substantial hors d'oeuvres and a cash bar at the opening reception of the conference.

Our annual Exhibit Fair kicks off during the reception—your first opportunity to chat with exhibitors and explore wonderful resources and programs. A variety of nonprofit organizations will also share their inspiring efforts at the tabletop displays comprising this year's Share Fair, and NAAEE members and other writers will be in the Authors' Corner to discuss, sign, and sell their newest publications and chat about writing and publishing for the environmental education field.



Watch for **Woody Owl, America's conservation icon**, who will be there to welcome you to the home of El Yunque, the US national forest system's only tropical rain forest, and to say thanks for helping to **"Lend a Hand and Care for the Land."**

NAAEE Board and staff members will be there to greet you, too, and answer any questions about the organization and the 2017 conference. And you can begin to bid on your favorite items in the silent auction and share your thoughts on the GEEP Call for Action for the EE field. Come connect with colleagues and begin to foster relationships that we hope will continue far beyond the conference.

### Share Fair

- Cottonwood Gulch Expeditions
- Duke University Nicholas School of the Environment
- E3 Washington
- Hurricane Island Center for Science and Leadership
- IslandWood
- Missouri Environmental Education Association
- NorthBay Education
- North Carolina Museum of Natural Sciences
- Stroud Water Research Center
- Upstream Alliance
- WGBH
- The Wild Center

### Early Morning Event

## THURSDAY-SATURDAY Birdwatching



**7:00 AM-8:00 AM, Luis Muñoz Rivera Park**  
Join an expert birder from Puerto Rico for a walk through the coastal zone and urban forest of the Luis Muñoz Rivera Park. Meet at the hotel entrance. No transportation is required. Sign up at the Information Station.

## Conference Opening Ceremony Tomorrow and Beyond: An Evening with Dr. Jane Goodall

6:30 PM-8:30 PM, San Gerónimo Ballroom



Photo: the Jane Goodall Institute/Bill Wallauer

Immediately following the reception, we'll officially get started with opening remarks from Executive Director Judy Braus and Board President Charlotte Clark.

This year, NAAEE is thrilled to recognize Dr. Jane Goodall with a lifetime achievement award for advancing environmental education, conservation, and hope. Dr. Goodall is the founder of the Jane Goodall Institute and the Roots & Shoots program, which equips young people to act as conservation leaders and compassionate change agents for a better world. Her research on chimpanzee behavior in what is now Tanzania gave rise to a lifelong effort to protect chimpanzees and their habitats. In her speeches and books, Dr. Goodall emphasizes the interconnectedness of all living things and the collective power of individual action, urging her audiences to recognize their personal responsibility and ability to effect change.

Dr. Goodall is the recipient of honors including the Medal of Tanzania, the National Geographic Society's Hubbard Medal, Japan's prestigious Kyoto Prize, the Prince of Asturias Award for Technical and Scientific Research, the Benjamin Franklin Medal in Life Science, the UNESCO 60th Anniversary Medal, and the Gandhi/King Award for Nonviolence. In 2002, Secretary General Kofi Annan named Dr. Goodall a United Nations Messenger of Peace, and in 2004, Prince Charles invested Dr. Goodall as a Dame of the British Empire. She also received France's highest recognition, the Legion of Honor, and her life and work are the subject of numerous documentaries and films.

Following the award presentation, Dr. Goodall will take the stage with this year's opening keynote, *Tomorrow and Beyond: An Evening with Dr. Jane Goodall*. After her thought-provoking and inspirational presentation, Dr. Goodall has graciously agreed to sign copies of her most recent book, *Seeds of Hope: Wisdom and Wonder from the World of Plants*.

The opening reception and opening ceremony are included with full conference registration with RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk.

## Thursday

### Exhibit Fair Luncheon, Poster Session, and Affiliates' Welcome

12:30 PM-2:00 PM, San Cristóbal and  
San Gerónimo Ballrooms

The Exhibit Fair will be open from Wednesday evening through Friday afternoon for you to explore innovative programs, dynamic practices, and effective products. And you can help us celebrate by joining us for this great buffet luncheon.

During this special event, you can chat with exhibitors eager to connect you with the latest and greatest in environmental education products and services. In addition, many of our colleagues will be in the San Gerónimo Ballroom to share their poster presentations and discuss their work.

The NAAEE Affiliates will also be on hand to welcome you and share information about the many services they offer to their members on the state and provincial levels. Learn how the Affiliates are helping to develop state environmental literacy plans, find out which states have environmental educator certification programs, and check out other professional development opportunities in your area.

The luncheon is also a great time to bid on fabulous finds in the silent auction, drop a couple of tickets into a bucket raffle item, or add your input to the GEEP Call for Action. Take advantage of this opportunity for networking and enjoying a good meal—it's included with your Thursday or full conference registration with an RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk. Exhibitors are listed on page 118.

## Thursday (continued)

### HHMI Night at the Movies: *How Lizards Find Their Way Home*

5:30 PM-6:45 PM, San Gerónimo Ballroom



Join us for a special movie event! Watch HHMI BioInteractive's newest short film, *How Lizards Find Their Way Home*, featuring the work of Dr. Manual Leal who studies the behavioral ecology of lizards in Puerto Rico. Enjoy light hors d'oeuvres and one free drink, the screening, and a short discussion session with Dr. Leal.

This event is free, but advance registration is required. Check for available space at the registration desk. See the movie advertisement on page 50.

### Rum Run

7:00 PM-10:30 PM, Transportation provided.  
Meet at the entrance to the Caribe Hilton.

What better way to meet new colleagues than to spend your open evening networking over a few drinks? Join the Rum Run and visit three Old San Juan nightspots—Princesa Gastrobar, La Factoría and El Batey—selected for their authentic local flavor. Enjoy signature Puerto Rican cocktails (one per venue) and a light tapas dinner. Advance registration is required; the event is sold out.



## Friday

### Annual Gala and Stapp Scholarship Auction

7:00 PM-9:30 PM, El Cuartel de Ballajá

Join us for an evening of authentic Puerto Rican fare, live music by Sin Prisa—a local favorite—dancing, artisan craft vendors, our annual auction, and time to spend with your friends and colleagues at the incredible El Cuartel de Ballajá Infantry Barracks Building.



Completed in 1864, the impressive barracks building stands as the last example of monumental architecture built by the Spanish monarchy in the Americas. The restored building, which is topped by a 24,000-square-foot green roof as part of an energy-saving retrofit project, is now home to educational and cultural organizations, along with the Museum of the Americas and is a monument to Puerto Rican culture.



Get ready to bid on your favorite items in the energetic **live auction**, which features special treasures in all price ranges, including a fabulous **trip to the Galapagos Islands** donated by Lindblad Expeditions. The silent auction will culminate at the reception as well. Be there to slip in your final bid and snatch up a great variety of arts and crafts, jewelry, clothing, pottery, and much more.



Every auction purchase helps support scholarships that enable students to attend the conference. The scholarship fund was established in honor of Dr. William Stapp (1930-2001), one of the founders of the field of environmental education. Bill was a huge supporter of NAAEE and introduced many of his students to the association and the conference. Many "Stapplings" have gone on to fill leadership roles in the organization.

This action-packed, fun-filled evening is included with Friday or full conference registration with RSVP in advance. You'll need to show your name badge for entry. Additional tickets can be purchased as space allows; check for details at the registration desk.

The first buses will depart from the entrance of the Caribe Hilton at 6:30 PM.



#### GOOD TO KNOW

#### Asopao

Not really a soup, the most traditional Puerto Rican dish is asopao, a hearty gumbo made with either chicken or shellfish.

## NAAEE Annual Auction



### Three fun ways to win treasures in all price ranges!

#### LIVE AUCTION

**When: Friday night's gala**

Featured items include a Galapagos trip, a Hawaiian vacation home, a live show-stopping duet, bundles of huggable plush animals, surprise experiences, and lots more!

#### SILENT AUCTION

**When: Wednesday evening through Friday night's gala**

Add your bid to the bid sheets, and keep watch to make sure yours is the final entry! Most items will be up for auction until the Friday night gala, but special sections will close each day, so check back often.

#### BUCKET RAFFLE

**When: Wednesday through Friday**

Everyone has an equal chance! Win one of two \$500 REI gift cards, conference registration for NAAEE 2018 in Spokane, or one of many mystery gift cards, and more! Lots of chances to win!

Buy your **\$1 bucket raffle tickets (12 for \$10)** from the volunteers at the auction tables. Drop your ticket into the bucket for any item; winning tickets will be drawn on Friday.

# Saturday

## NAAEE Awards Luncheon & Closing Panel



### 30 Under 30: Young Leaders Making a Difference

Ankita Bhalla, Connel Bradwell,  
Lucila Belén Castro, Leandra Taylor  
Moderated by Ana María García Blanco

12:00 PM-2:30 PM, San Gerónimo Ballroom



Help us recognize NAAEE award recipients at the annual Awards Luncheon. We will honor individuals and organizations for their laudable work on behalf of the environment at the local, regional, national, and international levels. The awards ceremony includes presentation of the President's Award and NAAEE's highest honor, the Jeske Award.

Following the awards, four exceptional young leaders will share their accomplishments and stories, as well as give us advice for engaging more young people in our work. Ranging in age from 19 to 29, the four speakers are selected from NAAEE's 2017 "EE 30 Under 30," a recognition program offered in partnership with the US Forest Service, the Global Environmental Education Partnership, US Environmental Protection Agency, and Environmental Protection Administration Taiwan.

These 30 individuals, 30 years of age or younger, embody the conference theme: Imagine a World. They envision a more sustainable future, and are taking on leadership positions in communities around the globe to use environmental education to create the change they want to see.

The Awards Luncheon is included with Saturday or full conference registration with RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk.



## 2017 NAAEE Annual Award Recipients



Please join us in extending warmest congratulations to the 2017 NAAEE award recipients, individuals and organizations demonstrating exemplary leadership in our field.



### Walter E. Jeske

The highest honor NAAEE bestows is the Walter E. Jeske Award, established to honor Walt Jeske, Chief of the Education and Publications Unit with the US Soil Conservation

Service. Walt was a dedicated member of the NAAEE Board of Directors and an outstanding environmental educator until his untimely death in 1983. The award is given to recognize the highest level of service to NAAEE and leadership within the field of environmental education. Tradition calls for each year's recipient to present the award in the following year.



### Walter E. Jeske Award Susan Toth

Susan Toth has exhibited a lengthy, deep, and unwavering commitment to EE since the early 1980s. As Director of Education at Pine Jog Environmental

Education Center, Susan worked to improve and expand elementary school programs, and oversaw projects that included construction of Florida's first Gold LEED-Certified elementary school and the development of a Master's program in EE in partnership with Florida Atlantic University. Among her many contributions to the field, she also served on the Florida Advisory Council on EE, the Florida Greenways Commission, the NAAEE Board of Directors, and as a founding member of the Green School National Network Board. In addition, Susan was a regular instructor for University of Wisconsin-Stevens Point's online "Fundamentals of EE" course, taught one of the first EE courses in Thailand for the Smithsonian Institution, and wrote a series of children's books on water and energy. Susan exemplifies leadership and service at the highest level, and NAAEE is proud to honor her with this year's Jeske Award.

### **Outstanding NAAEE Affiliate Organization Environmental Education Association of New Mexico (EEANM)**

EEANM stands out because of its recent growth as an organization; cultivation of collaborative, engaging community efforts; a strong commitment to building diversity, equity, and inclusion in the field; and successful advocacy and leadership toward developing a more environmentally literate New Mexico.

#### **Rosa Parks and Grace Lee Boggs**

##### **Marcos Trinidad**

Marcos Trinidad, Center Director of Audubon Center at Debs Park, has devoted his life to making the world a better place. As director of Audubon's Youth Environmental Stewards, co-founder of the Environmental Professionals of Color in Los Angeles, and an urban forester with TreePeople, he has always worked to engage and inspire others, especially through restoration projects.

#### **K-12 Educator of the Year**

##### **John Jung**

Twenty-three years ago, John Jung created the Environmental Science program for Mesa High School, and, ten years ago, he added an AP Environmental Science program. During this time frame, he's been recognized multiple times for innovation in the classroom, contributions to the field of EE, and development of a unique educational garden.

#### **Higher Education Educator of the Year**

##### **Jacqueline S. McLaughlin**

Dr. Jacqueline McLaughlin, associate professor of biology at Penn State University, Lehigh Valley, founded CHANCE (Connecting Humans and Nature through Conservation Experiences), an award-winning, international environmental education program. She effectively reimagines educational interfaces that use authentic scientific research experiences and conservation efforts.

#### **Outstanding Contributions to Research in EE**

##### **Constance Russell**

In nearly three decades as an environmental education scholar, Professor Connie Russell has made substantive, innovative contributions in numerous dimensions. A leader in the field at local, national, and international levels, Dr. Russell edited the Canadian Journal of Environmental Education for more than a decade and is the co-editor of the Peter Lang book series, *(Re)thinking Environmental Education*. Dr. Russell is recognized and admired as a generous scholar who has been an inspiring mentor to countless students and colleagues.

### **Outstanding Service to EE by an Organization at the Local/Regional Level**

#### **Mojave Environmental Education Consortium**

Mojave Environmental Education Consortium (MEEC) provides free high-quality environmental resources and tools to educators and students throughout the High Desert. This includes workshops, mini grants, transportation grants, the Youth Environmental Leadership STEM Conference, a Solar Cooker Competition, student and educator scholarships, Common Core and NextGen curriculum, and essay contests.

### **Outstanding Service to EE by an Individual at the National Level**

#### **Josetta Hawthorne**

Over the past 41 years, Josetta Hawthorne has developed and managed environmental education programs from the local to the international level. Under Josetta's leadership, nearly 1 million educators in the United States, Canada, and Japan have received training through the WILD family of programs. She has served in countless leadership positions with NAAEE, the Bird Education Network, and other organizations.

### **Outstanding Service to EE by an Organization at the Global Level**

#### **The Foundation for Environmental Education**

The mission of the Foundation for Environmental Education is to engage and empower people through education in collaboration with members and partners worldwide. Established in 1981, FEE brings cutting-edge programs in education for sustainable development and environmental education to individuals and communities in more than 70 countries.

### **Outstanding Service to EE by an Individual at the Global Level**

#### **Ginger Potter**

As Senior Education Specialist for US EPA, Ginger Potter has helped implement the National Environmental Education Act and its supporting programs, including ee360. She is one of the driving forces behind the Global Environmental Education Partnership and has effected many national and international advances in environmental education research, policies, and practice.

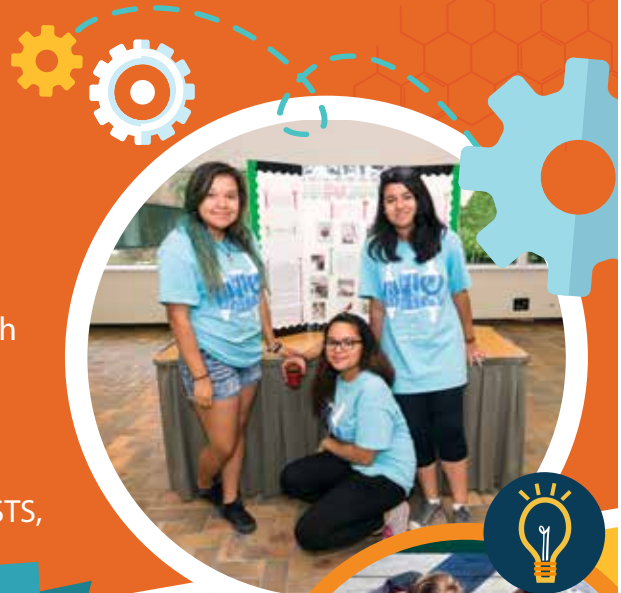


# INNOVATIVE EDUCATION AWARD

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Recognizing outstanding nonprofits advancing environmental and STEM education (ESTEM) through youth empowerment and sustainable community development.

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North American Association for Environmental Education

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**Hurricane Island**  
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PRO

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- Climate Change Education
- Connecting to Nature
- Conservation and Behavior Change
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- Early Childhood EE
- EE in Urban Settings
- Green Schools
- Guidelines for Excellence
- Higher Education
- Research and Evaluation
- Sustainable Communities
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## A Gift That Lives On

Invest in NAAEE's future. Bequests are a meaningful way to help us continue to provide the education we need for the world we want. Please consider including NAAEE in your will or living trust. We can provide official language for you and your attorney.



**naaee**

North American Association  
for Environmental Education

## Sunday & Monday

### Sunday 7:00 PM

#### Global Environmental Education Partnership Welcome & Check-In

6:30 PM-8:30 PM, Caribar Lounge

By invitation.

### Monday 8:30 AM

#### Global Environmental Education Partnership Meeting

8:30 AM-5:00 PM, Las Olas

By invitation.

### Monday 11:00 AM

#### Research Symposium Workshop: A Field Session

Today's Practices, Tomorrow's Opportunities: EE in  
a Long-Term Ecological Research (LTER) Program

11:00 AM-5:00 PM, El Verde Research Station,  
El Yunque National Forest

During this field session, we will visit the El Verde Research Station, the research center for El Yunque National Forest, part of the US National Forest System. The session will have three primary components: (1) an interactive activity in the ecological teaching garden during which local students will share with NAAEE researchers about their research projects; (2) a tour of forest research sites, led by station director Dr. Jess Zimmerman; and (3) a design charrette wherein NAAEE researchers will collaborate with the Station and Forest Service staff to brainstorm ways of maximizing and managing an upcoming change in visitor use of the area. Lunch will be provided and shared with local students, teachers, and station staff. Pre-registration required.

Coordinators: Rachelle Gould, University of Vermont; Charlotte Clark, Duke University; Noelia Báez Rodríguez, University of Puerto Rico, Río Piedras

### Monday 7:00 PM

#### Research Symposium Networking Dinner

7:00 PM-9:30 PM, Touro Restaurant

Join with colleagues and friends for an evening of food, fun, and conversation focused on EE research. The group will be dining at Touro, which features Spanish and Caribbean-style tapas. In addition to casual conversation, from 8:00 PM to 9:00 PM, we'll have an engaging, low-stress, research-focused activity. Participants must have pre-registered and selected their meal choice from the vegetarian menu by October 1. Pre-registration does not include alcoholic beverages; please bring money to pay for drinks. Touro is located in Paseo Caribe within easy walking distance of the Caribe Hilton. [tourorestaurant.com](http://tourorestaurant.com)

The only academic journal devoted to early childhood environmental education is available exclusively from NAAEE. Download your free copy at [naaee.org](http://naaee.org).



## Tuesday

### Tuesday 8:30 AM

#### ee360 State Leadership Workshop

8:30 AM–4:30 PM, Flamboyán

By invitation.



### Tuesday 9:00 AM

#### Research Symposium

9:00 AM–4:00 PM

NAAEE's annual Research Symposium brings the academic community together to explore the current state and future directions of environmental education research and to advance the use of practices proven to be effective. Join new and experienced researchers from around the globe to converse on emerging and traditional areas of environmental education research. At this milestone year of Tbilisi +40, the Research Symposium encourages reflection on the evolution of our field and its trajectory in light of today's trends, challenges, and opportunities. Through keynote panels, facilitated discussions, poster sessions, and workshops, we explore new ideas and approaches to advance our work and consider how emerging issues, methods, and theories might inform current and future EE research. Separate registration fee required.  
Co-Chairs: Nicole Ardoin, Stanford University;  
Alan Reid, Monash University

### Tuesday 4:00 PM

#### Research Symposium Reception

4:00 PM–6:00 PM, Las Olas Terrace

For Research Symposium participants only.



#### GOOD TO KNOW

#### Religion

The Constitution guarantees freedom for all faiths. The major religions are: Catholic (85%), Protestants (8%), non religious (2.3%), and others (3%).

Churches of many denominations can be found throughout the island.

Some islanders ascribe to spiritualism (espiritismo), and others practice Santería, an Afro-Caribbean belief system brought to Puerto Rico from Cuba. There is also a small Jewish community.

# Wednesday

## Wednesday 7:30 AM

### Research Symposium Graduate Student Breakfast

7:30 AM-9:00 AM, Las Olas Terrace

## Wednesday 8:30 AM

### Workshops

Note: Workshops require an additional fee. Onsite registration will be accepted as space allows; check at the registration desk. There are full day, morning, and afternoon options. Lunch is included with full day workshops.

### Full Day Workshops

8:30 AM-4:30 PM

#### Affiliate Network Workshop

8:30 AM-4:30 PM, Gran Salón Los Rosales B

By invitation.



#### Create Your Own Community Water Discussion Guide Using EIF

8:30 AM-4:30 PM, Conference 6-7

Use the new Environmental Issues Forums publication, *Let's Talk About Water*, to create your own issue guide for public or classroom deliberation on local water issues. You'll also learn how to apply this "issue framing" process to other problems, and use *Let's Talk About Water* as an educational tool.

Presenter(s): Michele Archie, The Harbinger Consulting Group


#### Earth Force Training

8:30 AM-4:30 PM, Executive Boardroom

By invitation.



### Strands

- Applying Research to Increase Our Impact
- Building Leadership for Environmental Literacy
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools
- Inspiring Connections to the Outdoors
-  Addresses Diversity, Equity, and Inclusion
- S Spanish    B Bilingual

### Environmental Education, Ethics and Action: Imagining Sustainable Communities, Global Citizenship

8:30 AM-4:30 PM, Flamingo CD

Deliberations on values associated with relationships between people and their environments are central to (re)emerging concepts of sustainable communities and global citizenship. This workshop explores educational processes that enable deliberations on values and ethics and how these may foster environmentally and socially responsible forms of environmental justice and social-ecological change.  
Presenter(s): Bob Jickling, Lakehead University; Blair Niblett, Trent University

### The GLOBE Program and Eco-Schools: Science and Sustainability in School Gardens

8:30 AM-4:30 PM, Offsite—Meet at front entrance

Learn about GLOBE science, Eco-Schools sustainability, and NASA resources in this interactive hands-on workshop. Conduct GLOBE field investigations through an exploration of a local Eco-School's schoolyard habitat. Develop an implementation action plan and discover NASA resources in this interactive hands- and minds-on workshop.

Presenter(s): Kristin Wegner, UCAR/The GLOBE Implementation Office; Jennifer Hammonds, National Wildlife Federation; Jennifer Bourgeault, Leitzel Center GLOBE Partnership at UNH; Janelle M. Johnson, Metropolitan State University of Denver



## The Road to NAAEE Higher Education Accreditation: A Map for Success

8:30 AM–4:30 PM, Conference 2

This workshop provides critical information for universities to become an NAAEE Distinguished College and University Program. It includes in-depth review of standards, strategies for incorporating them into curriculum, sample assessments, and exemplary models with faculty members who have completed applications. Participants should bring laptops and documents to begin the process.

Presenter(s): Rebecca L. Franzen, University of Wisconsin-Stevens Point, Wisconsin Center for Environmental Education; Linda K Hilligoss, Southern Oregon University; Billy Bennett, Kentucky Environmental Education Council; Stewart Janes, Southern Oregon University; Dottie Shuman, Montreat College; Melinda Wilder, Eastern Kentucky University; Bora Simmons, National Project for Excellence in Environmental Education



## Train-the-Trainer Workshop: NAAEE's Environmental Education Guidelines for Community Engagement

8:30 AM–4:30 PM, Garita

Participants in this all-day workshop will receive training in the use of NAAEE's new Environmental Education Guidelines for Community Engagement and will begin to develop preliminary plans to provide Guidelines trainings in their respective regions and professional communities.

Presenter(s): Bora Simmons, National Project for Excellence in Environmental Education; Augusto Medina, Independent; Judy Braus, NAAEE; Michele Archie, The Harbinger Consulting Group; Elizabeth (Libby) McCann, Antioch University New England; Jean Chimbirima Kayira, Antioch University New England; Dave Chase, Antioch University New England; Anna Mooney, YMCA Camp Thunderbird



# Wednesday

## Field Trips

Meet the buses at the front entrance to the Caribe Hilton 15 minutes before the stated departure time. Lunch is provide unless otherwise stated.

Note: Field trips require pre-registration and an additional fee. Check at the Registration Desk for limited remaining availability.

### El Yunque: Walk in the Cloud Forest

8:00am-4:30pm

#### El Yunque National Forest

Explore the wonders and sacredness of El Yunque, the only tropical rain forest in the U.S. National Forest System. After a visit to the El Portal Visitor Center, ascend through the rain forest to the Mt. Britton observation tower. There, surrounded by clouds, you can enjoy spectacular views. Learn about the natural and human dynamics of this jewel of Puerto Rico.

SOLD OUT

### ENLACE: A Model of Community Restoration

8:30 AM–4:30 PM

#### Caño Martín Peña

The environmental degradation of the Caño Martín Peña, a tidal channel in San Juan, is a threat to the health and safety of over 26,000 residents living in adjacent communities. ENLACE is changing this. Take a bicycle tour of the communities and a boat tour of the San Juan Bay Estuary to experience this community-led effort to attain social and environmental justice.

### Puerto Rico's Sweet History and Unique Ecosystems

8:30 AM–4:30 PM

#### Hacienda la Esperanza Nature Reserve and Historic Site, Manatí

The restored structures of one of Puerto Rico's most important 19th century sugar plantations now serve as headquarters for Hacienda La Esperanza Nature Reserve and Historical Site. Tour the plantation site and then hike through the karst hills known as mogotes, exploring the forests and natural springs of this characteristic landscape, and its role in the natural and cultural history of Puerto Rico.

## Wednesday 8:30 AM

### Morning Workshops

8:30 AM-12:00 PM

#### Creating and Supporting Culturally Relevant Organizational Change

8:30 AM-12:00 PM, Guayacán

Youth Outside developed the Cultural Relevancy Series to ensure that organizations are working toward creating and supporting a culture that includes and celebrates difference. Join us to learn about the series and take away tips and tools to move your organization toward a commitment to equity, inclusion, and cultural relevancy.

Presenter(s): Rena Fidelia Payan, Youth Outside; Kim Moore Bailey, Youth Outside



#### Partnerships for Impact in EE/Colaboraciones Transparentes

8:30 AM-12:00 PM, Conference 3-4-5

En este taller compartiremos perspectivas de una investigación liderada por treinta comunidades culturalmente diversas y de recursos limitados. Exploraremos el rol que tienen las asociaciones en la implementación de proyectos de educación ambiental en dichas comunidades. Descubriremos oportunidades y barreras para lograr un impacto positivo y real en la práctica.

Presenter(s): Karen Purcell, Cornell Lab of Ornithology; Marilu Lopez Fretts, Cornell Lab of Ornithology; Fanny Villarreal, YWCA/Nosotros Radio Inc.



#### Professional Learning to Teach Instructors to Use Evidence & Explanations

8:30 AM-12:00 PM, Magüey

When outdoor science is taught as discovering mysteries around us, and attempting to explain them, it ignites curiosity about interacting with nature. We'll model how to teach instructors to lead inquiry outdoors, to evaluate strength of evidence, and how teaching language of science can contribute to social justice.

Presenter(s): Kevin Beals, Lawrence Hall of Science, BEETLES (Better Environmental Education, Teaching, Learning, & Expertise Sharing)

#### Teach Inquiry-Based Ecology with a Citizen Science Trail Camera Project

8:30 AM-12:00 PM, Flamboyán

Scientists in Panama are tracking jaguars and their prey using remote trail cameras. HHMI BioInteractive developed a new online platform for exploring trail camera data generated by citizen scientists. In this presentation, participants will do hands-on activities using trail camera photos and data to teach about ecology and scientific inquiry. Personal laptops required.

Presenter(s): Bridget Conneely, Howard Hughes Medical Institute

## Wednesday 9:00 AM

### Research Symposium continues

9:00 AM-4:00 PM

## Wednesday 12:00 PM

### Lunch

12:00 PM-1:30 PM, Gran Salón Los Rosales A

Lunch is included for registered participants in the Research Symposium and all full day workshops. The meal is self-service and available any time between 12:00 PM and 1:30 PM. Lunch is not provided with half day workshops.

### Afternoon Workshops

12:00 PM-4:30 PM

#### Building a Stronger, More Inclusive Movement

1:00 PM-4:30 PM, Conference 3-4-5

For those embarking upon equity, diversity & inclusion work, this session is part of a dynamic and rewarding journey. We start by creating a safe space and a forum for deep learning, honest exploration, and open dialogue. The work before us is vital.

Presenter(s): Queta Gonzalez, Center for Diversity & the Environment; Traci Price, 3 Ways to Change



ee360

### Climate Change Community Level Solutions: Moving from Me to We

1:00 PM–4:30 PM, Guayacán

Join the National Network for Ocean and Climate Change Interpretation as we demonstrate how to dive into the most important part of the climate change discussion—solutions! Learn research-based techniques that move concerned citizens from individual actions to community-level solutions that help us solve climate change together.

Presenter(s): Lauren Watkins, White Oak Conservation; Christina Dembiec, Jacksonville Zoo and Gardens; Adam Ratner, The Marine Mammal Center

### Haciendo Ciencia Ciudadana con Cámaras Trampa para Aprender Ecología

1:00 PM–4:30 PM, Flamboyán

HHMI-BioInteractive presenta una nueva plataforma en línea que les permite a maestros, estudiantes y público en general contribuir a proyectos de investigación y conservación de jaguares en Panamá. En este taller exploraremos cómo usar esta plataforma en el aula, para ayudar a estudiantes a investigar sus propias preguntas ecológicas.

Presenter(s): Javier Robalino, Howard Hughes Medical Institute; Bridget Conneely, Howard Hughes Medical Institute



### Ideate, Innovate! Connecting Research and Practice in Environmental Education

1:00 PM–4:30 PM, Magüey

This workshop highlights relevant findings from recent environmental education-related (EE) research, focusing on tools that help practitioners infuse research findings into their work. We use design-thinking principles of brainstorming, ideating, and rapid prototyping to incorporate research findings in EE practice and open the research-practice dialogue.

Presenter(s): Mele E.M. Wheaton, Stanford University; Stephanie Rafanelli, Stanford University; Nicole Ardoin, Stanford University



## Wednesday 5:00 PM



### Opening Reception with Exhibits, Share Fair, and Authors' Corner

5:00 PM–6:30 PM, San Cristóbal Foyer

Welcome! Whether this is your first NAAEE conference or your thirty-first, it starts here! Meet new colleagues and greet returning ones as you enjoy substantial hors d'oeuvres and a cash bar at the opening reception of the conference. Visit with nonprofit organizations at the Share Fair, and with NAAEE members in the Authors' Corner.

See page 36 for more information.

## Wednesday 6:30 PM

### Conference Opening

6:30 PM–8:30 PM, San Gerónimo Ballroom

The conference officially begins with opening remarks from Executive Director Judy Braus and Board Chair Charlotte Clark, and the presentation of the NAAEE Lifetime Achievement Award to Dr. Jane Goodall in recognition of her work to advance environmental education, conservation, and hope.



Following the award presentation, Dr. Goodall will take the stage with this year's opening keynote address.

### Tomorrow and Beyond: An Evening with Dr. Jane Goodall

See page 37 for more information.



#### GOOD TO KNOW

### Central Coloso

Central Coloso, also known as Coloso Sugar Cane Refinery, was a long-running sugarcane refinery in Aguada, Puerto Rico. The refinery was established in late 19th century becoming one of the biggest sugar emporiums in the island. It remained operational until 2003 becoming the last sugarcane refinery to cease operations on the island.



**Join BioInteractive and NAAEE for  
HHMI Night at the Movies**

Featuring Special Guest Dr. Manuel Leal, University of Missouri

**How Lizards Find Their Way Home**

**Thursday 5:30 p.m., San Geronimo Ballroom**

*Refreshments will be served*

**BioInteractive Sessions**

*Explorando Modelos Tróficos y Perturbaciones  
en el Parque Nacional Gorongosa, Mozambique*

Thursday 2:15 to 3:45 p.m., Caribe

*Modeling Trophic Cascades and Keystone Species in Diverse Ecosystems*

Friday 10:30 to 11:10 a.m., Conference Room 3-4-5

# Thursday

## Early Morning

### Birdwatching

**7:00 AM-8:00 AM, Luis Muñoz Rivera Park**

Join an expert birder from Puerto Rico for a walk through the coastal zone and urban forest of the Luis Muñoz Rivera Park. Meet at the hotel entrance. No transportation is required. Sign up at the Information Station.

### Environmental Education Research Breakfast Meeting

**7:00 AM-8:15 AM, Tropical B**

By invitation.

Coordinator: Alan Reid

## Thursday 8:30 AM

### Symposia

**8:30 AM-10:00 AM**

#### How to Recruit, Train, and Retain Diverse Environmental Professionals


**8:30 AM-10:00 AM, Auditorium**

A nonprofit and a government agency will describe their partnership that provides at-risk young urban adults with conservation work experience. Staff will share the social, educational, and financial commitment required to build a more inclusive profession. Recruitment and training resources will be shared to empower attendees to replicate similar programs.

Presenter(s): Darryl Ramos-Young, West Basin Municipal Water District; Maria Madrigal, The SEA Lab, a program of the Los Angeles Conservation Corps

Strand: ● 

### Strands

- Applying Research to Increase Our Impact
- Building Leadership for Environmental Literacy
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools
- Inspiring Connections to the Outdoors
-  Addresses Diversity, Equity, and Inclusion
- Ⓢ Spanish    ⓑ Bilingual

#### Using Research to Shift the Public Discourse on Climate Change

**8:30 AM-10:00 AM, Guayacán**

Learn how an NSF-funded project (1) designed an evidence-based program to train staff and advance public engagement; (2) showed its impacts on educators' capacity to lead difficult discussions and on learners' understanding of climate change and feelings that solutions are possible. With panelists, reflect on application of these research findings.

Presenter(s): Billy Spitzer, New England Aquarium; Rebecca Johns, University of South Florida-St. Petersburg; Adam Ratner, The Marine Mammal Center; Jennifer Lynn Hubbard-Sanchez, Kentucky State University

Moderator: Karen S. Hollweg, Fulbright Specialist

Strand: ●

#### Hands-On Presentations

**8:30 AM-10:00 AM**

##### Best Practices in Nature-Based Early Childhood Education

**8:30 AM-10:00 AM, Flamboyán**

Nature preschools, forest kindergartens, and other nature-based programs for young children are expanding rapidly. The Natural Start Alliance is working with experts in early childhood and environmental education (and related fields) to develop a common set of best practices for these programs. Come learn about the project and weigh in.

Presenter(s): Sheila Williams Ridge, University of Minnesota

Strand: ●

### Conducting an Outdoor Learning Resource Inventory at Your School

8:30 AM-10:00 AM, Salon Del Mar AB

Exploring outdoor experiential learning theory by venturing outdoors to conduct an audit of outdoor places, participants will practically consider how outdoor places tie into local curriculum. Workshop participants shall feel prepared to return to their own schools and begin an outdoor learning resource inventory with students, teachers, and administrators.

Presenter(s): Hartley Banack, University of British Columbia

Strand: ● (S)

### Confrontation in Conservation: Turning Tricky Conversations into Productive Dialogue

8:30 AM-10:00 AM, Magüey

Has fear of confrontation hindered your program topics? Rather than avoiding environmental controversies, complex issues are opportunities for inclusive dialogue with your audiences. This hands-on session will provide you with the resources and experience to turn tricky conversations into a positive exploration of environmental issues promoting a more sustainable future.

Presenter(s): Lauren Watkins, White Oak Conservation; Lily Maynard, University of Florida

Strand: ●

### Messaging and Marketing for EE Affiliates

8:30 AM-10:00 AM, Garita

How do we better communicate about the benefits of EE while promoting our Affiliate organizations to potential supporters and community members? Learn new tools for developing effective messaging as we broaden the circle of who we reach while learning to better market our organizations.

Presenter(s): Sarah Bodor, NAAEE; Katie M. Navin, Colorado Alliance for Environmental Education; Olivia Griset, New England Environmental Education Alliance; Eileen Everett, Environmental Education Association of New Mexico

Strand: ●

**naaee**  
Affiliate

### Utilizing Place Pedagogies to Engage Real-World Watershed Investigations

8:30 AM-10:00 AM, Caribe

Learn how a partnership between Teton Science Schools and University of Wyoming connected public school teachers and students in Riverton, Wyoming to their local waterways. Participate in a sampling of activities from this program and bring home ideas for your own classroom or professional development workshop.

Presenter(s): Emily Schaller, Teton Science Schools; Jason Katzmann, University of Wyoming at Casper

Strand: ●

## Traditional Presentations

8:30 AM-9:10 AM

### Connecting Your City and Citizens Through a Green School Program

8:30 AM-9:10 AM, Conference 10

The Athens-Clarke County Green School program partners local schools and government to increase environmental literacy in the community. It provides educators with resources to connect classroom concepts with the city where students live. Partners will share strategies to increase local environmental education opportunities and offer advice for collaborating with local schools.

Presenter(s): Stacy Smith, Keep Athens-Clarke County Beautiful; Laurie Loftin, Athens-Clarke County Govt.; Stacey Farrell, Keep Athens-Clarke County Beautiful

Strand: ●

### Curriculum Across the Community: Reaching Urban Youth Through Informal Educators

8:30 AM-9:10 AM, Conference 6-7

21st Century learning serves as a foundation to prepare youth to meet the challenges faced in urban communities. Learn how a sewer district has raised an interest in careers that work to keep Lake Erie great! This unique place-based collaborative across Cleveland Schools and community partners has elevated environmental education.

Presenter(s): Ebony Hood, Northeast Ohio Regional Sewer District

Strand: ●

### Lessons Learned from the NOAA B-WET National Evaluation System

8:30 AM-9:10 AM, Flamingo B

The NOAA Bay-Watershed Education and Training (B-WET) program is implementing a national evaluation system designed to inform seven diverse regional programs, serving approximately 3,600 educators and 48,000 students annually. Come learn about how evaluation results are used to monitor and adjust program activities and support grantees in implementing best practices.

Presenter(s): Bronwen Rice, NOAA; Jennifer Carman, University of Michigan; Jaime Frungillo, NOAA

Strand: ●

## Life After Our Programs: An Investment Beyond a Summer Program

8:30 AM-9:10 AM, Flamingo A

Ever wonder what the youth you worked with are doing now? Do you want to better equip youth to be successful in life after your program? Then this session is for you. Learn how conservation educators working with diverse urban youth prepare them to become engaged alumni, and track outcomes.

Presenter(s): Amaris Alanis Ribeiro, North Park Village Nature Center; Ian Viteri, The Field Museum; Credell Walls, Forest Preserve of Cook County

Strand: ●

## Responding to a Socio-Environmental Crisis: Eco-Service Learning in Lesvos, Greece

8:30 AM-9:10 AM, Conference 2

Socio-environmental challenges call for educators to prepare students for a globalized, interconnected world. College faculty and preservice teachers volunteered with an NGO in Lesvos, Greece, removing and upcycling debris resulting from the Syrian refugee crisis. We will present footage of the experience, share critical reflections, and provide lesson ideas.

Presenter(s): Marissa Bellino, The College of New Jersey; Greer Burroughs, The College of New Jersey

Strand: ●

## Teacher Preparation Pipeline Through In-School Environmental Education Model

8:30 AM-9:10 AM, Conference 8-9

Education Outside places environmental educators in public schools for two years to teach outdoor science; over 50% of our alumni have gone on to become formal educators. EE programs that operate at the intersection of formal and information education can have huge impacts on teacher preparation.

Presenter(s): Danielle Diuguid, Education Outside; Hannah Shulman, Education Outside

Strand: ●

## Wildlife Immersion and Leadership Development: Employing Under-Supported Youth in EE

8:30 AM-9:10 AM, Conference 3-4-5

The Wildlife Immersion and Leadership Development (W.I.L.D.) Program provides paid employment for culturally- and economically-diverse teens from under-supported communities in Jacksonville, Florida. Hear from the staff of this award-winning program to find ways to create nature connection, leadership development, and opportunities to promote diversity in EE in your own community.

Presenter(s): Christina Dembiec, Jacksonville Zoo and Gardens; Christopher Conner, Jacksonville Zoo and Gardens

Strand: ●

## Bright Spots

8:30 AM-9:10 AM

Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.



### GROUP 1, Flamingo C

#### Changes in Ontario Teenagers' Awareness and Attitudes About Electricity Conservation

The role of adolescents in the current, and future, story of energy in Ontario prompts an investigation into the attitudes and awarenesses of this demographic regarding electricity conservation. Are teenagers in tune with current electricity conservation issues? Are they aware of any conservation practices? Or are they simply not interested?

Presenter(s): Samra Amir, University of Waterloo

Strand: ●

#### Teaching with Mini Wind Turbines and Solar Panels: Opportunities and Challenges

Renewable energy production is on the rise, offering both benefits and challenges for our next generation. Learn about these technologies as well as strategies for incorporating them into STEM learning experiences for students.

Presenter(s): Shelly Johnson, Next Step Adventure; Sara Lockie, Next Step Adventure

Strand: ●

### GROUP 2, Flamingo D

#### Environmental Communication Through Education or Interpretation?

Education and interpretation are both methods of environmental communication. You may be considered an environmental interpreter or an environmental educator. Are there similarities and differences in these two fields?

Presenter(s): Dottie Shuman, Montreat College

Strand: ●



GOOD TO KNOW

#### Most popular city destinations

San Juan, Ponce, Mayagüez, Bayamón, Fajardo, San Germán, Cayey, and Caguas

### Standardized Recycling Education in America: Lessons from Rhode Island

Why does all recycling bin signage in America look so different? Prior the 1930s, every traffic sign looked different, too. Now, a red octagon speaks for itself. Yesterday's traffic signs are today's recycling bins. Learn how Rhode Island is teaming up with Recycle Across America to change that.

Presenter(s): Krystal Noiseux, Rhode Island Resource Recovery

Strand: ●

### Supports and Barriers to Careers in Natural Resources in Texas

Environmental educators are at the forefront of exposing individuals to careers in natural resources. To better support a diverse and inclusive field, we must understand the supports and barriers faced by individuals in the field. Awareness of these supports and barriers will help practitioners develop programs that improve effectiveness in engaging diverse audiences.

Presenter(s): Maria Florentina Mejia

Strand: ● 

## Roundtable Discussions

8:30 AM–9:10 AM, Las Olas

### Collaboration Story: Climate and Water Education Pilot Lessons Learned

#### Table 1

San Diego Coastkeeper and Climate Science Alliance partnered to develop a bilingual water and climate science curriculum. We tested the NGSS and CCSS lessons in San Diego Unified School District. We will showcase K-5 hands-on science (i.e. climate change and pollution) and art projects that enhanced students' ability to identify actions to mitigate climate change.

Presenter(s): Sandra Lebron-Garcia, San Diego Coastkeeper

Strand: ●  (B)

### Enhance Climate Change Environmental Education: New Conceptual Map Resources

#### Table 2

Come explore a resource-linked climate change concept map to learn more about causes, impacts, and solutions. Navigate to your areas of inquiry: vetted K-16 activities, effective instructional methods, science and engineering practices. Consider how a weather/climate strand map can support your work. Advise further development. Receive links to both maps!

Presenter(s): Jane Ann Heinze-Fry, Museum Institute for Teaching Science

Strand: ●

### Leave No Trace...Anywhere

#### Table 3

Come discuss ways that Leave No Trace can be creatively applied to more than just wild places, including cities. Challenge your ideas of what should be protected and learn methods to not only leave no physical trace, but also to lessen negative social impacts.

Presenter(s): Miranda Bailey-Russomano, Green Mountain College; Teresa Schretter Coker, Green Mountain College

Strand: ●

### Making Stuff Up: An Urban Green School Transformation

#### Table 4

From 6th grade to 12th grade we're making stuff up: connecting students to environmental justice movements, collaborating with community partners, hacking the curriculum, transforming urban concrete campuses, leading teacher education, and redefining "school" and "learning." Hear three teachers share how Green Ambassadors are getting things done in Los Angeles.

Presenter(s): Sammy Lyon, Environmental Charter Schools; Tashanda Giles, Environmental Charter Middle School Inglewood

Strand: ●

### Systems Thinking in Environmental and Sustainability Education

#### Table 5

Systems thinking is a core skill in sustainability and environmental education. But how do you teach systems thinking? ThinkWater has a systems-thinking framework and resources to do just that. This workshop will introduce the systems-thinking framework and provide practice in using the framework in understanding complex issues and in designing educational programming.

Presenter(s): Jeremy Solin, ThinkWater, University of Wisconsin Extension

Strand: ●



## Thursday 9:00 AM

### NAAEE Board Meeting

9:00 AM-11:00 AM, Executive Boardroom

## Thursday 9:20 AM

### Traditional Presentations

9:20 AM-10:00 AM

#### Building a Statewide Museum Network to Strengthen EE Capacity

9:20 AM-10:00 AM, Conference 2

Discover how the NC Museum of Natural Sciences is developing a statewide network of partner science museums to strengthen both environmental and science literacy. This engaging session will review several of the strategies being used as well as the benefits and pitfalls to consider.

Presenter(s): Charles Yelton, North Carolina Museum of Natural Sciences; Dana Gillooly, North Carolina Museum of Natural Sciences

Strand: ●

#### Cornell Online Courses: Professional Development of Environmental Educators

9:20 AM-10:00 AM, Flamingo B

We will discuss Cornell University's approaches to professional development of environmental educators through online courses. These courses build on social learning, applying research-based ideas to participants' EE programs, strengthening professional networks and partnerships, and fostering innovations in the field of EE.

Presenter(s): Alex Kudryavtsev, Consultant; Yue Li, Cornell University

Strand: ●

#### Empathy in Environmental Education

9:20 AM-10:00 AM, Conference 3-4-5

Fostering empathy toward wildlife is an important step in building pro-environmental behaviors. In this session, we will present best practices in building empathy and share indicators of empathy and tools for evaluating empathy in participants and visitors.

Presenter(s): Kathayoon Khalil, Seattle Aquarium; Kathryn Owen, Kathryn Owen Consulting

Strand: ●

#### Expanding Access to EE Through School District Partnerships

9:20 AM-10:00 AM, Flamingo A

The responsibility of achieving environmental literacy cannot rest on one school or organization alone. ChangeScale, TreePeople, and the California Environmental Literacy Steering Committee are forging community partnerships to expand access to EE while supporting new learning standards and California's Blueprint for Environmental Literacy. Join us to explore strategies for developing district-wide environmental literacy plans.

Presenter(s): Kirk Anne Taylor, ChangeScale; Candice Dickens-Russell, TreePeople

Strand: ●

#### Land Trusts and K-12 Education: California's Learning Landscapes Program

9:20 AM-10:00 AM, Tropical A

Learn how land trusts can work with schools and community partners to create outdoor classrooms for youth through the Learning Landscapes program. Learning Landscapes uses an "Outdoor Core" approach to implementing the Next Generation Science Standards and Common Core State Standards using local environments as the context for learning.

Presenter(s): Anne Kinney Stephens, California State University-Chico; Robert Wade, Plumas Unified School District

Strand: ●

#### Pilina Activities: Introduce Hawaii's Environment to Your Classroom

9:20 AM-10:00 AM, Conference 6-7

"Pilina" is Hawaiian for unity and connectedness and the title of Hawaii Environmental Education Alliance's PD workshops. Take a trip through the Hawaiian Islands and engage in experiential activities adaptable for every classroom. Featured: Oahu's Ohe Kapala inspired soil stamping, Kauai's sensory exploration activities, a Maui watershed demonstration, and Hawaii Island's paper-play ecosystems.

Presenter(s): Michelle Gorham, Hawaii Environmental Education Alliance; Liz Foote; Makana Kahalelio, Hawaii Project Learning Tree

Strand: ● 

**Using Religion to Educate about Sustainable Communities**

9:20 AM-10:00 AM, Tropical C

This session will explore ways to use religion to teach about environmental education. Information will give insights to ways the environment is portrayed in religion, and a case study will highlight the work of Interfaith Center for Sustainable Development, a nonprofit organization training future clergy to teach about the environment.

Presenter(s): Leib Kaminsky, Leib Kaminsky Consulting  
Strand: ●

**Bright Spots**

9:20 AM-10:00 AM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

**GROUP 1, Flamingo C**

**Gaming as Eco-Justice Pedagogy: Exploring Possibilities With College Students**

This hands-on workshop has participants exploring and discussing the power and possibility of in-class role-playing games in college courses to deeply question themes in eco-justice. Based on an innovative First Year Seminar at Northern Arizona University, participants will learn about and play games that push pedagogical boundaries.

Presenter(s): Michael Caulkins, Northern Arizona University; Kristin Ziska, Northern Arizona University  
Strand: ●

**The Other Important 3 R's: Reduce, Reuse, and Recycle**

This session highlights a new course that is part of the First Year Seminar (FYS) program at Salem State University. This particular course, taught in the School of Education, addresses the misconception that recycling will solve all our problems and focuses on changing our consumerist culture.

Presenter(s): Dennis Sanchez Rosemartin, Salem State University  
Strand: ●

**GROUP 2, Flamingo D**

**PLT Green Schools Investigations in Michigan Urban Schools**

Project Learning Tree (PLT) Green Schools is a perfect match to integrate STEM into our critical relationship to climate change and our reduced support for public education. Our experiences with Detroit, Pontiac, and Flint are promising. It is my intention to assist others with key communication steps while establishing working relations with urban school districts and staff.

Presenter(s): Mike Mansour, Hawk Woods Nature Center  
Strand: ●

**Project Learning Tree GreenWorks! Environmental Service-Learning Grants**

Discover Project Learning Tree's (PLT) GreenWorks! program—an innovative service-learning program that allows youth to bring about positive change within their community through environmental and community-based projects that link classroom learning to the real world. Educators and students will leave with PLT's GreenWorks! grant guidelines and implementation ideas.

Presenter(s): James Riley McGirt, Project Learning Tree  
Strand: ●



**Reaching Educators Online: PLT's Dive into Online EE Workshops**

Since 2015, Project Learning Tree has developed and implemented six online workshops to support formal and nonformal educators in facilitating environmental education activities with students. In this session, learn more about our online workshops—including three new workshops for PLT's E-Units—and discuss best practices for designing effective online programs.

Presenter(s): Jennifer Pic, Project Learning Tree  
Strand: ●



## Roundtable Discussions

9:20 AM–10:00 AM, Las Olas

### Creating Meaningful Interdisciplinary Science-Based Field Courses to Connect Students with Nature

#### Table 1

In this round-table discussion we identify strategies for creating successful interdisciplinary undergraduate science experiences to motivate life-long scientific curiosity, understanding, and concern for the natural world. We will engage audience participants in a vibrant discussion to explore challenges and solutions in developing and teaching GE science-lab courses in outdoor settings.

Presenter(s): Kelly Bringhurst, Dixie State University; Erin O'Brien, Dixie State University

Strand: ●

### Inspiring Young Leaders for Climate Action and Solutions Through #Youth4Climate

#### Table 2

The solutions to climate change are the paths to a safer, healthier, cleaner, and more prosperous future for all. To sustain the transition, we need to empower youth leadership through focused education, training, and public awareness at all levels of society. Come discuss strategies to leverage the power of youth.

Presenter(s): Frank Niepold III, NOAA Climate Program Office; Max Edkins, World Bank Group; Jen Kretser, The Wild Center

Strand: ● 

### Motivating College Students for the Environmental Education Profession

#### Table 3

How do we motivate college students to engage in the profession of environmental education? Join this group of faculty members for a discussion on assignments, activities, and college student organizations that get participants excited to teach environmental education, whether it is in a K-12 or nonformal education setting.

Presenter(s): Kimberly Yates, Northern Kentucky University; Rebecca L. Franzen, University of Wisconsin-Stevens Point, Wisconsin Center for Environmental Education; Terri Hebert, Indiana University-South Bend; Lucy R. McClain, Shaver's Creek Environmental Center-Penn State University; Fletcher Brown, University of Montana; Molina Walters, Arizona State University

Strand: ●

### School Garden Support Organizations Unite! Growing Capacity and Community Impact

#### Table 4

Throughout North America, foundations, nonprofits, school districts, and state and university programs are working together to institutionalize school gardens in their regions. Join us to discuss ways that we can grow our capacity and impact, while influencing policy, systems, and environmental changes that sustain the school garden movement into the future.

Presenter(s): Nathan Larson, Community GroundWorks

Strand: ● 

### US Cities Are Warming 10.5°F per Century

#### Table 5

Daily highs for 122 summer days, for 330 US cities in 48 states, have risen 10.5°F per century since 1995. Learn about cities near you. Explore how to use this data in your work and to influence policy. Get handouts and a CD with a library of related resources.

Presenter(s): Gene Fry, Citizens Climate Lobby

Strand: ●

## Thursday 10:00 AM

### Coffee Break

10:00 AM–10:30 AM, San Cristóbal Ballroom

## Thursday 10:30 AM

### Traditional Presentations

10:30 AM–11:10 AM

#### BirdNote: Impactful Storytelling For and By Students

10:30 AM–11:10 AM, Flamboyán

1.7 million people listen to BirdNote's inspirational, science-based stories. We feel an urgency to use our resources to engage younger and more diverse audiences. Join us as we share what we know about impactful audio and video storytelling for youth and adults, illustrated with examples from our audio story archives.

Presenter(s): Lisa Eschenbach, E3 Washington

Strand: ●

### Climate Change Education: Case Studies for Inclusion and Agency

10:30 AM-11:10 AM, Conference 3-4-5

Scientific and technological advances have vastly outpaced society's ability to adapt to climate change in a timely manner. We are reframing climate change education to be more relevant to diverse audiences; to build emotional intelligence and agency; and to be understood as an opportunity instead of a debilitating, unchangeable reality.

Presenter(s): Rebecca Stanfield McCown, National Park Service Stewardship Institute; Kerri McAllister, Shelburne Farms; Joan Haley, Shelburne Farms & Marsh-Billings-Rockefeller NHP

Strand: ●

### Conéctate con el Ambiente

10:30 AM-11:10 AM, Conference 10

Se presentará la importancia de planificar adecuadamente los viajes educativos a reservas naturales. Conocerán cómo las alianzas efectivas promueven el aprendizaje significativo en espacios naturales para estudiantes de K-12. Se presentarán proyectos trabajados con Para La Naturaleza en Puerto Rico y cómo estos desarrollan las destrezas de STEM y del siglo 21.

Presenter(s): Mayrelis Narváez, Forward Learning

Strand: ● (S)

### EPA Education Office Strategic Plan: A Paradigm Shift for EPA

10:30 AM-11:10 AM, Conference 2

EPA's Office of Environmental Education will give a final update on our strategic plan and we will engage the audience in discussions about important issues and trends in EE. We will also engage the audience in discussions on how best to incorporate EE throughout the work of the Agency.

Presenter(s): Ginger Potter, US EPA

Strand: ●

### Maximize Your Impact for Kids: The Environmental Education "Better Results" Toolkit

10:30 AM-11:10 AM, Conference 8-9

If you are looking to strengthen your program and improve outcomes through measurement and learning, the Better Results Toolkit is for you! This practice-based toolkit leads an organization through the process of defining its theory of change, developing a measurement plan, and then using data to strengthen programs.

Presenter(s): Jessica Xiomara García, Learning for Action

Strand: ● 

### Mentoring High School Students Toward Sustainability-Related Careers

10:30 AM-11:10 AM, Tropical A

With the goal of strengthening the future sustainability of our region, Merry Lea Environmental Learning Center of Goshen College offered an immersion style program for high school students interested in the conservation of natural resources. Participants developed leadership skills and environmental content knowledge through relationship-building experiences in natural and managed ecosystems.

Presenter(s): Kaitlyn Stoltzfus, Merry Lea Environmental Learning Center of Goshen College; Joel Pontius, Merry Lea Environmental Learning Center of Goshen College

Strand: ●

### Preparing Future Teachers to Integrate Environmental Education Across the Curriculum

10:30 AM-11:10 AM, Flamingo A

Future teachers are motivated to be environmental educators, but need practice learning how to address state and national standards across the curriculum in their daily work. In this session, teacher educators will share effective lessons and assignments from their courses that help preservice teachers (PreK-12) make interdisciplinary connections.

Presenter(s): Eileen Merritt, Arizona State University; Rebecca L. Franzen, University of Wisconsin-Stevens Point, Wisconsin Center for Environmental Education; Kimberly Yates, Northern Kentucky University; Sarah Haines, Towson University; Yash Bhagwanji, Florida Atlantic University; Fletcher Brown, University of Montana; Molly Gerrish, University of Wisconsin-River Falls

Strand: ●

### Project-Based Learning Pathways: A Scaffolded Approach to Integrating PBL with EE

10:30 AM-11:10 AM, Salon Del Mar AB

Discover and explore an interactive online tool that effectively leads teachers and students through a scaffolded approach to project-based learning in the schoolyard.

Presenter(s): Karan Wood, Captain Planet Foundation

Strand: ●

### Ramping Up: Environmental Education in an Age of Civic Action

10:30 AM-11:10 AM, Conference 6-7

Join us to celebrate environmental education's success instilling the habits of environmentalism (e.g. recycling, conserving water, and planting trees) in young people and to learn how some organizations are helping young people take that step from being environmental believers to community actors.

Presenter(s): Vince Meldrum, Earth Force

Strand: ●

### Rethinking Methodologies in EE Research: Can We Better Diversify Approaches?

10:30 AM-11:10 AM, Tropical C

Are we using the same data collection methodologies in our research in environmental education?

This discussion will detail results from a study examining the research designs and data collection methodologies of environmental education research over the past 15 years and implications of becoming more innovative with our research.

Presenter(s): Milton Garry Newberry, University of Georgia

Strand: ●

### United We Rise: Sustainability Leaders Across Age, Race, and Place

10:30 AM-11:10 AM, Flamingo B

What does a historically black university, a global K-12 nonprofit, and a city's sustainability department have in common? They are all charged to build bridges and a shared vision across community silos and sectors. Join this session for stories and lessons at the intersection of diversity, collaboration, and collective action.

Presenter(s): Gina LaMotte, EcoRise Youth Innovations; Lucia Athens, City of Austin; Amanda Masino, Huston-Tillotson University

Strand: ● 

## Bright Spots

10:30 AM-11:10 AM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Activating Nature: Keeping Natural Spaces in a City Park

Blue Heron Nature Preserve is part of the City of Atlanta Public Parks System. We accepted the challenge of "activating" our park without building the traditional playgrounds, ball fields, or large amphitheaters. Learn how we creatively activated nature to grow our community's connection to the outdoors.

Presenter(s): Amy Zvonar, Blue Heron Nature Preserve

Strand: ●

#### Join the TACO party to Take A Child Outside!

Take a Child Outside is an annual international initiative to get kids outside between September 24 and September 30. Come and learn how you can become part of this movement to address the ever-increasing need to get children outside. Participation is free and open to any group through [takeachildoutside.org](http://takeachildoutside.org).

Presenter(s): Beth Jones Cranford, North Carolina Museum of Natural Sciences

Strand: ●



**GROUP 2, Flamingo D****Restoring Connections: Nurturing a Meaningful Sense of Place**

How do we help children develop a deep sense of place, one which integrates an understanding of both natural and cultural local history? This presentation highlights lessons learned from a collaborative project called Restoring Connections that brings together a nonprofit, an elementary school, and a university to do just this.

Presenter(s): Kathryn Lynch, Environmental Leadership Program, University of Oregon

Strand: ●

**Water Knowledge Teachings from Cree (Indigenous) Youth**

This presentation will share Indigenous knowledge related to water from Cree youth in Northern Quebec, Canada. I will show photos and tell stories from water-related adventures including both a canoe and snowshoe expedition, while relaying messages about water that Cree youth believe are important to teach to future generations.

Presenter(s): Kristy Franks, Concordia University

Strand: ● 

**Wisconsin ThinkWater: Creating Space to Innovate and Pilot a National Water Education Campaign**

ThinkWater is a national movement of educators, students, managers, stewards, scientists, and citizens who think and care deeply about water. Wisconsin was identified to pilot and innovate effective water education and outreach. This presentation will share the strategies and resources being used and what's been learned through the process.

Presenter(s): Jeremy Solin, ThinkWater, University of Wisconsin Extension

Strand: ●

**Roundtable Discussions**

10:30 AM-11:10 AM, Las Olas

**A Public Voice on Climate Change: How You Can Participate****Table 1**

Learn how you can be involved in a partnership between NAAEE and the Kettering Foundation to use online and in-person deliberative forums to gather insights into public views on climate change. Get set up to conduct community and classroom forums using the Environmental Issues Forums Climate Choices issue guide.

Presenter(s): Michele Archie, The Harbinger Consulting Group; Bora Simmons, National Project for Excellence in Environmental Education

Strand: ●

**Building Diverse Workforces: How Can We Finally Move the Needle?****Table 2**

How can we leverage partnerships and planning to finally change our organizations' demographics? The Forest Service Southern Region and our partners are shifting the paradigm and creating new, forward-thinking programs. Come discuss the engagement pipeline, barriers to diversity hiring, and how partners can work together to promote inclusivity.

Presenter(s): Kelly Balcarczyk, USDA Forest Service

Strand: ● 

**Collaborating for Impact: Stories from Two States****Table 3**

Connecting with like-minded organizations and thoughtfully designing partnerships can help Affiliates evolve for greater impact. North Carolina and Maine are reaching new audiences and building collaborative relationships to enhance success and "build a bigger boat." Learn about their experiences and explore how your organization might pursue similar capacity-building strategies.

Presenter(s): Olivia Griset, New England Environmental Education Alliance; Ruth Kermish-Allen, Maine Math and Science Alliance; Tamara Lee Pinard, The Nature Conservancy; Michelle Pearce, Environmental Educators of North Carolina; Shannon Culpepper, Chatham County Solid Waste and Recycling; Brad Daniel, Montreat College

Strand: ●

**naaee**  
Affiliate

**EE in the Every Student Succeeds Act****Table 4**

New federal education policy includes environmental education in two key grant programs for the very first time. Come for a discussion of how EE fits within the overall bill, how the grant programs work, and what you can do to take advantage of the new opportunities provided by ESSA.

Presenter(s): Sarah Bodor, NAAEE

Strand: ●

**Tiny Homes, Big Impact****Table 5**

An urban school builds a tiny home to help solve the homeless crisis. Students learn more than carpentry as they focus on social justice and environmental awareness. We will discuss the benefits and obstacles of the project. Furthermore, we will uncover student achievement academically and increased understanding of environmental justice.

Presenter(s): Jonathan Montoya, East Side Union High

Strand: ●

## Thursday 11:30 AM



### Keynote

11:30 AM-12:30 PM, San Gerónimo Ballroom



### Carmen Guerrero Pérez

**Protecting an Island: What We've Learned About Natural Resource Management, Community Outreach, and Education in Puerto Rico**

See page 31 for more information.

## Thursday 12:30 PM

### Exhibit Fair Luncheon, Poster Sessions, and Affiliates' Welcome

12:30 PM-2:00 PM, San Cristóbal Ballroom

Our Thursday luncheon celebrates the Exhibit Fair, where you can explore innovative programs, dynamic practices, and effective products. The NAAEE Affiliates will share information about the many services they offer to their members on the state and provincial level. And many of our colleagues will be sharing their poster presentations and discussing their work. This event is included with Thursday or full conference registration with RSVP in advance.



GOOD TO KNOW

### Diosa Costello

Diosa Costello, known as "The Latin Bombshell," was a legend of nightclubs, theater, and films, and a native of Puerto Rico. Her career spanned over six decades and she lived to be 100 years of age.

## Poster Presentations

1:00 PM-2:00 PM,  
San Gerónimo Ballroom

### 1) A Green Port is Hosting an Environmental Camp

Linaria port is a port in Skyros Island, Greece. Since 2015, an environmental summer camp took place there, in the general "SKYROS Project", which was created by an innovative cooperation between two governmental organizations. A unique educational kit has been created, with the port acting as an education tool.

**Presenter(s):** Evangelia Tsagaki Rekleitou, University of the Aegean

Strand: ●

### 2) Becoming an AP Environmental Science Reader

Each June, high school AP teachers and college faculty members from around the world meet to score the free-response section of the AP Environmental Science exam. Readers have an opportunity to gain an in-depth understanding of the AP Environmental Science exam, engage in professional development, and are paid a stipend.

**Presenter(s):** Stephanie Lanzel, Educational Testing Service; Christopher Gentile, Educational Testing Service

Strand: ●

### 3) Beyond Science: Examining the Effects of Teaching Social Studies Outside

This poster describes the design, implementation, and effects of teaching social studies to 4th graders outside. We designed a 5-day unit of study that covered basic economic principles and integrated reading and writing. Data includes surveys, pre- and post-interviews with 23 students, and student work.

**Presenter(s):** Isabelle Fagen, Elon University

Strand: ●



**4) Building Partnerships and Collaboration to Improve Communities and Civic Engagement**

For over 40 years Keep America Beautiful has used behavior change methodology to bring together business, civic, government, and neighborhoods to end littering, improve recycling, and beautify communities. In this partnership KAB will take the lead in providing community-wide recycling education.

Presenter(s): Cecile Carson, Keep America Beautiful

Strand: ●



**5) Climate Ambassadors, Environment and Climate Education in Smart Cities**

Malmö University, the City of Malmö, and Greater Copenhagen are developing challenge-based learning in environmental and sustainability education in secondary schools. We are collaborating on a regional and two interregional projects that focus on student active learning methods, e.g. climate ambassadors and energy smart schools with climate smart education.

Presenter(s): Kerstin Sonesson, Malmö University, Sweden

Strand: ●

**6) Collaborating for the Greater Good—Strategies for EE Literacy Pathways**

In this presentation, we will share our experience creating pathways for K-8 environmental literacy as part of the Sonoma Environmental Education Collaborative (SEEC). SEEC represents over 20 environmental education organizations in Sonoma County, and we will discuss our strategies for increasing our collective impacts to achieve environmental literacy.

Presenter(s): Bree Benton Arthur, LandPaths

Strand: ●

**7) Connecting to the Outdoors by Combining Interpretation and Citizen Science**

Citizen science is an innovative tool to engage visitors of all ages in relevant and meaningful educational activities that promote conservation and stewardship.

Presenter(s): Yogani Govender, Inter American University of Puerto Rico Metro Campus

Strand: ●

**8) Conservation Education at Zoos: Mission Impossible or Mission Accomplished?**

Zoos and aquaria have conservation-focused mission statements, but the realization of this organizational goal is unclear. Does their institutional strategy influence their conservation projects, conservation education programs, or how they communicate with their audiences? This study analyzes the relationship between zoos' missions and their practice.

Presenter(s): Lily Maynard, University of Florida

Strand: ●

**9) Data in Action: Applying Industry Survey Data to Influence Decision Making**

Over the past year, organizations have been applying the results from two surveys of EE related organizations in Wisconsin to inform their programming decisions. This includes a look at participation trends, economic impact, program evaluations, inclusion & accessibility, use of technology, land management, and professional development needs.

Presenter(s): Robert Justin Hougham, University of Wisconsin—Extension; Steve C. Kerlin, Stroud Water Research Center

Strand: ●

**10) Designing Aesthetic Environmental Inventories for Ecological Literacy and Civic Engagement**

Transformative experiences are never one sided—both the environment and the learner are forever changed. This session explores what happens when educators learn to pair aesthetic themes of connection, risk-taking, perceptivity, imagination, sensory experience, and active engagement with the ideas of influential environmental scientists when designing for transformative learning.

Presenter(s): Emily Bretl, Earth Force

Strand: ●



### 11) Developing Sustainable Leadership and Environmental Education in Rural Costa Rica

Environmental education faces unique challenges when directed to students in developing rural areas. This study incorporates quantitative and qualitative data to understand an informal place- and community-based environmental education program for underserved rural students. Through surveys and interviews, the experiences of 22 program participants are examined.

Presenter(s): Samantha Selby, Stanford University; Austin Cruz, University of Arizona

Strand: ●

### 12) Do Role Models Matter? Exploring Their Influence on Student Outcomes

Which role models have the greatest potential to help students reach environmental literacy and positive youth development outcomes? Can a residential environmental education (EE) program influence who students view as their role models? We will discuss findings from a study investigating role models and outcomes at a residential EE program.

Presenter(s): Troy Frensley, Virginia Tech

Strand: ●

### 13) E-CORP: Educational Connections to Ongoing Research Projects, Florida Atlantic University

FAU Pine Jog Educational Connections to Ongoing Research Projects (E-CORP) introduces students to the world of scientific research. Through collaboration with university research departments, and by incorporating education elements into grant proposals, E-STEM research education is made available to middle and high school students for both classroom and field based learning.

Presenter(s): Christopher Andrew Hill, FAU Pine Jog Environmental Education Center; Wen Zhang, Pine Jog Environmental Education Center

Strand: ●

### 14) Ecological Service Learning: Connecting Natural and Human Communities

We will explore NCCC's ecological place-based, service-learning projects in life science laboratory courses. Students' reflections and outcomes will be included, and opportunities for funding and partnership building for similar projects will also be discussed.

Presenter(s): Tara Holmberg, Northwestern Connecticut Community College

Strand: ●

### 15) Ecopedagogy, the Earth Charter, and the Puerto Rico Eco-School Program

This qualitative research has been undertaken with the purpose of developing an intervention program for the Puerto Rico Eco-Schools Programme. It aims to integrate the Earth Charter's principles and values to Eco-Schools' vision and actions, and to foster a sustainable culture through environmental education in Puerto Rico.

Presenter(s): Maria A. Vilches, Universidad Metropolitana

Strand: ● (B)

### 16) Empowering At-Risk Teens to Shape Environmental Challenges with Design

Can "design thinking" equip at-risk students with an ability to understand and propose solutions to the complex environmental challenges disproportionately impacting their lives and neighborhoods? This research showcases the perspectives of youth living in drought-ridden Los Angeles, California toward design thinking as a teaching methodology and learning approach.

Presenter(s): Yanin Kramsky, Yale University

Strand: ● 

### 17) Environmental Education Through Digital Storytelling in Middle Schools in Dubai

Middle school students are assessed on their environmental knowledge, attitudes, and behavior, after their exposure to digital social stories. Environmental awareness mandates further educational investment and this can be achieved through innovative technological means.


Presenter(s): Paraskevi Theodorou, University of the Aegean

Strand: ●

### 18) Environmental Health Literacy: A Framework for Responding to Environmental Exposures in Free-Choice Contexts

Join a conversation about the emerging framework of environmental health literacy! Using communication of fish consumption advisories as a case study, we will examine how fostering environmental health literacy can lead to greater engagement of underserved populations, more effective education, and improved understanding of the teaching efficacy of nonformal educators.

Presenter(s): Kathleen Gray, University of North Carolina Institute for the Environment; Sarah Yelton, University of North Carolina Institute for the Environment

Strand: ● 

### 19) Evaluating Online University Environmental Course's Impacts on Undergraduates' Environmental Attitudes

Can an online undergraduate environmental science class aid in promoting environmental concern? Employing the modified Environmental Attitudes Inventory of Sutton and Gyuris (2015), we examined how Ashford University students' environmental attitudes were affected by taking an environmental science course. Study results provide baseline data for course revisions promoting environmental stewardship.

Presenter(s): Clifford Blizard, Ashford University; Srabasti Dutta, Ashford University

Strand: ●

### 20) Experiential Learning of Sustainable Architecture at a Historic Palace in Korea

This study examines how children experience "sustainable architecture" as they participate in an experiential education program which takes place at Changdeokgung, a historic palace in Korea. It explores how children carry out authentic and situated inquiry into the palace and make sense of sustainability, supported by a mobile learning environment.

Presenter(s): Miyou Lim, Ewha Woman's University

Strand: ●

### 21) From Island to Paper: A Hands on Topography Lesson

Learn about a fun approach to teaching mapping and topography using modeling clay. Program participants build an island form and then create topographic maps from their creations. The unit is NGSS-aligned and developed to introduce modeling to middle school students.

Presenter(s): Willie Adam Richerson, Catalina Island Conservancy

Strand: ●

### 22) Green Schoolyards: Environmental Education at Scale

San Francisco Unified School District developed the nation's first network of publicly funded green schoolyards. Education Outside has been partnering with SFUSD, and now other urban districts in the Bay Area, to enhance site infrastructure and help school communities effectively utilize these spaces for environmental and science learning, at scale.

Presenter(s): Danielle Diuguid, Education Outside; Hannah Shulman, Education Outside

Strand: ●

### 23) Growing Local Leaders: The Sustainable Floridians Extension Program

Sustainable Floridians is an innovative "discussion-to-action" Extension program designed to meet the growing demand for systems-level, cross-disciplinary environmental education that flips the classroom and engages participants as peers. Our team poster introduces this model program, shares the Sustainable Floridians story, and highlights outcomes and impacts to date.

Presenter(s): Jennison Kipp Searcy, University of Florida; Ramona Madhosingh-Hector, University of Florida/IFAS Extension; Alicia Betancourt, University of Florida; Holly Abeels, University of Florida IFAS Extension; Linda Seals, UF/IFAS Extension Brevard

Strand: ●

### 24) How Do Environmental Literacy Improvements Correlate With Youth Demographic Data?

Through an evaluation tool inspired by NAAEE's proposed framework for the evaluation of environmental literacy, we will display how improvements in environmental literacy correlate to gender, age, and type of education institution. Results presented can help inform whether demographic data should be considered in the design of environmental education programs.

Presenter(s): Carlos Trejos, Ecology Project International

Strand: ●

### 25) How to Host a Youth Climate Summit

Youth Climate Summits are powerful vehicles for inspiration, learning, community engagement, and youth leadership development. Through project-based learning teams, create a unique, student-driven sustainability effort and Climate Action Plan. The presented summit model is flexible and has been replicated across the US, as well as internationally.

Presenter(s): Jen Kretser, The Wild Center

Strand: ●

### 26) Impacts of EE on Student Populations that Speak Different Languages, Their Teachers, and Their School

At an elementary school in Greece, there was little EE activity and two distinct student populations: native speakers and English-speakers. An action research study examined whether a joint EE program can bring change in students, teachers, the school, and the community.

Presenter(s): Marianna Kalaitzidaki, University of Crete

Strand: ●



### 27) Improving the Mammoth Cave Experience for Preservice Teachers Through Assessments

After analyzing pretest and posttest drawings, paragraphs, and concept maps, changes occurred to preservice elementary field trips to Mammoth Cave National Park. An increase in inquiry teaching and more open-ended questions allowed for the preservice teachers to determine more of their own learning for field trip experiences.

Presenter(s): [Jeanine Huss, Western Kentucky University](#)

Strand: ●

### 28) Inclusive Environmental Education for Toddlers Using Universal Design for Learning

Following an active discussion of the Universal Design for Learning (UDL) framework and guidelines, participants will engage in an interactive soil exploration simulation that applies UDL strategies in nature-based activities. Participants will then obtain resources for guiding and evaluating their current programs' implementation of UDL practices.

Presenter(s): [Sylvia Collazo, Florida Atlantic University-Boca Raton](#)

Strand: ●

### 29) Increasing Youth Participation in Community Activities: Sharing Lessons Learned from Mexico

Rainforest Alliance shares activities and strategies for working with youth in rural communities. By increasing scientific knowledge, deepening cultural connections, working with experts, and involving youth in community life, we are working towards a sustainable future for youth in Mexico.

Presenter(s): [Maria Ghiso, Rainforest Alliance](#)

Strand: ●

### 30) Informing the Future Using Teachers' Perspectives on Environmental Sustainability Education

We conducted focus group discussions at three K-5 schools with markedly different visions to learn practicing teachers' perspectives on environmental and sustainability education. We will share trends that emerged and strategies for how to use this information to shape future preservice and inservice teacher education in environmental sustainability.

Presenter(s): [Lauren Madden, The College of New Jersey](#)

Strand: ●

### 31) Integrating Sustainability Concepts Across a University Curriculum

It is apparent how sustainability concepts can fit into collegiate science or economics courses. This project's goal was to create a critical mass of faculty from the arts, humanities, and social sciences who integrate sustainability concepts into their courses, so that students have multiple opportunities to learn about its importance.

Presenter(s): [Scott Ashmann, University of Wisconsin-Green Bay](#)

Strand: ●

### 32) Introductory Ecology in Higher Education: A Case to Support EE

Ecology, environmental literacy, and sustainability are important concepts for all students. Introducing these concepts through rigorous introductory courses can serve as a means to building a more environmentally- and ecologically-literate society, as well as strengthening and improving retention in environmental programs.

Presenter(s): [Tara Holmberg, Northwestern Connecticut Community College](#)

Strand: ●

### 33) KAP Study: Climate Change, Global Warming, Energy Conservation, Carbon Reduction

The purpose of this study is to understand the performance and differences in knowledge, attitude, and behavior with respect to climate change, global warming, energy conservation, and carbon emission reduction in environmental educators who have been certified by Taiwan EPA since June 5, 2011, when the Environmental Education Act came into force.

Presenter(s): [Yung-Chiech Yu, Environmental Protection Administration, Taiwan](#)

Strand: ●

### 34) Learning Experiences from a School Gardening Project in Sweden

The ambition for outdoor education was high when a team of secondary school teachers started a gardening project with a combination of theoretical and practical work. However, after one school year there was a clear discrepancy between the teachers' vision and the learners' thoughts on learning in the extended classroom.

Presenter(s): Agneta Rehn, Malmö University; Kerstin Sonesson, Malmö University, Sweden

Strand: ●

### 35) Looking Back and Looking Ahead on a Mission of Environmental Sustainability

Florida Gulf Coast University opened in 1997 with a mission "to promote and practice environmental sustainability." We've been deeply challenged to live up to this commitment to infuse sustainability across the critical dimensions of university life. We will share successes and failures such that they might provide insight to others.

Presenter(s): Heather Skaza Acosta, Florida Gulf Coast University; Peter Blaze Corcoran, Center for Environmental and Sustainability Education, Florida Gulf Coast University

Strand: ●



### 36) MWEE: Increasing Student Achievement, Stewardship, and Conservation Through Environmental Literacy

We recognize the power of outdoor learning and informed action for supporting student achievement, but how do we go about systemically integrating it into formal curriculum? Join us as we explore *An Educator's Guide to Meaningful Watershed Education Experiences*.

Presenter(s): Amy E. Green, Chesapeake Bay Foundation

Strand: ●

### 37) Nature Writing with Diverse Youth

Urban youth culture—influenced by a hip-hop ethos—is wildly imaginative, always changing, and often focused on justice. In this poster, we explore creative teaching methods for engaging diverse youth in writing about their home cultures and connections to the natural world. Participants will gain specific writing activities with supporting theory.

Presenter(s): Rob Linne, Adelphi University; Shari Caton, Wimberley High School

Strand: ●

### 38) Partnering with Parks to Connect Youth in Underserved Communities to Nature

For many children, families, and educators, particularly in underserved urban communities, a barrier to outdoor programs is discomfort in nature. The Wildlife Explorers program provides a framework for connecting children to nature in local parks. Join us to learn about best practices and resources for engaging kids in outdoor exploration.

Presenter(s): Serda Ozbenian, National Recreation and Park Association

Strand: ●

### 39) Pilina Lau Lima: "Connecting Many Hands" Through EE Professional Development

"Pilina" means unity and connectedness in Hawaiian. This professional development program unites diverse classroom teachers with nonformal EE professionals in their community. Each 24-hour credit-bearing course includes standards-based EE curricula, nonformal partnerships, locally-available field experiences, and more. Learn how culminating reflections, results, and networks grow a stronger EE community.

Presenter(s): Michelle Gorham, Hawaii Environmental Education Alliance; Makana Kahalelio, Hawaii Project Learning Tree; Liz Foote, Hawaii Environmental Education Alliance

Strand: ● 🌍

#### 40) Potencial de Educación Ambiental a Través del Huerto Escolar, Prácticas Exitosas

El huerto escolar representa un potencial inagotable de experiencias de educación ambiental. Actividades relacionadas a las ciencias terrestres, biodiversidad y sistemas alimentarios pueden desarrollarse de diversas formas en el huerto escolar. Compartimos experiencias y estrategias de educación formal y no formal y el modelaje de conductas responsables hacia el ambiente.

Presenter(s): Alida Ortiz- Sotomayor, University Puerto Rico-Humacao; Marisol Quiñones

Strand: ● (S)

#### 41) Raising Awareness Towards Climate Change Through a Mobile Application Tool

This presentation concerns the establishment of an environmentally oriented application for mobile phones, focused on climate change, in order to strengthen knowledge and promote positive attitudes and behaviors towards this crucial environmental issue.

Presenter(s): Lampros Topaltsis, University of the Aegean

Strand: ●



#### 42) Reflection and Analysis–Project-Based Learning in Southern Kenya

As rural Kenyan communities continue to modernize, many indigenous youth are losing their traditional ecological knowledge and connection to local wildlife. This presentation focuses on the successes and challenges of a project-based learning curriculum developed to help combat this important issue with Maasai youth.

Presenter(s): Carrie S. Harding, Arizona Center For Nature Conservation

Strand: ● (S)

#### 43) Research for the Environmental Interpretation System of EE Center of Guangzhou Waste-to-Energy Plant No.1

Guangzhou set up its first EE Center at a Waste-to-Energy incineration plant in 2012. Using the results of a questionnaire completed by center visitors, this research constructed a suitable Environmental Interpretation System and put forward an applicable Environment Perception Model for the EE center.

Presenter(s): Nan Chen, Guangzhou University

Strand: ●

#### 44) Subjective Cameras in EE: Valuing the Experience of Seeing Wisely

This presentation will introduce you to subjective cameras (subcams) and how they can be used as a data collection tool. We will share our experiences using subcams with families. We asked families to wear the subcams to collect data about their interactions during EE programs. Come wear a subcam!

Presenter(s): Michael Dentzau, Columbus State University

Strand: ●

#### 45) Supporting At-Risk Elementary Students' Academic Skill Development Through Nature Photography

This poster presentation describes a university/ PreK-12 partnership project for at-risk students in a rural Title 1 elementary school, involving brief nature photography activities to support learning in several academic areas. Students demonstrated enthusiasm for observing and photographing nature, as well as positive dispositions toward related academic assignments, with beneficial outcomes.

Presenter(s): Wendy Chambers, Georgia Southern University

Strand:

#### 46) Teacher Capacity for Teaching About/In the Environment

Are classroom teachers equipped for environmental literacy? View research that was conducted with elementary teachers examining their environmental knowledge, training, teaching practices, and the relationship with their confidence in their ability to teach in this area. Obtaining this information can provide needed background for working with our inservice teachers.

Presenter(s): [Melanie Parker, Anne Arundel County Public Schools/Arlington Echo Outdoor Education Center](#)

Strand: ●

#### 47) Teacher Environmental Literacy: Why It's Important, How to Assess it

Why do we want teachers and EE practitioners to be environmentally literate? What does that mean? What are the potential impacts of teacher environmental literacy (TEL)? This session explores the development of a new instrument for assessing TEL, and highlights its use with a problem-based learning professional development program.

Presenter(s): [Roberta Hunter, Rutgers University; Rebecca Jordan, Rutgers University](#)

Strand: ●

#### 48) The Environmental Culture of Northern Lights Community School

Northern Lights Community School (NLCS) is a tuition-free public charter school for grades 6-12, in Warba, Minnesota. NLCS is an environmental project-based school authorized by Audubon Center of North Woods. NLCS is built on four pillars—a small learning community, an environmental focus, hands-on projects, and student-driven education.

Presenter(s): [Matt Alleva, Northern Lights Community School](#)

Strand: ●

#### 49) Trump Era Ecowarriors: Enacting Democracy in Response to Anti-Environmental Policy

We will present findings from a study which examined the environmental attitudes, significant life experiences, and ideas about active democratic citizenship of participants in the March for Science. Discussion will center on strategies to motivate the public to take informed actions on environmental and other civic issues.

Presenter(s): [Vanessa Ann Klein, University of Maine; Evan Mooney, Montclair State University](#)

Strand: ●

#### 50) Understanding Global Impacts of Rapid Climate Change in Polar Regions

Research shows that climate change happens most rapidly in polar regions, and news stories often highlight this information. These changes impact us all, no matter where we live. Learn how polar changes impact Earth systems, and how to connect climate changes to local environments.

Presenter(s): [Regina Brinker, Livermore Valley Joint Unified School District](#)

Strand: ●

#### 51) Using the Local Watershed to Integrate Science in K-12 Education

Stop by our poster to find out how a kindergarten and a high school teacher integrated water and environmental science into their classrooms following two years of professional development.

Presenter(s): [Jason Katzmann, University of Wyoming at Casper; Emily Schaller, Teton Science Schools](#)

Strand: ● 

#### 52) WikiWatershed.org Toolkit of Resources for Studying Your Watershed

The Wikiwatershed.org community toolkit features STEM resources to promote systems thinking, data collection, and interactive technologies, including online Model My Watershed GIS modeling, EnviroDIY stream sensors, a micro site runoff simulation, Monitor My Watershed, international Leaf Pack Network, the Water Quality mobile app, scientific data gathering processes, and watershed curricula.

Presenter(s): [Steve C. Kerlin, Stroud Water Research Center; Tara Muenz, Stroud Water Research Center](#)

Strand: ●

#### 53) Working to Eliminate Barriers to the Outdoors for Young Children

This session builds on existing research that deals with perceptions and practices of risky nature-based outdoor play for young children. This interactive poster exhibit will ask participants to explore the research, then identify their own barriers for creating these experiences for young children in their own lives.

Presenter(s): [Shelby Gull Laird, Stephen F. Austin State University; Kelly Hoke, Oregon State University](#)

Strand: ●

#### 54) Youth Learning as Citizen Environmental Scientists (YLACES)

YLACES seeks to develop citizens with scientific habits of mind, utilizing the environment as a learning laboratory where students conduct inquiry-based research and contribute to a better collective understanding of our changing world. Come learn more about YLACES and see if your organization can collaborate with YLACES for support.

Presenter(s): Dixon Butler, Youth Learning as Citizen Environmental Scientists; Leib Kaminsky, Leib Kaminsky Consulting

Strand: ●

## Thursday 2:15 PM

### Special Sessions

2:15 PM–3:45 PM

#### Growing and Supporting the Movement—Funders' Perspectives

2:15 PM–3:45 PM, Guayacán

Join us for a thought-provoking panel with distinguished funders representing foundations, government, and corporations. Our panelists will share current trends, funding priorities, and challenges that impact environmental education. This session will provide the funder's perspective in a way that spurs discussion and new ideas leading to strategies for growing funding for the field.

Presenter(s): Judy Braus, NAAEE; Jason Walter Morris, Pisces Foundation; Nancy E. Bales, Gray Family Foundation; Louisa Koch, National Oceanic and Atmospheric Administration (NOAA); Alexandra Hertell, Fundación Segarra Boerman e Hijos, Inc.

Strand: ●

#### Introduction to EPOC (Environmental Professionals of Color)

2:15 PM–3:45 PM, Las Olas

Interested in learning more about the Center for Diversity & the Environment's Environmental Professionals of Color Network? Join EPOC members and CDE to learn more about the movement, meet the coalition, and be inspired to start your own EPOC chapter in your community.

Presenter(s): Queta Gonzalez, Center for Diversity & the Environment

Strand: ●

### Symposium

2:15 PM–3:45 PM

#### How to Change While Staying the Same

2:15 PM–3:45 PM, Auditorium

Teachers prefer predictable familiarity when committing to a field trip. Yet EE organizations strive for relevancy in a rapidly changing demographic, aiming to foster appreciation for nature through more diverse perspectives. Hear examples of how change and predictability are both possible from National Park Service, National Park Foundation, and partners.

Presenter(s): Katherine Chesson, National Park Foundation; Kerry Olson, National Park Service–Santa Monica Mountains NRA; Katie Wright, Conservancy for Cuyahoga Valley National Park; Allyson Gantt, Everglades National Park; Kina Gonzalez, National Park Service

Strand: ●

### Hands-on Presentations

2:15 PM–3:45 PM

#### 4 Dinámicas Educativas para Impulsar la Alfabetización Ambiental

2:15 PM–3:45 PM, Garita

Nuestros retos ambientales actuales necesitan ahora más que nunca de una educación ambiental contundente para nuestros jóvenes. A través de 4 dinámicas cortas y divertidas, mostraremos cómo se puede fomentar los 4 ejes claves de la alfabetización ambiental, así como impartir temas actuales, filosofías educativas modernas, estándares educativos internacionales y liderazgo juvenil.

Presenter(s): Carlos Trejos, Ecology Project International

Strand: ● (S)

### Explorando Modelos Tróficos y Perturbaciones en el Parque Nacional Gorongosa, Mozambique

2:15 PM-3:45 PM, Caribe

Comprender relaciones tróficas es clave para estudiantes y ciudadanos involucrados en conservación. En este taller los participantes explorarán una actividad que utiliza tarjetas para construir modelos tróficos y hacer predicciones acerca de los posibles efectos de perturbaciones, usando el Parque Nacional Gorongosa en Mozambique como caso de estudio.

Presenter(s): Javier Robalino, Howard Hughes Medical Institute; Bridget Conneely, Howard Hughes Medical Institute

Strand: ● (S)

### Get Their Feet Wet: Water Education for Young Learners

2:15 PM-3:45 PM, Magüey

Water education doesn't have to be dry. Learn how you can make a splash teaching water conservation to our early learners. Join the presenter as she shares songs, magic, hands-on activities, and unique learning tools.

Presenter(s): Laurie Loftin, Athens-Clarke County Government

Strand: ●

### Increasing Impact: Linking Research to Practice Through Logic Models

2:15 PM-3:45 PM, Flamboyán

Using research findings to inform practice can be challenging. Developing a logic model can facilitate the incorporation of research into program planning. We will use activities and discussions to introduce logic models, highlight staff capacity building, and share strategies for how to incorporate research findings into program design.

Presenter(s): Renee Elizabeth Birk, John G. Shedd Aquarium; Sue Magdziarz, John G. Shedd Aquarium

Strand: ●

### The Transformative Power of Nature

2:15 PM-3:45 PM, Salon Del Mar AB

Discover how to draw a Mapa de Vida (Map of Life) or to venture into the forest in search of Champion Trees! The natural richness of Puerto Rico offers many opportunities for transformative experiences in nature that both complement the school curriculum and promote protection of our ecosystems. Learn in and for nature!

Presenter(s): Elizabeth Padilla, Para la Naturaleza, Conservation Trust of Puerto Rico

Strand: ● (S)

## Traditional Presentations

2:15 PM-2:55 PM

### Building the Capacity of Urban Educators Through EE Program Partnerships

2:15 PM-2:55 PM, Flamingo A

This presentation will focus on strategies for engaging urban educators in environmental education. This presentation will include a discussion of connecting urban educators with EE topics through Projects WILD, WET, WOW, PLT, Climate Science, Invasive Species, Flying WILD, GLOBE, and National Geographic Field Scope in a week long institute format.

Presenter(s): Juliann Dupuis, Notre Dame of Maryland University; Cindy P. Etgen, Maryland Department of Natural Resources; Sarah Haines, Towson University; Bart Merrick, NOAA

Strand: ●

### Buscando el Sol is a Documentary on ESD in Puerto Rico

2:15 PM-2:55 PM, Conference 2

Buscando el Sol is a documentary on the benefits of implementing ESD in grades K-12 in Puerto Rico. In an age of accountability, children need to learn critical thinking skills in order to understand their reality from their perspective, and from within their own particular families, schools, communities, and environments.

Presenter(s): Elsie Aquino, Buscando el Sol

Strand: ●

### Connecting Environmental Education to Local Government

2:15 PM-2:55 PM, Flamingo B

Integrating environmental education into local government is an important avenue for creating strong and sustainable communities. Learn from a local government administrator how community leaders may incorporate environmental education practices into their programs, or how your education organization may be connected to your own local government to provide valuable EE opportunities.

Presenter(s): Blair Hecker, Franklin County Fiscal Court

Strand: ●



### Connecting Learners to the Largest Outdoor Classroom

2:15 PM-2:55 PM, Conference 3-4-5

During this session participants will learn how schools work with public land agencies and the National Environmental Education Foundation to connect field-based teaching and learning experiences to a diverse audience of youth, educators, and communities.

Presenter(s): TaKeisha Walker, NEEF; Derrick Baldwin, Bureau of Land Management

Strand: ● 

### Green Play to Green Pay: Fostering Careers in Natural Resources

2:15 PM-2:55 PM, Tropical A

How do we build pathways for young adults to pursue environmental and natural resource careers? Join us to explore network models and innovative tools for Affiliates and other organizations. Discuss opportunities to increase your state and regional capacity for career development across environmental education and conservation fields.

Presenter(s): Scott Segerstrom, Colorado Youth Corps Association; Katie M. Navin, Colorado Alliance for Environmental Education

Strand: ● 

**naaee**  
Affiliate

### Improving Your Climate Change Education Programs: What the Research Says

2:15 PM-2:55 PM, Conference 6-7

As part of NAAEE's eeWORKS, we conducted a systematic literature review on climate change education. We will briefly describe common themes and examples of effective climate change education and help you apply these findings to your programs. Come ready to discuss your climate change program ideas!

Presenter(s): Martha C. Monroe, University of Florida

Strand: ●

### Sacred Ground: Spiritual Retreat Centres as Spaces of Environmental Education

2:15 PM-2:55 PM, Conference 10

As we realize our deepening ecological crisis is a spiritual problem requiring a shift in our relationship to the earth, spiritual retreat centers are uniquely positioned to engage in this work. This session profiles how two Canadian retreat centers are engaged in this important work in environmental adult education.

Presenter(s): Janet Groen, University of Calgary

Strand: ●

## Bright Spots

2:15 PM-2:55 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo D

#### Empowering Environmental Education Through a Unique Voluntarism Program

The Inter Metro Environmental Voluntarism Program uses a unique integrated approach to train undergraduate students with basic skills in environmental research, education, and interpretation. The involvement of our volunteers in the nature-based learning and field hands-on activities has allowed them to engage young citizens with natural resources conservation.

Presenter(s): Ernesto Torres, Inter American University of Puerto Rico

Strand: ● 

#### Observatorio de Aves: Un Espacio con Prácticas Educativas Ambientales

El Observatorio de Aves en Chichicastle, Veracruz, México, forma parte del Programa Veracruz Río de Rapaces, trabajamos con niños que viven en el corredor migratorio de aves rapaces más importantes del mundo, para que sean niños sensibles y participen en la conservación de las aves rapaces migratorias y hábitat.

Presenter(s): Yumei Cabrera Carrasco, Pronatura Veracruz A.C.

Strand: ● 

## Thursday 2:30 PM

#### H<sub>2</sub>O Challenge Business Meeting

2:30 PM-4:30 PM, Tropical B

Meeting for H<sub>2</sub>O Challenge teachers

By invitation.

## Thursday 3:05 PM

### Traditional Presentations

3:05 PM–3:45 PM

#### EE Advocate

3:05 PM–3:45 PM, Conference 2

Important advances for environmental education can be achieved through policies at the federal and state levels. NAAEE works with local Affiliates and other partners to monitor opportunities to shape EE policy, develop strategy for advancing key initiatives, and build capacity within the EE community for advocacy. This session will cover advocacy basics and showcase new tools for more effective outreach and organizing.

Presenter(s): Sarah Bodor, NAAEE

Strand: ●

#### EE in the Garden

3:05 PM–3:45 PM, Conference 8-9

Join us to explore the many positive benefits of school gardens and garden-based education for students of all ages through engaging stories, vivid photographs, and interactive discussions, songs, and activities. We will discuss guiding principles, best practices, and the growing body of research in support of garden-based education.

Presenter(s): Nathan Larson, Community GroundWorks

Strand: ●

#### Gateway to Nature LA: Connecting Urban Communities to Public Lands

3:05 PM–3:45 PM, Conference 3-4-5

Imagine a “gateway to nature” in the heart of Los Angeles—the Western National Parks Center is a partnership between the Western National Parks Association, NPS, USFS, California State Parks, and the City of Los Angeles. Come examine the journey and the successes at the end of the trail.

Presenter(s): Pepe Marcos-Iga, Western National Parks Association; Jim Cook, Western National Parks Association


Strand: ●

#### Nurturing Informal Science Educators from Within Your Community

3:05 PM–3:45 PM, Flamingo A

How do we engage urban families in relevant experiences? How can we truly embed museums’ resources into the fabric of a community? The Communities of Learning for Urban Environments and Science project demonstrates a uniquely focused professional development model for training ISE apprentices to teach in their own community venues.

Presenter(s): Angela Wenger, Center for Aquatic Sciences

Strand: ● 

#### Pámpanos Verde Corp. Modelo de Educación Ambiental Auto Gestionada

3:05 PM–3:45 PM, Conference 10

Pámpanos Verde Corp. capacita y desarrolla líderes con conciencia de las Tres R y la conservación ambiental para que sean los portavoces e implementen soluciones para disminuir la producción de basura y promovamos una mejor calidad de vida en nuestra comunidad.

Presenter(s): Maria Alicea, Pampanos Verde Corp


Strand: ●  (S)

#### Urban Advantage: A Community Partnership Model for Lifelong Science Learning

3:05 PM–3:45 PM, Tropical A

In this session, professional development coordinators from Wildlife Conservation Society, Brooklyn Botanic Garden, and New York Botanical Garden, will demonstrate how Urban Advantage, a partnership between the NYC Department of Education and eight science cultural institutions, engages whole school communities in science through access, high-quality professional learning, and implementation support.

Presenter(s): Colleen Owen, Wildlife Conservation Society; Candyce Johnson, Brooklyn Botanic Garden; Judith L. Hutton, The New York Botanical Garden

Strand: ● 

#### Using GIS and Niche to Diversify Statewide Environmental Education Programs

3:05 PM–3:45 PM, Flamingo B

Learn how program data, Geographic Information Systems, and the concept of niche helped the California Naturalist program identify important gaps in coverage and prioritize areas for expansion. The session highlights the reflective action research process used to systematically address participation from underrepresented populations and increase access, inclusion, and equity.

Presenter(s): Gregory Ira, UC California Naturalist Program

Strand: ● 

## Bright Spots

3:05 PM–3:45 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots sessions. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Diving Deeper Into the Power of Reflective Watershed Education

There are various approaches to educating preservice and environmental educators. This session will explore a reflective place-based approach, sharing the methods and results used in an undergraduate watershed education practicum. This framework focuses on embodied leadership, systems thinking, and challenging structures of domination and oppression.

**Presenter(s):** Ashley Eaton, University of Vermont-Lake Champlain Sea Grant

Strand: ●

#### Reflecting on Practice: Fostering a Professional Learning Community

Join us to learn about Reflecting on Practice (RoP). Currently in use in more than 50 institutions across the United States, it combines hands-on learning experiences, shared reflective activities, current research on how people learn, and video observation protocols for exploring participants' teaching practice in action.

**Presenter(s):** Lindsay Thomas, Virginia Aquarium and Marine Science Center

Strand: ●

#### Training Teachers, Mentoring Youth, and Promoting Stewardship Through Community-Based Learning

Learn how preservice students at the University of Oregon work with community partners to implement interdisciplinary, experiential, place-based environmental education. These UO students gain professional training while their students gain knowledge, skills, and inspiration to protect local ecosystems. Lessons learned from over 10 years of implementation will be shared.

**Presenter(s):** Kathryn Lynch, Environmental Leadership Program, University of Oregon

Strand: ●

### GROUP 2, Flamingo D

#### Canopy Connections: Broadening a Sense of Community in Old-Growth Forests

Trees, while critical to our well-being, are often considered scenery. But what happens when you climb a tree? Climb all the way to the top? This presentation highlights experiences from the Canopy Connection's project, a partnership that acquaints middle schoolers to each layer of an old-growth forests, including the canopy!

**Presenter(s):** Ashley Studholme, University of Oregon; Kathryn Lynch, Environmental Leadership Program, University of Oregon

Strand: ●

#### Students Learn the Importance of Tree Biodiversity in Schoolyard Woodlands

In this talk, we describe the success of our School Woodland Ecosystem Study Project (SWESP) in engaging students using inquiry-based lessons focused on local tree biodiversity. This curriculum increases student knowledge of tree diversity specifically, as well as leading students towards understanding the functional importance of biodiversity on broader scales.

**Presenter(s):** Rhea Esposito, Cary Institute of Ecosystem Studies

Strand: ●

#### Tree Trails, A Project Connecting Community, Technology, and Trees

A Tree Trails project celebrates trees for their benefits and values in our community, connecting trees and technology. A mapping application plus school and community guides create real and virtual trails of trees. Create a trail and investigate how to layer it within your programs using a variety of resources.

**Presenter(s):** Leslie Kessner, Texas A&M Forest Service; Cheryl T. Boyette, Boyette Consulting; Cecile Carson, Keep America Beautiful

Strand: ●

## Thursday 4:00 PM

### Meetings

4:00 PM–5:30 PM

#### EPOC Business Meeting

4:00 PM–5:30 PM, Las Olas

The Environmental Professionals of Color (EPOC) business meeting is open to all EPOC members and potential members. We will build community connections, discuss lessons learned, and identify potential priority areas for the next year. EPOC is a program of the Center for Diversity & the Environment.

Coordinator: Queta Gonzalez, Center for Diversity & the Environment

Strand: 

### Symposium

4:00 PM–5:30 PM

#### Envisioning Futures for Environmental and Sustainability Education

4:00 PM–5:30 PM, Guayacán

*Envisioning Futures for Environmental and Sustainability Education* (Wageningen Academic Publishers, 2017) invited educational practitioners and theorists to speculate on—and craft visions for—the future direction of environmental education. Led by the co-editors of the book, this session will focus on how these ideas might be applied by participants.

Presenter(s): Peter Blaze Corcoran, Center for Environmental and Sustainability Education, Florida Gulf Coast University; Arjen Wals, Wageningen University

Strand: ●

#### Interested in Designing a Children's Natural Playscape? A Community's Story

4:00 PM–5:30 PM, Auditorium

Imagine a world where children are actually asked to go play outside. And where they can connect with the environment by discovering the magic and wisdom of nature. This symposium guides participants through the journey of creating a nature playscape, highlighting theoretical considerations, community partnerships in design and implementation, and outcomes.

Presenter(s): Yash Bhagwanji, Florida Atlantic University; Anne Margaret Henderson, Pine Jog Environmental Education Center; Luisa F. Gomez, Florida Atlantic University

Strand: ●

### Hands-on Presentations

4:00 PM–5:30 PM

#### Create Healthier Schools & Communities with PLT GreenSchools Program

4:00 PM–5:30 PM, Caribe

Learn about how students led the way with Project Learning Tree's GreenSchools program, which inspires students to apply their STEM and investigative skills to create greener and healthier schools. Project Learning Tree's (PLT) GreenSchools connects PLT with service learning, professional development, and environmental action.

Presenter(s): James Riley McGirt, Project Learning Tree  
Strand: ●



#### Human Geography, Biodiversity, and Conservation Education: Activities on Population Connections

4:00 PM–5:30 PM, Salon Del Mar AB

Discover inquiry-based bilingual activities to introduce multicultural student groups to issues central to human ecology and geography—population, resource and land use, and community sustainability. These lively role-playing simulations and games will provide interdisciplinary environment-centered content appropriate for the classroom or environmental education center.

Presenter(s): Eliezer Nieves-Rodriguez, University of Puerto Rico

Strand: ● (S)

#### Liberating Diverse Creativities from the Field: Arts-Based Environmental Education Research

4:00 PM–5:30 PM, Flamboyán

This workshop brings liberating creativities to life, introducing EE practitioners and researchers to arts-based educational research and program design. Together we explore justice and empathy, surface and value diversity through multiple ways of knowing, and engage with arts-informed ways of researching. Practice with hands-on, interactive infusions and collaborative inquiry.

Presenter(s): Marna Hauk, Institute for Earth Regenerative Studies & Prescott College; Mandisa Amber Wood, Napa Valley College; Amanda Kippen, City of Watsonville; Amanda Leetch, Prescott College

Strand: ● 

### Teaching Climate Change: Collaborating to Encourage and Enhance Climate Education

4:00 PM-5:30 PM, Garita

A hands-on workshop where participants are teachers! With emphasis on teaching climate literacy principles, educating challenging audiences, and how best to train formal and nonformal educators, there is something in this workshop for everyone.

Presenter(s): Jennifer Lynn Hubbard-Sanchez, Kentucky State University; Fletcher Brown, University of Montana; Adam Ratner, The Marine Mammal Center; Jennifer Alldredge, Alliance to Save Energy Strand: ●

### Woodsy Owl Conservation Corps: Peer-to-Peer Environmental Education to Action

4:00 PM-5:30 PM, Magüey

Woodsy Owl Conservation Corps highlights the intersectionality that has ignited a partnership between the Americas for Conservation + Arts (AFCA) and the US Forest Service, committed to ensuring the next generation of conservation and stewardship in America reflects the faces of our country and its diversity of thoughts, heritage, and cultures.

Presenter(s): Tamberly Conway, USDA Forest Service; Felipe Benitez, Americas for Conservation + Arts Strand: ●

## Traditional Presentations

4:00 PM-4:40 PM

### Assessing the Results for EPA's Environmental Education Grant Program

4:00 PM-4:40 PM, Conference 2

Analyzing the results of the projects funded by the EPA's Environmental Education Grant Program has been a challenge because of the diversity in size, scope, environmental topic, education methodology, and audience make-up of those projects. EPA will share its efforts to address this challenge and how grantees are taking part in this effort.

Presenter(s): Karen Scott, US Environmental Protection Agency; Ginger Potter, US Environmental Protection Agency Strand: ●

### Building Capacity Through Innovation: The Teacher Environmental Literacy Leadership Network

4:00 PM-4:40 PM, Tropical A

Join us to explore an innovative approach to advancing environmental education and stewardship! The Teacher Environmental Literacy Leadership Network engages educators and experts from field-based organizations, formal school systems, and universities across the multi-state Chesapeake Bay Watershed in professional learning and leadership through study, reflection, discussion, curriculum design, and practice.

Presenter(s): Amy E. Green, Chesapeake Bay Foundation Strand: ●

### Creative EE Communication and Media for Today's Young Digital Audience

4:00 PM-4:40 PM, Flamingo B

Discover simple ways to digitally engage young audiences through social media platforms and video storytelling with your smartphone. Danni Washington, host of national TV show *Xploration Nature Knows Best*, will share fun, easy, and engaging techniques. Learn how to craft your own EE story and develop an online brand.

Presenter(s): Danni Washington, Big Blue and You Strand: ●

### Impact of an Environment-Based Education Program on Academic Achievement

4:00 PM-4:40 PM, Conference 3-4-5

Environment-Based Education is a philosophy and practice that utilizes the natural environment as an integrating context to teach academic standards in traditional subject areas. This session will explore the principles and tenets of this approach, while also examining original research that employed an experimental design to measure academic achievement.

Presenter(s): Daniel Bowan, Colorado State University-Pueblo Strand: ●

**NOAA-21st Century Community Learning Center Watershed STEM Education Partnership Grants**  
**4:00 PM-4:40 PM, Conference 6-7**

Environmental education can be a powerful tool for promoting skills and interest in STEM in an after school setting. Examples of successful projects and evaluation results from a pilot grant program will be provided, as well as discussion of how STEM-focused funding sources may be leveraged to support environmental education activities.

**Presenter(s):** Bronwen Rice, NOAA; Natalie Ducharme-Barth, National Marine Sanctuary Foundation; Allison Alexander, National Marine Sanctuary Foundation; Jaime Frungillo, NOAA; Elise Sheffield, Boxerwood Nature Center; Gloria Brown, Maury River Middle School; Heidi Cisneros, Clear Creek Intermediate; Tina Jacovino, Waterbury Public Schools; Abby Peklo, EdAdvance; Amanda Rinehart, Artist Boa  
 Strand: ●

**People's Risk Perception Toward Climate Change and Framing Strategies of Media in Taiwan**

**4:00 PM-4:40 PM, Conference 8-9**


Through this study, people with relatively higher climate literacy, shorter psychological distance, and more environment oriented identity tended to have higher climate risk perception. Significantly different psychological distances corresponding to eight images were also identified. "Smart" framing strategies for climate change communication could then be designed according to these observations.

**Presenter(s):** Shin-Cheng Yeh, Graduate Institute of Environmental Education, National Taiwan Normal University; Hui-Ching Yu, Cheng Shiu University  
 Strand: ●

**Stewardship Education: A Big Task for a Short Program**

**4:00 PM-4:40 PM, Flamingo A**

Environmental Volunteers' Educate 4 Action project is improving stewardship education in our curriculum and incorporating best practices for English language learners. Come learn more about our journey, the evaluation and research that guides us, our results, and how you can do this too.

**Presenter(s):** Brittany Joy Sabol, Environmental Volunteers  
 Strand: ● 

**Wild Pedagogies: Reflections on Writing a Manifesto at/with Sea**

**4:00 PM-4:40 PM, Conference 10**

Wild Pedagogies is a scholastic experiment and alternative to conventional research conferences bringing together scholars to co-create knowledge with/in wild places. This session will discuss theoretical roots and research methodologies, but will focus on key findings of the conference and the process of composing a manifesto collaboratively at/with sea.

**Presenter(s):** Michael Whitefield Sitka-Sage, Simon Fraser University; Bob Jickling, Lakehead University; Nora Timmerman, Northern Arizona University  
 Strand: ●

**Bright Spots**

**4:00 PM-4:40 PM**




Learn about two or three successful and loosely related programs in each 40-minute Bright Spots sessions. Sessions are presented in the order listed.

**GROUP 1, Flamingo C**

**Authentic Experiences—Sustaining Mongolian Herders' Traditional Practices to Conserve Resources**

Learn how the head of a small Mongolian NGO, a Fulbright Specialist, and communities of local herders have collaborated to craft a program that provides supplemental income for the herders, respects the integrity of their environment and traditional lifestyle, plus engages visitors and educates them about culturally rooted practices.

**Presenter(s):** Karen S. Hollweg, Fulbright Specialist  
 Strand: ● 

**Cultural Competence and Community Engagement Through Environmental Education in Haiti**

The need of a mission group for environmental education experience in gardening, farming, and forestry led to a unique partnership between a university and an NGO mission organization working in Haiti. This led to multiple lessons in cultural competency and community engagement for university students.

**Presenter(s):** Shelby Gull Laird, Stephen F. Austin State University  
 Strand: ●

**GROUP 2, Flamingo D****Preparing Science Teachers to Promote Environmental Education: Examining Assessment Outcomes**

In this session, you will learn how two teacher educators utilized creative assessment approaches to teach environmental education. The assessment tasks required their students to utilize resources within their Caribbean context to tackle existing environmental issues. Samples of students' artifacts, perceived benefits, and challenges of this approach will be presented.

**Presenter(s):** Sharon Bramwell-Lalor, *The University of the West Indies*; Miguel Ison, *The University of the West Indies (Mona)*

Strand: ●

**Qualitative Evaluation of Environmental Education Programs Using Student Artwork**

Pre/post student surveys are a tool of the past. They can be stressful for students, and often do not provide useful feedback. As an alternative, we are implementing a qualitative document review of student artwork and thank you letters to measure the success of our programs.

**Presenter(s):** Suzie Fortner, *Friends of the Dunes*

Strand: ●

**Thursday 4:50 PM****Traditional Presentations**

4:50 PM–5:30 PM

**Certification: eeLEARN Modules**

4:50 PM–5:30 PM, **Tropical A**

eeLEARN is NAAEE's series of online learning modules exploring the foundations of environmental education. Two modules are currently available—What is EE? and The History of EE—and a third on research and evaluation is in development. Discover how you might use these modules to advance your own understanding of EE or in your professional development programs.

**Presenter(s):** Judy Braus, *NAAEE*; Bill Finnegan, *Tamarack Media*

Strand: ●

**Creating Meaningful Play: Game Design in Environmental Education**

4:50 PM–5:30 PM, **Conference 8-9**

The Chicago Botanic Garden has enhanced early childhood environmental education programs by embracing unstructured play and nonformal games as pedagogic designs. By reviewing principles of game theory and evaluating play-driven learning conversations, we will share our guidance on designing and executing meaningful games in NGSS-aligned programming.

**Presenter(s):** Drew Wehrle, *Chicago Botanic Garden*

Strand: ●

**Environmental Literacy in the United States**

4:50 PM–5:30 PM, **Conference 3-4-5**

Environmental educators have an unprecedented opportunity to create a more environmentally literate citizenry equipped with the knowledge, skills, and motivation to tackle the environmental, social, and economic challenges of today and into the future. Learn about NEEF's Environmental Literacy Report and find out how you can contribute your own story!

**Presenter(s):** TaKeisha Walker, *National Environmental Education Foundation (NEEF)*

Strand: ●

### Keeping EE Programs Fresh: Aligning with Next Generation Science Standards

4:50 PM-5:30 PM, Conference 6-7

Naturalists' interactions with school groups have a major impact on the next generation. By tweaking programs as school curriculum evolves, naturalists can expand their outreach. Learn about the Next Generation Science Standards and tips for modifying your EE programs.

Presenter(s): Shelly Johnson, Next Step Adventure; Sara Lockie, Next Step Adventure; Martha Tushaus McCormick, Next Step Adventure

Strand: ●

### Olimpiadas del CASA: Puerto Rican Forests for Children With ADHD

4:50 PM-5:30 PM, Conference 10

Olimpiadas del CASA are activities in forests for children with Attention-Deficit and Hyperactivity Disorder (ADHD). "Athletes," often boys, hiked trails, made friends, and explored nature-related hobbies, while parents reported changes in symptoms. Projects like these can increase ADHD toolkits for families, as well as opportunities in forests, for all children.

Presenter(s): Dayamiris Candelario, Centro Ambiental Santa Ana; Yaritza Bobonis, Centro Ambiental Santa Ana; Jacqueline Castaneda, Centro Ambiental Santa Ana

Strand: ● (S)

### Set Yourself Up for Success: Principles of Nonprofit Management for Affiliates

4:50 PM-5:30 PM, Conference 2

Clearly defined roles, responsibilities, and transparent operations will set your nonprofit up with the foundation for success. Build a solid governance structure, proper financial management, strategic partnerships, and an inclusive organizational culture to strengthen your organization and promote your mission.

Presenter(s): Adrian Ayson, Maine EE Association; LoriAnne Barnett, USA National Phenology Network; Thom Benedict, Utah Society for Environmental Education

Strand: ●

**naaee**  
Affiliate

### Superintendents' Environmental Education Collaborative

4:50 PM-5:30 PM, Flamingo B

Do you work with schools or school systems? Join us to discuss partnerships and model programs for EE in formal education. As partners of the Superintendents' Environmental Education Collaborative, we would like to discuss opportunities to advance EE in your community through your local superintendents.

Presenter(s): Don Baugh, Upstream Alliance; Sarah Bodor, NAAEE; Kathy McGlaufflin, Project Learning Tree

Strand: ●

### Youth4Climate for SDG13: Promoting Climate Literacy Through Global Partnerships

4:50 PM-5:30 PM, Flamingo A

The Youth4Climate coalition is leveraging the power of social media and mass public engagement to empower young people around the world to learn about climate change, advocate for climate solutions, and take action to achieve SDG13 in line with Action for Climate Empowerment under the UNFCCC.

Presenter(s): Max Edkins, World Bank Group; Frank Niepold III, NOAA Climate Program Office; Jen Kretser, The Wild Center

Strand: ●

### Bright Spots

4:50 PM-5:30 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Creating Collaborative Culture Around Diversity, Equity, and Inclusion in Environmental Education

Learn best practices in organizational collaboration to build strategies and programs around environmental education. Examine how culture impacts your initiatives and approach to diversity, equity, and inclusion. Learn how Cuyahoga Valley National Park and its nonprofit friends group have increased connection to diverse communities through a unique collaborative culture.

Presenter(s): Jesus Sanchez, Conservancy for Cuyahoga Valley National Park; Katie Wright, Conservancy for Cuyahoga Valley National Park; Emily Heninger, Conservancy for Cuyahoga Valley National Park

Strand: ● (S)



### Environmental Education in Abandoned Lots Near Public Housing in Puerto Rico

Puerta de Tierra, located in the most important tourist islet in the Caribbean, has had a significant increase in abandoned and underused lots. Because of this, Brigada PDT promotes the rehabilitation of abandoned lots through community integration, social justice, and environmental education.

Presenter(s): Carol Ramos, University of Puerto Rico  
Strand: ● (B)

### Partnering to Expand Your Reach

After years of ineffective recruitment of rural Hispanic youth at an ecology summer camp in rural Florida, a partnership with an employer started a customized camp for the children of the employees. Learn the story of why the partnership worked and what we've learned after three summers.

Presenter(s): Dustin Angell, Archbold Biological Station  
Strand: ●

### GROUP 2, Flamingo D

### Inspiring Learning-Diverse Students Through Citizen Science and Community Partnerships

Greenwood School supports students with learning differences through community partnerships and citizen science opportunities. Students who may have struggled in a traditional learning environment find unparalleled success through partnerships and programming cultivated within a framework of true collaboration and mutual benefit. Faculty and partners will share their strategies for success.

Presenter(s): Diane R. Krug, Greenwood School; Andria Kroening, Greenwood School; Christina Dembiec, Jacksonville Zoo and Gardens  
Strand: ●

### Science Strikes Back! Engaging Youth Around Environmental Issues

Science Strikes Back kicked off with a mission to broaden participation in science and in our community. With political discourse more polarizing than ever, and the role of science in decision making under attack, this community-oriented science fair put a youth voice first while upending who it is that does science.

Presenter(s): Robert Justin Hougham, University of Wisconsin Extension; Joey Zocher, Escuela Verde  
Strand: ●

## Thursday 5:30 PM



### HHMI Night at the Movies

5:30 PM-6:45 PM, San Gerónimo Ballroom

Join us for a special movie event! Watch HHMI BioInteractive's newest short film, *How Lizards Find Their Way Home*, featuring the work of Dr. Manual Leal who studies the behavioral ecology of lizards in Puerto Rico. Enjoy light hors d'oeuvres and one free drink, the screening, and a short discussion session with Dr. Leal. Free with advance registration.



## Thursday 7:00 PM

### Informal Gatherings

#### Diversity Dinner

7:00 PM, El Mercado

Join us for this informal dinner gathering for those interested in diversity, equity, and inclusion in EE. Meet at the entrance to the Caribe Hilton for the five-minute walk to El Mercado, an upscale food court with about 15 vendors to choose from. Open to all; no reservations required.

#### Rum Run

7:00 PM-10:30 PM, Offsite—Meet at front entrance

What better way to meet new colleagues than to spend your open evening networking over a few drinks? Join the Rum Run and visit three Old San Juan nightspots, selected for their authentic local flavor. Advance registration is required; this event is sold out.

# Friday

## Early Morning

### Birdwatching

**7:00 AM-8:00 AM, Luis Muñoz Rivera Park**

Join an expert birder from Puerto Rico for a walk through the coastal zone and urban forest of the Luis Muñoz Rivera Park. Meet at the hotel entrance. No transportation is required. Sign up at the Information Station.

## Friday 8:30 AM

### Meeting

**8:30 AM-4:45 PM**

### UL Innovative Education Award Business Meeting

**8:30 AM-4:45 PM, Tropical B**

Meeting for UL Award Winners  
By invitation.

## Special Sessions

**8:30 AM-10:00 AM**

### Certification Clinic: Developing State EE Certification Programs

**8:30 AM-10:00 AM, Conference 3-4-5**

Whether you're thinking about developing a Certification program, piloting one, or facing challenges in your program, this interactive clinic will help you explore and address your questions. Join us for a brief overview of existing programs, followed by breakout sessions where you can discuss your questions and work through specific challenges with colleagues from other states.

Presenter(s): Thomas J. Marcinkowski, Florida Institute of Technology; Billy Bennett, Kentucky Environmental Education Council; Wesley Bullock, Kentucky Environmental Education Council; Sarah Haines, Towson University; Elena Takaki, Association of Fish & Wildlife Agencies

Strand: ●



## Strands

- Applying Research to Increase Our Impact
- Building Leadership for Environmental Literacy
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools
- Inspiring Connections to the Outdoors
- Addresses Diversity, Equity, and Inclusion
- Ⓢ Spanish    ⓑ Bilingual

### NAAEE Evaluation Clinic

**8:30 AM-10:00 AM, Las Olas**

Do you have questions about evaluation or assessment? Bring them to NAAEE's fourth annual Evaluation Clinic, where you can ask questions of experts and contribute your own relevant experience. Learn from evaluation experts as well as peers through informal, roundtable conversations.

Presenter(s): Joe E. Heimlich, Institute for Learning Innovation; Nicole Ardoin, Stanford University; Dave Chase, Antioch University New England; Elizabeth (Libby) McCann, Antioch University New England; Kathayoon Khalil, Seattle Aquarium

Strand: ●

## Symposia

8:30 AM-10:00 AM

### Twenty-Three Watershed Education Allies Collaborate Through Shared Trails and Waterways

8:30 AM-10:00 AM, Auditorium

Once so polluted they caught fire, Delaware River waterways rebounded after the Clean Water Act. Today, how do we reconnect our communities with this stigmatized river? An aquarium, urban wildlife refuge, Citgo fuel-storage island, and 20 other education centers ally to engage watershed constituents by leveraging trails and waterways.

Presenter(s): Amy Weidensaul, Audubon Pennsylvania; Robin Irizarry, Tookany/Tacony-Frankford Watershed Partnership; Michele Perch, William Penn Foundation; Maggie McCann Johns, Camden County Parks  
Moderators: Don Baugh, Upstream Alliance; Genevieve Leet, Environmental Leadership Strategies  
Strand: ●

### What We Are Learning: NAAEE's Environmental Issues Forums

8:30 AM-10:00 AM, Guayacán

What do community members gain from participating in deliberative forums? As part of NAAEE's partnership with the Kettering Foundation, we've been holding deliberative forums, focusing on climate change and local water issues, across the country. Come hear what we've been learning about forum participants' motivations, expectations, and sense of efficacy.

Presenter(s): Christine Jie Li, University of Missouri; Amy Lee, Kettering Foundation; Melinda Wilder, Eastern Kentucky University; Lara Milligan, UF/IFAS Extension Pinellas County; Jennison Kipp Searcy, University of Florida; Ramona Madhosingh-Hector, University of Florida/IFAS Extension; Rebecca L. Franzen, University of Wisconsin-Stevens Point, Wisconsin Center for Environmental Education  
Moderator: Bora Simmons, National Project for Excellence in Environmental Education

## Hands-on Presentations

8:30 AM-10:00 AM

### Birds in my Neighborhood®: Engaging With Nature Close to Home

8:30 AM-10:00 AM, Salon Del Mar AB

Think you need to be an expert to lead a birding adventure? Join staff from Openlands to learn how Birds in my Neighborhood connects Chicago Public Schools students and their families to birds, thereby sparking interest in nearby nature. We will go outdoors, so dress appropriately and wear comfortable shoes!

Presenter(s): John Cawood, Openlands; Elvia Rodriguez Ochoa, Openlands  
Strand: ● (S)

### Building the STEM Pipeline: Hands-on Activities and Best Practices for Partnerships

8:30 AM-10:00 AM, Caribe

Partnerships are a powerful tool to promote increased diversity in STEM and environmental fields. Join this session to explore the collaborative youth programs run by the Northeastern University Marine Science Center, and to discuss partnership best practices, and try activities that engage youth in meaningful STEM and environmental education experiences.

Presenter(s): Valerie Perini, Northeastern University Marine Science Center  
Strand: ● (S)

### Inspired Ideas to Galvanized Action: Outdoor School for All

8:30 AM-10:00 AM, Garita

In 2014 a group tasked with fundraising for a one-week outdoor school in Portland, Oregon asked, "Why just here? Why not all Oregon 6th graders?" Join us as we share how an inspired idea galvanized Oregonians into Action, and participate in charting your own inspired idea to action.

Presenter(s): Susan Sahnaw, Oregon Natural Resources Education Program; Nancy E. Bales, Gray Family Foundation  
Strand: ●

### Next Generation Science Standards Meet Climate Change: Transdisciplinary Learning Strategies

8:30 AM-10:00 AM, Flamboyán

Next Generation Science Standards (NGSS) promotes all standards for all students. This presentation will review NGSS, climate change data, and climate literacy resources. The audience will practice an NGSS teaching strategy connecting climate change information to learning. This strategy may be used in K-12, preservice, and informal education settings.

Presenter(s): Regina Brinker, Livermore Valley Joint Unified School District; Jane Ann Heinze-Fry, Museum Institute for Teaching Science; Frank Niepold III, NOAA Climate Program Office; Karen S. Hollweg, Fulbright Specialist

Strand: ●

### Opening the World Through Nature Journaling: Art, Science, and Meaning Making

8:30 AM-10:00 AM, Magüey

Learn how to use nature journaling to increase memory, observation, and thinking. Participate in exemplary activities that support NGSS and Common Core at all grade levels while deepening sense of place. We'll discuss best practices strategies for integrating journaling to support learning goals in Green Schools or any EE context.

Presenter(s): Emilie Lygren, Opening the World Through Nature Journaling

Strand: ●

## Traditional Presentations

8:30 AM-9:10 AM

### At-Risk Youth and EE: Sharing 40 Years of Success

8:30 AM-9:10 AM, Flamingo B

Today, young people are disconnected from nature while connected to a device. For 40 years, an EE Center in New Jersey worked to serve the underserved, and connect the disconnected with inspired and innovative programs. We share guiding principles and fool-proof activities that help bring back fun and freedom into learning.

Presenter(s): Pat Heaney, Woods and Wayside International; Patricia Shanley, Woods & Wayside International

Strand: ● 

### Juntos Podemos: A Process for Co-Creation With Community Partners and Residents

8:30 AM-9:10 AM, Flamingo A

Too often, community engagement paints community organizations and residents as consumers rather than collaborators. Lincoln Park Zoo is utilizing a co-creation process that results in programs being equally owned and sustained by the zoo and our partners. What is this process and can we share it? Absolutely, and we believe anyone can use it!

Presenter(s): Lisa Hyatt, Lincoln Park Zoo

Strand: ● 

### Latino Earth Partnership: Ecological Restoration Through Community Connections and Education

8:30 AM-9:10 AM, Conference 10

Latino Earth Partnership in Puerto Rico creates collaborations between schools and communities improving ecological literacy and ecosystem health. It connects perspectives and experiences of the Latino culture with stewardship and ecological restoration. Learn how these collaborations to restore dunes, forests, and sea turtle nesting sites are connecting meaningful experiences with classroom learning.

Presenter(s): Robert Mayer, University of Puerto Rico at Aguadilla

Strand: ● 

### Two Years Later: IslandWood's Journey Towards Equity

8:30 AM-9:10 AM, Conference 6-7

Through this transparent presentation, learn more about the challenges and successes of undoing implicit bias within a historically white-led environmental education organization. Topics: community engagement, marketing, and clarity in narrative.

Presenter(s): Sapna Sopori, Islandwood

Strand: ● 

### Urban Environmental Education Review Book: Place, Participation, Partnerships

8:30 AM-9:10 AM, Flamingo D

This presentation will launch the new 30-chapter edited book *Urban Environmental Education Review*, published by Cornell University Press in 2017 (editors: Alex Russ and Marianne Krasny).

Presenter(s): Alex Kudryavtsev, Consultant

Strand: ●



## GOOD TO KNOW

### Arecibo Radio Telescope

Puerto Rico has the largest telescope in the world, the Arecibo Radio Telescope at the Arecibo Observatory. It was built in the early 1960s, and has been responsible for some major astronomical finds as well as starred in several Hollywood films. The main dish of the Arecibo Observatory is 1,000 meters in diameter.

The observatory was used as a filming location in the climax of the James Bond movie *GoldenEye* (1995) and as a level in the accompanying Nintendo 64 video game *GoldenEye 007*.

Fox Mulder went to the observatory in *The X-Files* episode, "Little Green Men."

The film *Contact* (1997), based on the Carl Sagan 1985 novel of the same name, features the main character using the observatory as part of a SETI project.

The observatory is featured in the film *Species* (1995), the James Gunn novel *The Listeners* (1972), the Robert J. Sawyer novel *Rollback*, the Mary Doria Russell novel *The Sparrow* (1996) and the film *The Losers* (2010).

## Friday 9:20 AM

### Traditional Presentations

9:20 AM-10:00 AM

#### Building a Sustainable Urban Environmental Education Collaborative for K-8 Learners

9:20 AM-10:00 AM, Conference 8-9

Student-led projects from the first year of an EPA-funded grant focused on creating a sustainable urban environmental education collaborative in Indianapolis will be shared. Learn how K-8 students succeeded in blending environmental literacy and civic engagement with support from museums, nonprofits, community leaders, city officials, and their schools' staff.

Presenter(s): Brian Plankis, The Children's Museum of Indianapolis

Strand: ●

#### Discover the Past: Archaeology and Paleontology Education's Role in Conservation

9:20 AM-10:00 AM, Conference 10

Discovering, studying, and understanding evidence of the past provides us with important lessons about how we should be using our public lands today. The Bureau of Land Management uses archaeology and paleontology education to achieve our multiple-use and conservation goals and protect the past for the future.

Presenter(s): Derrick Baldwin, Bureau of Land Management; Jeanne Moe, Bureau of Land Management

Strand: ●

#### Fundraising for Success—Tips and Tricks for Diversifying Affiliate Revenue

9:20 AM-10:00 AM, Conference 2

Join us for a collaborative discussion tailored to the specific needs of Affiliate leaders. Receive an introduction to fundraising and share success stories. Potential topics include donor cultivation, crowd funding, grant writing, conferences and other special events, and exploring joint funding opportunities between Affiliates.

Presenter(s): Katie M. Navin, Colorado Alliance for Environmental Education; Laura Downey, Kansas Association for Conservation and Environmental Education

Strand: ●

**naaee**  
Affiliate

**Healthy Outdoor Play and Early Childhood Education**  
**9:20 AM-10:00 AM, Flamingo B**

The National Wildlife Federation and partners are developing policy strategies that support the healthy growth and development of young children by creating outdoor learning environments. Participants will learn about research that created this strategy, as well as some simple design steps that they can take to improve outdoor play options.

Presenter(s): Josh Falk, National Wildlife Federation; Emilian Geczi, NAAEE; Jennifer Hammonds, National Wildlife Federation

Strand: ●

**Impact on Latino Young Children’s Decisions About Environmental Education**

**9:20 AM-10:00 AM, Conference 6-7**

This study addresses the intervention of providing preservice teachers with explicit training using an education environmental curriculum, with the goal of having them teach it when they become educators. Training at this level can make an impact on young Latino children’s environmental habits, when not modeled at home.

Presenter(s): Patsy Robles-Goodwin, Texas Wesleyan University; Cecile Carson, Keep America Beautiful

Strand: ● 

**NAAEE’s Newest Collaboration with US EPA**

**9:20 AM-10:00 AM, Tropical C**

ee360 is supporting innovative environmental education across the country. NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading an ambitious initiative to support a diverse cadre of environmental education leaders who are building a stronger, more inclusive field. Hear about our accomplishments so far this first year, and learn how you can be involved!

Presenter(s): Judy Braus, NAAEE; Anne Umali, NAAEE; Drew Price, NAAEE

Strand: ●



**Sustainability in Prisons Project: Environmental Education From the Inside Out**

**9:20 AM-10:00 AM, Flamingo A**

The Sustainability in Prisons Project, a unique partnership between the Washington State Department of Corrections and The Evergreen State College, offers environmental education programs to incarcerated people in Washington State and serves as an international model for program development. Join us on a tour of our ventures to learn more!

Presenter(s): Sadie Gilliom, Sustainability in Prisons Project; Amanda Mintz, The Evergreen State College; Jeanne Dodds, The Evergreen State College

Strand: ● 

**The Role of Social and Emotional Learning in Environmental Education**

**9:20 AM-10:00 AM, Tropical A**

NatureBridge is studying the role of Social and Emotional Learning (SEL) in residential environmental education settings. Join us as we present current research on SEL and discuss instructional best practices.

Presenter(s): Kathleen M O’Connor, NatureBridge; Lauryn Smith Demyanovich, NatureBridge

Strand: ●

**Bright Spots**

**9:20 AM-10:00 AM**



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

**GROUP 1, Flamingo C**

**Greening Your District Through Cross-Sector Partnerships**

Learn how to leverage cross-sector partnerships to accelerate sustainability! Austin Independent School District and EcoRise will share best practices and engage in candid conversation about how a collaboration based on strategic planning and authentic STEM education has placed AISD at the forefront of innovative education and sustainable practices.

Presenter(s): Abby Randall, EcoRise; Darien Clary, Austin Independent School District

Strand: ●

### Is Environmental Education Sustainable? A Story of Endurance

In Greece, a network of small, locally adaptable Environmental Education Centers survived the economic crisis and has been commended for innovative practices (CEDEFOP, 2012). This presentation discusses the institutional, structural, and pedagogical characteristics that contributed to this result.

Presenter(s): Constantinos Yanniris, McGill University  
Strand: ●

### School Energy Efficiency Funding

Earth Day Network has worked to establish a funding mechanism that makes green building renovation possible for low-income schools, and the pieces are now in place to run a pilot project at three low-income schools in Newark, California.

Presenter(s): Susan Bass, Earth Day Network  
Strand: ●

### GROUP 2, Flamingo D

#### Getting Ready for the Outdoors With Online Learning Technology

In environmental education programs, sometimes we need to deliver large amounts of content to educators and students and we find ourselves with less time to spend outdoors or doing hands-on activities. We will present our experience of advancing content through online learning platforms that promote engaging learning in a fun way.

Presenter(s): Carlos Trejos, Ecology Project International  
Strand: ● (S)

#### Guías Curriculares Sobre Los Ecosistemas Marinos de Puerto Rico

Las guías curriculares sobre el manglar, las hierbas marinas, y los arrecifes de coral les proveen a los docentes las herramientas necesarias para integrar estos temas en el salón de clases de una forma sencilla, clara, y activa, creando conciencia de la importancia de estos ecosistemas y promoviendo su conservación.

Presenter(s): Delmis del C. Alicea-Segarra, Programa Sea Grant de la Universidad de Puerto Rico  
Strand: ● (B)

#### Voluntariado Ambiental a Favor del Hospital Psiquiátrico Infantil: Beneficios Mutuos

La interacción con la naturaleza es una eficiente terapia para los pacientes de un hospital psiquiátrico infantil. Al sumar el esfuerzo de grupos voluntarios para mejorar este espacio, tanto ellos como los pacientes encuentran oportunidades de mejorar su día a día en la naturaleza.

Presenter(s): Ileana Alcocer, CICEANA AC  
Strand: ● (S)

## Friday 10:00 AM

### Coffee Break

10:00 AM-10:30 AM, San Cristóbal Ballroom

## Friday 10:30 AM

### Traditional Presentations

10:30 AM-11:10 AM

#### A Future of Diversity and Inclusion Through Internships and Partnerships

10:30 AM-11:10 AM, Flamingo A

Building new partnerships? Reinvigorating old ones? Striving to engage marginalized communities and millennials? Modeling the Academic Internship Program, learn how to re-think your relationships; create win-win solutions; and develop relevant programming that engages students of color in nature, builds career pathways, diversifies your workforce, and creates lifelong environmental stewards.

Presenter(s): Elizabeth Lindner, Golden Gate National Parks Conservancy

Strand: ● (B)

#### eeWORKS: Demonstrating the Power of Environmental Education from Anecdotes to Evidence

10:30 AM-11:10 AM, Conference 6-7

What is the capacity for environmental education to contribute to a more sustainable world? How do we demonstrate the evidence-based outcomes of EE in engaging and exciting ways? The eeWORKS initiative seeks to answer these critical questions.

Presenter(s): Judy Braus, NAAEE; Nicole Ardoin, Stanford University; Kristen Kunkle, NAAEE

Strand: ●

#### Grassroots Green Schools: A Model Program for Increased Local Participation

10:30 AM-11:10 AM, Flamingo B

The international Green Schools movement continues to grow, but it takes root locally, one school at a time. Learn how one established county-level program increased local Green School participation by over 20% in one year with the help of an innovative ambassador program to mentor new schools.

Presenter(s): Lauren Butcher, Florida Atlantic University Pine Jog Environmental Education Center; Molly Thistle, Florida Atlantic University Pine Jog Environmental Education Center

Strand: ●

### ICT's Innovative Performance in Environmental Education of Small Islands

10:30 AM-11:10 AM, Tropical A

This study is researching the innovative performance of ICT's applications in the field of environmental education, particularly in fragile and sensitive environments of small islands, aiming for transition of small islands to smart islands aspiring to create sustainable, inclusive, and thriving island societies.

Presenter(s): Christos Andriopoulos, University of the Aegean

Strand: ●

### Modeling Trophic Cascades and Keystone Species in Diverse Ecosystems

10:30 AM-11:10 AM, Conference 3-4-5

The loss of keystone species can have devastating effects on an ecosystem, including triggering a trophic cascade. Using HHMI BioInteractive's free resources on keystone species and trophic cascades in the Pacific Coast, participants will model trophic cascades and learn techniques for applying models to their systems.

Presenter(s): Bridget Conneely, Howard Hughes Medical Institute

Strand: ●

### Mundo Curioso: Explorando y Descubriendo a Través de los Libros.

10:30 AM-11:10 AM, Conference 10

Explore el uso de libros de ficción e informativos en programas de educación temprana para promover en los niños la curiosidad y el amor por el mundo. Empoderando así a las futuras generaciones a ser líderes y gestores de cambio en sus comunidades.

Presenter(s): Tania Hinojosa, Make Way for Books

Strand: ● (S)

### NAAEE's 2017 EE Federal Policy Agenda

10:30 AM-11:10 AM, Conference 8-9

Environmental education advocates have been essential to protecting a variety of federal programs and policies that support the field. This session provides an annual update to the range of federal regulatory and legislative issues of highest priority to EE. Come learn about the biggest needs for advocacy in 2017 and how you can get involved.

Presenter(s): Sarah Bodor, NAAEE

Strand: ●

### Personalizing the Community Engagement Guidelines (Real Talk)

10:30 AM-11:10 AM, Conference 2

Come learn about the Community Engagement Guidelines (CEGs) and their training uses at your organization! We will discuss a workshop conducted to demonstrate how the CEGs can guide cultural competency training and challenge each other to identify ways in which the CEGs can guide training at our home organizations.

Presenter(s): Anna Mooney, YMCA Camp Thunderbird

Strand: ● 

ee360

### Take Learning Outside: Overcoming Barriers to Connecting Students and Nature

10:30 AM-11:10 AM, Salon Del Mar AB

Teachers cite a number of barriers to teaching students outdoors, which can be mitigated through effective professional development in place-based environmental education. Gain insights into one successful program in which teachers integrate watershed-focused outdoor experiences into their curriculum, fostering opportunities to connect children with nature while meeting learning objectives.

Presenter(s): Sarah Yelton, University of North Carolina Institute for the Environment; Kathleen Gray, University of North Carolina Institute for the Environment

Strand: ●

### Bright Spots

10:30 AM-11:10 AM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Environmental Education for Preservice and Informal Educators

How do we create future environmental educators? The Arizona State University Environmental Education Program of Distinction Certificate is addressing this question through engaging formal and nonformal educators in hands-on, field, and content-rich coursework. The Certificate program is preparing the future generation of environmental education literate advocates.

Presenter(s): Molina Walters, Arizona State University

Strand: ●



### **Growing Green Teachers: Progress in TCNJ's Environmental Sustainability Education Initiative**

The College of New Jersey developed a comprehensive program in Environmental Sustainability Education. Our work started with courses for preservice teachers and expanded to include educational and content-area research, empowerment and advocacy work, relationship-building with community partners, and education for practicing teachers. We will present our progress and future plans.

**Presenter(s):** Lauren Madden, The College of New Jersey; Marissa Bellino, The College of New Jersey; Greer Burroughs, The College of New Jersey  
**Strand:** ●

### **Integrating EE in Preservice Teacher Education and Inservice Teacher PD: Examples Across Grade Levels**

Integrating EE into teacher preparation programs is important. We can't expect teachers to effectively implement EE into their classroom teaching if they are not properly trained. Come learn about how one university is successfully integrating EE into its K-12 education programs, from early childhood coursework through inservice teacher professional development programs.

**Presenter(s):** Sarah Haines, Towson University  
**Strand:** ●

## **GROUP 2, Flamingo D**

### **Authentically Connecting Under-Represented Communities to Nature**

NGOs were advised on how to engage under-represented communities with a simple phrase, "Meet people where they are." But how do you know where they are? That question was rarely answered. Families in Nature will demonstrate how they include underrepresented families in all programming in an authentic and inclusive manner.

**Presenter(s):** Heather Kuhlken, Families in Nature  
**Strand:** ● 


### **Improving and Connecting Communities to Nature Through Local Parks**

Low income, communities of color are often disproportionately affected by environmental hazards and often lack safe green space for children to play and connect with nature. Learn how local park improvement projects—when done right—can both address environmental challenges and create an engaged community of environmental advocates.

**Presenter(s):** Serda Ozbenian, National Recreation and Park Association  
**Strand:** ●

### **PBS KIDS' Resources to Inspire Urban Families to Go Outdoors**

WGBH's PLUM LANDING, an NSF-funded PBS KIDS research-design project, has investigated barriers urban low-income families face in getting outdoors and connecting with their local environment. Hear about how WGBH, in partnership with outdoor prescription programs, developed new resources to create innovative opportunities inspiring urban families to explore "nature in the city."

**Presenter(s):** Brianne Keith, WGBH  
**Strand:** ● 

## **Roundtable Discussions**

**10:30 AM-11:10 AM, Las Olas**

### **Eating Place(s): A Bioregional Bridge Toward Community**

#### **Table 1**

The thought of snapping turtle soup, garlic mustard pesto, and road-killed deer stew might not make you salivate, but these dishes can be full of meaning when shared as a way to bridge political, economic, and cultural divides. Join this spirited conversation about community building for sustainability in rural places!

**Presenter(s):** Joel Pontius, Merry Lea Environmental Learning Center of Goshen College  
**Strand:** ●

### **EE Certification: The Benefits of Being a Certified Environmental Educator**

#### **Table 2**

Whether you are new to the field or have years of experience, EE certification programs can help you grow as an environmental educator and develop your professional credentials. Find out more about certification, discuss your needs, and explore opportunities available across the country.

**Presenter(s):** Katie M. Navin, Colorado Alliance for Environmental Education; Billy Bennett, Kentucky Environmental Education Council; Eileen Everett, Environmental Education Association of New Mexico; Elena Takaki, Association of Fish & Wildlife Agencies  
**Strand:** ●



## The E Guidelines: Creating Environmental Literacy Scaffolding Countywide

### Table 3

How do you create systemic environmental literacy and locally implement Environmental Literacy Plans across grade levels? Join us to explore a tool which can be used by a teacher, school, school district, or region to implement a continuum of environmental education experiences.

Presenter(s): Katie Navin, Colorado Alliance for Environmental Education; Angela Myers, Thorne Nature Experience; Erin Saunders, Thorne Nature Experience

Strand: ●



## The Global Environmental Education Partnership's Call for Action: Discussion and Feedback

### Table 4

As we commemorate the 40th anniversary of the Tbilisi declaration, this roundtable aims to seek feedback on a draft Call for Action for the field of environmental education. This discussion will be led by presenters from the Global Environmental Education Partnership (GEEP), a collaboration between the US EPA, EPA Taiwan, and NAAEE.

Presenter(s): Ginger Potter, US EPA; Alan Reid, Monash University; Melissa Hopkins Taggart, NAAEE; Amanda Luh, NAAEE

Strand: ●

## Role of Formal Assessments in Environmental Science Education

### Table 5

Measuring student progress and student proficiency is an essential component of education in any field of study. This roundtable discussion will focus on the role of assessment(s) in environmental science classrooms and the use of the assessment data for making informed decisions regarding teaching and educational policy.

Presenter(s): Christopher Gentile, Educational Testing Service

Moderator: Stephanie Lanzel, Educational Testing Service

Strand: ●

## Friday 11:30 AM



### PLENARY SESSION

11:30 AM-12:30 PM, San Gerónimo Ballroom

### Climate Change, Education, and Hope

Jennifer Hubbard-Sánchez, William Spitzer  
Vernard Williams, Moderated by Vicki Arroyo

Join us for an inspiring panel of experts in education, policy, and conservation working from a variety of angles to mobilize effective responses to climate change.

See page 31 for more information.

## Friday 12:30 PM

### Lunch-On Your Own

12:30 PM-2:00 PM

## Friday 12:45 PM

### Community Service Project

12:45 PM-2:15 PM, Offsite, Meet at the front entrance

Volunteer for NAAEE's annual community service project helping our conference partner, Para la Naturaleza, replant native trees to begin to restore San Juan's urban forest in the aftermath of Maria and Irma. Sign up at the Information Station. Transportation and box lunch provided. See page 25 for more information.

## Friday 1:00 PM

### eePRO Groups Brown Bag Lunch Meetings

1:00 PM-2:00 PM

Whether you're a current member or want to develop new networking opportunities, bring your lunch and join one of NAAEE's eePRO Group meetings. See page 19 for more information.

Advocacy, Salon Del Mar AB

Climate Change Education, Caribe

Diversity, Equity, and Inclusion, Garita

Early Childhood Education, Flamboyán

Global Environmental Education, Las Olas, Table 1

Green Schools, Magüey

Guidelines for Excellence, Executive Boardroom

Higher Education, Las Olas, Table 2

Research and Evaluation, Las Olas, Table 4

Technology and EE, Las Olas, Table 5



# Friday 2:15 PM

## Symposium

2:15 PM-3:45 PM

### Developing Effective Collaborations with State-Level Agencies

2:15 PM-3:45 PM, Guayacán

This session will explore how to develop effective collaborative relationships between state agencies and Affiliates to deliver EE statewide. Representatives from both types of organizations will share best practices and answer questions afterwards.

Presenter(s): Billy Bennett, Kentucky Environmental Education Council; Laura Downey, Kansas Association for Conservation and Environmental Education; Grace Manubay, DC Office of the State Superintendent of Education; Brenda Metcalf, Environmental Education Council of Ohio; Laura Johnson Collard, Maryland Association for Environmental and Outdoor Education; Michelle Pearce, Environmental Educators of North Carolina

Strand: ●



### Hands-on Presentations

2:15 PM-3:45 PM

#### Bark Beetles, Science Practices, and Climate Change

2:15 PM-3:45 PM, Garita

Bark beetles galleries are fascinating to investigate! We'll model a student activity using NGSS science practices and cross-cutting concepts to figure out what causes bark beetle features they observe. We'll engage in scientific argumentation about impacts of bark beetles, solutions, and learn about their connection to climate change.

Presenter(s): Kevin Beals, Lawrence Hall of Science, BEETLES (Better Environmental Education, Teaching, Learning, & Expertise Sharing)

Strand: ●



#### Effective Student Environmental Leadership Training–Sc3 Secrets for Success

2:15 PM-3:45 PM, Caribe

Experience a sampling of the environmental leadership training offered by the Student Conservation Corps & Congress (Sc3) in which students gain the skills and knowledge to enact meaningful and lasting change in their schools and communities. Through group activities, participants will identify and practice essential elements of effective youth environmental leadership.

Presenter(s): Katy Perry, Green Schools Alliance; Tara Perry, Green Schools Alliance

Strand: ●

#### Identify and Practice Interrupting Micro/Macro Aggressions

2:15 PM-3:45 PM, Flamboyán

Interrupting racist, sexist, homophobic, classist, ableist, etc. comments in an immediate manner helps create an environment that respects all people at all times and works towards dismantling complex systems of oppression. This session will be packed with practice in stepping up and into a safer and more inclusive space.

Presenter(s): Queta Gonzalez, Center for Diversity & the Environment

Strand: ●



#### Integrating Engineering Into Environmental Education: Future City Competition's Innovative Model

2:15 PM-3:45 PM, Magüey

Discover how to incorporate engineering concepts into your classroom curriculum or after-school organization using a program model that challenges middle school participants (and session attendees!) to imagine, design, and create cities of the future as they learn about engineering, citizenship, and the environment; develop 21st century skills; and have FUN!

Presenter(s): Maggie Dressel, DiscoverE

Strand: ●

#### Integrating Environmental Literacy: Interdisciplinary!

2:15 PM-3:45 PM, Salon Del Mar AB

Come explore how environmental literacy is part of the school curricula for Anne Arundel County Public Schools. Integrated as interdisciplinary units, students are engaging in hands-on learning through inquiry and issue investigation. Explore as the students would in a participatory outline of units and learn about curriculum development.

Presenter(s): Melanie Parker, Anne Arundel County Public Schools/Arlington Echo Outdoor Education Center

Strand: ●



## Traditional Presentations

2:15 PM-2:55 PM

### Engaging People in Civic Deliberations: NAAEE's Environmental Issues Forums

2:15 PM-2:55 PM, Tropical A

Learn how you can be involved in an exciting partnership between NAAEE and the Kettering Foundation. The Environmental Issues Forums discussion guides, training, and research efforts promote public and classroom deliberation on important issues such as climate change, energy, and water.

Presenter(s): Melissa A. Arthur, Kansas Association for Conservation and Environmental Education (KACEE); Sarah R. Johnson, Wild Rose Education; Jeremy Solin, ThinkWater, University of Wisconsin Extension

Strand: ●

### Connecting People to Rivers Through Snorkeling

2:15 PM-2:55 PM, Conference 10

The underwater world of our rivers and streams is unexpected, and the life in Puerto Rican rivers is mind blowing! Getting people to experience this incredible world establishes powerful connections to rivers. This presentation will share the underwater world of Puerto Rican rivers and will review a river snorkeling curriculum.

Presenter(s): Keith Williams, NorthBay Education Foundation; Jeremy Monroe, Freshwaters Illustrated

Strand: ●

### From Outdoors to Online: Unanticipated Directions for Utah Master Naturalist Courses

2:15 PM-2:55 PM, Conference 6-7

Delivery of Utah Master Naturalist courses is shifting from entirely outdoors to partially online to reach a broader audience and increase program impacts. Rural audiences, in particular, are underserved by traditional Utah Master Naturalist field courses, and stand to benefit the most from engaging online learning opportunities.

Presenter(s): Mark Larese-Casanova, Utah State University

Strand: ●

### Global EE Partnership: Building Capacity and a Network for EE

2:15 PM-2:55 PM, Flamingo A

The Global Environmental Education Partnership (GEEP) is entering its third year, and we are focused on building this vibrant learning network. Two new initiatives are developing a pilot grants program and developing an EE strategy for SE Asia. This is your opportunity to learn how the program has grown and matured.

Presenter(s): Ginger Potter, US Environmental Protection Agency; Justin Joseph Harris, US Environmental Protection Agency; Judy Braus, NAAEE

Strand: ● 

### Place-Based Multi-Session Programming Connects Families to Local Natural Areas

2:15 PM-2:55 PM, Conference 8-9

"4-H Junior Master Naturalists" offers family-friendly natural science education to underserved communities. Returning to the same local natural areas for field trips creates connections to the local landscape. Partner with your state's Extension Service to capitalize on local expertise, networks, and infrastructure to take environmental education to the next level!

Presenter(s): Emily Anderson, Oregon State University Extension

Strand: ● 

### Program Evaluation Partnerships: Findings from NCSU and Muddy Sneakers

2:15 PM-2:55 PM, Flamingo B

Researchers at NC State partnered with Muddy Sneakers to evaluate their EE program for elementary students. Come learn about the program, the partnership, the research results, and their implications. Particular emphasis will be placed on program effects in regard to traditionally low-achieving students (e.g., minorities, females, students with learning disabilities).

Presenter(s): Rachel Szczytko, North Carolina State University

Strand: ●

**State Policies That Advance Environmental Literacy**  
**2:15 PM-2:55 PM, Conference 3-4-5**

Political tensions and competing priorities sometimes cast doubt on near-term increases in federal policy to support EE. But exciting things are happening at the state level! Across the country, many states are adopting innovative policies to increase access to environmental and outdoor education. Come learn about successful state advocacy efforts, model policies, and the partnerships that support them.

**Presenter(s):** Sarah Bodor, NAAEE  
 Strand: ●

**Unlocking E-Units: PLT’s New Online Curriculum**  
**2:15 PM-2:55 PM, Conference 2**

The Next Generation of PLT is here! Get a personal introduction to PLT’s new, online, and standards-aligned curriculum. We will introduce three unique E-Units, spanning grades K-8. Learn how these resources differ from existing PLT materials, test the navigation, and review training opportunities for future implementation.

**Presenter(s):** Jaclyn Stallard, Project Learning Tree  
 Strand: ●



**Bright Spots**

**2:15 PM-2:55 PM**



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

**GROUP 1, Flamingo C**

**Anyone Can Cut Down Trees: Making Ecological Stewardship Accessible**

How young is too young to hold a saw? Learn how to implement ecological stewardship in programs for students as young as eight years old. Learn best practices on how to reduce risk making stewardship more inclusive for students with a wide range of ages and abilities.

**Presenter(s):** Ian Viteri, The Field Museum  
 Strand: ● (B)

**Leveraging Student Engagement to Advance Green STEAM Projects**

Check out how PreK-12 students are leading green STEAM projects in and out of the classroom using the Green Schools Alliance student engagement platform. Discover how the platform supports your classroom goals, directly links green projects to STEAM, and gives students the ability to connect their green passions to actions.

**Presenter(s):** Sharon Jaye, Green Schools Alliance  
 Strand: ●

**Promoting the CCSS and NGSS Through Global Environmental Education**

Rainforest Alliance’s hands-on lessons to help students think critically about global ecosystems and sustainability while addressing the Common Core State Standards (English language arts and math) and NGSS.

**Presenter(s):** Maria Ghiso, Rainforest Alliance  
 Strand: ●

**GROUP 2, Flamingo D**

**Creating Green Charter Schools in Minnesota**

The Audubon Center of the North Woods is the only charter school authorizer in the nation that requires schools to implement an EE program. Join us to learn more about how ACNW serves the needs of its community with this mission-driven program and discover the success of environmental education at Northern Lights Community School.

**Presenter(s):** Erin E. Anderson, Audubon Center of the North Woods, Charter School Division; Matt Alleva, Northern Lights Community School  
 Strand: ● (A)

**Student Learning that Leads to Environmental Action**

Dutch Fork Elementary School is an environmental sciences magnet school in Columbia, South Carolina. Our mission is to develop students who care about the world we live in and express critical thinking through natural curiosity and wonder. Come learn how we align our actions with our beliefs.

**Presenter(s):** Julius B. Scott, Academy of Environmental Sciences at Dutch Fork Elementary  
 Strand: ●

## Roundtable Discussions

2:15 PM–2:55 PM, Las Olas

### “Sense of Wonder” Nature Journaling

#### Table 1

Rekindle your “sense of wonder” by making your own nature journal and learning innovative ways to use the journal to reconnect with the outdoors. Connections to Common Core Standards, NGSS, the use of trade books, and the 5E lesson plan format will be shared.

Presenter(s): [Molina Walters, Arizona State University](#)

Strand: ●

### Building Culture and Structure to Support Program Evaluation and Learning

#### Table 2

How does a culture and built-in structure for reflection support programming within an organization?

Learn about the Student Conservation Association’s evaluation and reflection processes, and engage in discussion focused on why these processes are important for success within EE.

Presenter(s): [Laurel Ady, Student Conservation Association](#)

Strand: ●

### Designing the District of Columbia’s Sustainable, Green, Healthy School Certification

#### Table 3

DCEEC’s newest initiative is a roadmap for a DC’s Sustainable, Green, Healthy Schools certification program. Part Green Ribbon Schools, part NWF-ECO Schools, part DC Sustainability Plan, one goal moving DC schools incrementally on a continuum towards sustainable, green, healthy schools.

Presenter(s): [Rebecca N. Davis, DC Environmental Education Consortium](#); [Grace Manubay, DC Environmental Education Consortium](#)

Strand: ●

### Exploring Sustainability of Intentional Communities: Experiences From Eco-Villages

#### Table 4

Eco-Villages have been around for the last three decades, and have been an important cross-contextual bridge for innovation in sustainable development, education, and communication, but haven’t managed to become a niche in society. An in-depth exploration reveals their most common weaknesses and proposes a way for their future exploitation.

Presenter(s): [Georgios Antonopoulos, University of the Aegean](#)

Strand: ●

### Understanding the Debate: Exploring Relationships Between Environmental Education and Advocacy

#### Table 5

The relationship between environmental education and advocacy continues to be a provocative topic for discussion, particularly when considered in the context of a divisive political climate. Join us as we engage in discussion designed to empower formal and nonformal educators to address this controversial issue and find common ground.

Presenter(s): [Amy E. Green, Chesapeake Bay Foundation](#)

Strand: ●

## Friday 3:05 PM

### Traditional Presentations

3:05 PM–3:45 PM

#### Bridging the Communications Gap: A Key Audience & Strategy for Climate Education

3:05 PM–3:45 PM, Flamingo A

Anthropogenic climate change (ACC) persists as a contentious political issue. We investigate climate-related perspectives and informational needs of science educators who, like the general public, hold a range of beliefs regarding ACC. Through an examination of psychosocial factors that influence readiness to learn about and teach climate-related information, we make recommendations for future educational efforts.

Presenter(s): [Maggie Clifford, PINEMAP; University of Florida](#); [Kristen Kunkle, NAAEE](#)

Strand: ●

#### Eco School in Puerto Rico Case Study: Urban Stream Conservation

3:05 PM–3:45 PM, Conference 10

The Eco School program was established in Puerto Rico in 2006, and since then it has become an effective tool for the integration of environmental education. The presentation focuses on one case study: project-based learning using 21st century technology to investigate and conserve an urban stream located near school grounds.

Presenter(s): [Maria Garcia, Organización Pro Ambiente Sustentable](#)

Strand: ● (B)

### In Our Neighborhood—Birds, Conservation, Community, and the National Aviary

3:05 PM-3:45 PM, Flamingo B

The National Aviary's One Northside for Every Student is actively connecting all second graders and their families to birds, conservation, and the Northside community of Pittsburgh, Pennsylvania. Learn more about this special initiative and how it is impacting elementary students—the emerging leaders of tomorrow.

Presenter(s): Patricia O'Neill, National Aviary

Strand: ●

### Integrating Academic and Professional Opportunities for EE Graduate Student Success

3:05 PM-3:45 PM, Tropical C

FAU Pine Jog Environmental Education Center complements the academic learning in the FAU MEd in EE with a two-year Graduate Assistantship Program (GAP). Attendees will be offered insight into the effectiveness, highlights, and challenges of the program from the academic professor, GAP coordinator, and graduate student participants.

Presenter(s): Christopher Andrew Hill, FAU Pine Jog Environmental Education Center; Bryan Nichols, Florida Atlantic University; Natalie Frenberg, Pine Jog Environmental Education Center

Strand: ●

### Love Thy Nature—Film Inspires Outdoor Connections

3:05 PM-3:45 PM, Conference 8-9

Director Sylvie Rokab will screen a 25-minute version of *Love Thy Nature*, a film, narrated by Liam Neeson, which takes viewers on a cinematic journey through the beauty of our relationship with nature. She will discuss how her team and partners are igniting a nature-connecting movement in schools and beyond.

Presenter(s): Sylvie Rokab, *Love Thy Nature*


Strand: ●

### Making EE Accessible for All Students: A Special Education Investigation

3:05 PM-3:45 PM, Conference 2

Gain an inside look into best practices for engaging students with special needs from urban communities in outdoor education. Engage in conversation about how student behaviors and outlooks on EE shift as a result of interventions.

Presenter(s): Juliann Dupuis, Notre Dame of Maryland University; Dawn Martin, Notre Dame of Maryland University

Strand: ● 

### The Best of EPA's Environmental Education Grant Program

3:05 PM-3:45 PM, Conference 3-4-5

Covering all environmental topics and reaching audiences as diverse as the population of the United States, EPA's Environmental Education Grant projects have demonstrated initiative and resourcefulness, and accomplished goals that belied their modest budgets. EPA staff will discuss their grants and some of the best projects from the last few years.

Presenter(s): Karen Scott, US Environmental Protection Agency; Thomas Brennan, US Environmental Protection Agency

Strand: ●

### The Chicago Botanic Garden Veterans Internship Program: Advocacy Through Employment

3:05 PM-3:45 PM, Tropical A

The Veterans Internship Program (VIP) at the Chicago Botanic Garden is a transitional employment program for service members reintegrating into the civilian workforce. This presentation focuses on the replicable model, lessons learned during the two-year pilot, and ways other environmentally focused institutions can help create a supportive community for veterans.

Presenter(s): Katherine Knight, Chicago Botanic Garden

Strand: ● 

### What Works in Environmental Education?

#### A National Study

3:05 PM-3:45 PM, Conference 6-7

How much do we really know about best practices in environmental education? We'll review the body of knowledge and discuss an ongoing large scale national study to fill in the gaps, including opportunities to get involved, stay informed, and use our statistically validated measures in your own programs.

Presenter(s): Marc Stern, Virginia Tech; Robert Powell, Clemson University

Strand: ●



### Climate Change Education: Adapting Outreach to Diverse Neighborhoods

3:05 PM-3:45 PM, Flamingo D

Climate change education cannot be “one size fits all.” Diverse communities face varying threats. Under-served, minority neighborhoods may be vulnerable to climate change effects, and lack knowledge, resources, and capacity to adapt. Research on the needs of diverse communities can assist in the development of neighborhood specific climate change education.

Presenter(s): Rebecca Johns, University of South Florida-St. Petersburg; Barnali Dixon, University of South Florida-St. Petersburg; Kelly McKenna, University of South Florida-St. Petersburg

Strand: ● 

### Bright Spots

3:05 PM-3:45 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Teaching the Properties of Water Using 3D models

Participants will learn about properties of water that make it conducive to life on Earth. This hands-on presentation will allow participants to use 3D water models to learn about hydrogen bonding, covalent bonding, adhesion, cohesion, surface tension, solubility, polarity, etc.

Presenter(s): Jason Katzmann, University of Wyoming at Casper; Emily Schaller, Teton Science Schools

Strand: ●

#### Tracking Math in the Wild

Educators often use science to connect learners with the environment, but math offers another approach. Nature has an endless supply of things to count, measure, sort, categorize, record, graph, and perform operations on. This hands-on session provides examples for grades K-12 for engaging learners with nature through math.

Presenter(s): Jan Weaver, Missouri Environmental Education Association

Strand: ●

### GROUP 2, Flamingo D

#### Climate Education: Positive Programming with a New-to-Nature Audience

As a MADE-CLEAR ICCE community member, Delaware Nature Society staff reworked climate change messaging in school programs for economically-disadvantaged students. Learn tips on ways to resonate with these “new-to-nature” audiences, including programming hits and misses, and gain resources to bring back to your organization. Elevate your climate game!

Presenter(s): Lesley Bensinger, Delaware Nature Society

Strand: ●

#### Using Facebook to Foster Energy Conservation Behaviors in Families

This research initiative examines the role of social media, namely Facebook, in creating an eco-responsible community of practice comprised of urban families looking to adopt collective energy conservation behaviors and contribute in the fight against climate change. We look to describe the socio-ecological experience of 25 families over four months.

Presenter(s): Michel Leger, Universite de Moncton

Strand: ●

### Roundtable Discussions

3:05 PM-3:45 PM, Las Olas

#### Climate Change EE: Sharing Proven Practices & Addressing Challenges

##### Table 1

Join colleagues involved in eePRO Climate Change Education to share ideas, compare frustrations, and build alliances that facilitate improvement as we all push to build a citizenry with understandings and skills for confronting this existential challenge. Discuss what works and decide ways we can use eePRO to sustain our efforts.

Presenter(s): Jennifer Lynn Hubbard-Sanchez, Kentucky State University; Kristie Wagner, Lesley University  
Moderator: Karen S. Hollweg, Fulbright Specialist

Strand: ●

#### Introducing Native American Storytelling

##### Table 2

Storytelling is a means of introducing children to tales of nature and how it is being affected by climate change.

Presenter(s): Carlos Velazquez, Center for Human-Earth Restoration

Strand: ●



## Lessons Learned From Two NYC Change Agents

### Table 3

There are practical applications of school district sustainability that are attainable, but it requires leadership to steer large bureaucracies towards change. Come learn about being a change agent and hear lessons learned from the two women who have lead sustainability efforts in the largest school system in the United States.

Presenter(s): Sharon Jaye, Green Schools Alliance; Meredith McDermott, New York City Department of Education

Strand: ●

## Promise or Peril? The Role of Technology in Environmental Education

### Table 4

Join our conversation about the possibilities and challenges of harnessing digital technologies in environmental education. Ways this might be accomplished include applying mobile technologies to foster environmental awareness, promoting environmental concern in an online university context, and incorporating environmental content and resources into children's video games.

Presenter(s): Clifford Blizard, Ashford University; Lucy R. McClain, Shaver's Creek Environmental Center-Penn State University

Strand: ●

## Friday 4:00 PM

### Traditional Presentations

4:00 PM-4:40 PM

#### Better Together: The Value and Lift of School Partnerships

4:00 PM-4:40 PM, Flamingo A

This presentation will illustrate how well-constructed collaborations with local schools can lift each partner, reach new students, and enhance the learning experience of the student participants. Using successful models, this talk will demonstrate the benefits of school partnerships and inspire other educators and land management agencies to explore collaborative opportunities.

Presenter(s): Sue Gardner, Golden Gate National Parks Conservancy; Elsa Calvillo, Golden Gate National Parks Conservancy

Strand: ●

## Comunidades Azules: Agua y Salud en la Sierra Mazateca

4:00 PM-4:40 PM, Conference 10

Proveemos el acceso a agua y saneamiento, por medio de infraestructura sustentable para promover cambios que impacten positivamente en las condiciones de vida y salud de comunidades rurales a través de una metodología que conjunta infraestructura con educación para su apropiación en cinco localidades en la sierra Mazateca, Oaxaca, México.

Presenter(s): Ramón Pérez Guillé, CICEANA; Lourdes Guerrero, CICEANA

Strand: ● (B)

## Considerations for Adopting Mobile Digital Technologies to Enhance Outdoor Education

4:00 PM-4:40 PM, Conference 8-9

Mobile and field technologies can enhance outdoor education for digital natives. Presenters will discuss hardware and software considerations of selecting technologies to engage today's youth in the outdoors. Case study examples will include the Water Quality mobile app and Digital Observation Technology Skills (DOTS) kits.

Presenter(s): Steve C. Kerlin, Stroud Water Research Center; Robert Justin Hougham, University of Wisconsin Extension

Strand: ●

## Environmental Education Regional Center Projects in Taiwan: Stories Being Developed With NAAEE

4:00 PM-4:40 PM, Tropical A

Four Environmental Education Regional Centers were established by EPA of Taiwan in different regions. Universities, schools, governments, NGOs, and entrepreneur/business were involved and interdisciplinary, cross-field, and multi-dimensional collaboration was anticipated through co-design and co-delivery of environmental education programs with regional characteristics. Help and support from EECapacity and NAAEE mattered.

Presenter(s): Shin-Cheng Yeh, Graduate Institute of Environmental Education, National Taiwan Normal University

Strand: ●

### Help! We Are All Volunteers! How Can We Be Successful?

4:00 PM-4:40 PM, Conference 6-7

How do you move a one-time highly successful all-volunteer EE Affiliate back into the spotlight? A little creativity, volunteer recruitment, and program planning go a long way. Join LoriAnne to learn how the Arizona Association for Environmental Education is moving from nostalgia to action!

Presenter(s): LoriAnne Barnett, Arizona Association for Environmental Education

Strand: ●



### Inspiring the Next Generation Scientists

4:00 PM-4:40 PM, Conference 3-4-5

The GLOBE Program has for 22 years been inspiring students and teachers to take an interest in their local and global environment through the collection and analysis of earth science measurements. Over the years, a number of GLOBE students have progressed into STEM careers. Come learn about the program alums!

Presenter(s): Tony Murphy, GLOBE; Kristin Wegner, UCAR/The GLOBE Implementation Office

Strand: ●

### New Directions for EE Certification Programs

4:00 PM-4:40 PM, Tropical C

As part of NAAEE's ee360 efforts, a study on state EE Certification Programs was commissioned and a meeting was held with Affiliate leaders. We'll share information and ideas that emerged, collect additional comments, and discuss a strategic direction for certification and accreditation.

Presenter(s): Susan McGuire, McGuire Consulting; Lori Mann, NAAEE

Strand: ●



### Strategies for Systemic Environmental Literacy

4:00 PM-4:40 PM, Conference 2

Changing policy, developing plans, and securing funding are all part of efforts to advance environmental literacy. But what else is needed to make a systemic impact? In this session, we'll frame school districts as a targeted unit for change and consider essential elements for success in achieving systemic environmental literacy.

Presenter(s): Sarah Bodor, NAAEE; Candice Dickens-Russell, TreePeople; KirkAnne Taylor, ChangeScale

Strand: ●

### Teacher Leaders Using Citizen Science to Promote Environmental Literacy

4:00 PM-4:40 PM, Salon Del Mar AB

The infusion of environmental education into traditional science classrooms is a challenge that the Driven to Discover program addresses through citizen science. This professional development model trains teachers how to engage underrepresented youth in developing environmental literacy by connecting them with the natural world.

Presenter(s): Sarah Weaver, Monarch Lab, University of Minnesota; Gillian Roehrig, University of Minnesota


Strand: ●

### Youth Mentoring Collaborative: Advancing Diversity, Equity, and Inclusion in EE

4:00 PM-4:40 PM, Flamingo B

Our youth programs in Portland, Oregon are focused on diversifying the field of environmental education. We formed the Youth Mentoring Collaborative in 2013 to build our individual and collective capacity. This presentation will highlight our work and share ideas for replicating this powerful partnership in other settings.

Presenter(s): Gladys Ruiz, Consultant; Jody Van Riper, Oregon Zoo/Metro; Charissa Virginia Jones, Tualatin Riverkeepers; Isabel LaCourse, Portland Parks & Recreation

Strand: ● 

### Bright Spots

3:05 PM-3:45 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Champions of Community Collaborations for Conservation: Boston Bruins, Project Green Schools, and Walmart

What could be "cooler" than an NHL superstar and 6X Stanley Cup winning team, the world's largest retailer, and a leader in environmental education collaborating to develop student leaders?! Join us as we share what it takes to create a winning team of rigor, relevance, and relationships for best practices in community partnerships.

Presenter(s): Robin Organ, Project Green Schools

Strand: ●

## Outdoor Leadership Academy Activities for Diverse and Underserved Youth

A model program between the National Park Service (NPS), colleges, and community groups will be explored. The Outdoor Leadership Academy (OLA) is a program that targets diverse, economically disadvantaged, and underrepresented youth. The program provides participants a variety of foundational experiences to prepare them to be the next generation of public land leaders.

**Presenter(s):** Kelly Bringhurst, Dixie State University; Amanda Jean Dworak Rowland, National Park Service, Pacific West Regional Office; Erin O'Brien, Dixie State University

Strand: ●

## GROUP 2, Flamingo D

### ECO Teacher Training Workshop—A Five Year Reflection

For five years, the St. Petersburg College has teamed up with the University of Florida's Institute of Food and Agricultural Sciences and Extension Service to offer a fun and informative week-long workshop for preservice elementary education students and elementary teachers with a focus on environmental education.

**Presenter(s):** Robert E. Raze, St. Petersburg College; Lara Milligan, UF/IFAS Extension Pinellas County

Strand: ●

### Strong Connections Between Mammoth Cave and Western Kentucky Preservice Teachers

Elementary Science Methods professors and the Environmental Education Specialist at Mammoth Cave collaborate to make experiences at the national park meaningful for preservice teachers. The partnership evolved with improved understanding of what preservice students need to feel confident as future teachers, which included encouraging inspiring teachers to take students outside.

**Presenter(s):** Jennifer Shackelford, National Park Service

Strand: ●

## Roundtable Discussions

4:00 PM–4:40 PM, Las Olas

### Climate Change Education: Addressing Misconceptions

#### Table 1

An environmental education partnership collaborated to address climate literacy and misconceptions to increase knowledge of climate change, both global and local impacts, and decisions for adapting and mitigating change. A variety of formats were used to improve educators' climate content knowledge, and skills in teaching about climate change and pedagogy.

**Presenter(s):** April Haight, Morehead State University; Melinda Wilder, Eastern Kentucky University; Kimberly Yates, Northern Kentucky University; Jeanine Huss, Western Kentucky University; Jennifer Lynn Hubbard-Sanchez, Kentucky State University

Strand: ●

### Effective Pedagogy: Applying Proven Early Childhood Methodologies in Environmental Education

#### Table 2

This session will apply four proven methodologies in promoting children's construction of knowledge about nature. In-depth discussions will focus on experiential learning strategies, internal motivations that further children's inquiries, role of language and problem solving skills, and metacognitive skills development.

**Presenter(s):** Yash Bhagwanji, Florida Atlantic University

Strand: ●

### Encouraging Participation in Science and Nature Beginning in Pre-K

#### Table 3

When young learners from urban neighborhoods and their families explore ecosystems in museum dioramas and engage in hands-on lessons using live organisms, they connect with and develop a love for nature.

They also demonstrate long-term engagement in the sciences. We raise questions about ways to document their experiences and tell their stories.

**Presenter(s):** Jenny Ingber, American Museum of Natural History; Kristen Olson, American Museum of Natural History

Strand: ●

## Intergenerational Transfer in the “Real World” of Environmental Education

### Table 4

Environmental education initiatives that promote intergenerational learning (IGT) are growing in popularity, however, many times IGT is anecdotal in nature. Join our roundtable discussion between researchers that study IGT and practitioners who experience IGT in their day-to-day work. Methods to continue the conversation on eePRO will also be discussed.

**Presenter(s):** Danielle Alexis Lawson, North Carolina State University; Ruth Kermish-Allen, Maine Math and Science Alliance

**Strand:** ● 

## K-12 Learner Guidelines Update: We Want Your Input

### Table 5

NAAEE’s *K-12 Learner Guidelines*, part of the Guidelines for Excellence series, were last revised in 2009. They describe a framework for environmental literacy that is benchmarked at 4th, 8th, and 12th grades. We are in the process of updating them. Come and hear about the process. We’d love your feedback!

**Presenter(s):** Bora Simmons, National Project for Excellence in Environmental Education; Jaclyn Stallard, Project Learning Tree; Billy Bennett, Kentucky Environmental Education Council

**Strand:** ●



## Friday 5:00 PM

### Meetings & Gatherings

5:00 PM–6:00 PM

#### Accreditation Advisory Board Business Meeting 5:00 PM–6:00 PM, Executive Boardroom

Working meeting for members of the Accreditation Advisory Board, Accreditation Review Panel, and State EE Certification Program representatives.

By invitation.

**Coordinator:** Tom Marcinkowski

#### Southeastern Environmental Education Alliance Meeting

5:00 PM–6:00 PM, Magüey

Members of SEEA and other Affiliates in the southeastern United States will meet to discuss current activities.

**Coordinator:** Beth Cranford

## Friday 7:00 PM



### Annual Gala and Stapp Scholarship Auction

7:00 PM–9:30 PM



### El Cuartel de Ballajá

Join us for an evening of authentic Puerto Rican fare, live music by Sin Prisa—a local favorite—dancing, artisan craft vendors, our annual auction, and time to spend with your friends and colleagues at the incredible El Cuartel de Ballajá, the Ballajá Infantry Barracks Building. Bid on your favorite items in the always entertaining live auction, and slip in your final bid to snatch up a great variety of treasures as the silent auction and bucket raffles conclude.

Transportation is provided. Meet at the front entrance to the Caribe Hilton. The first buses depart at 6:30 PM.

Please note:

Your conference name tag is required for admittance to all meals and special events. While the gala is included with Friday or full conference registration, you must have signed up during the online registration process in order to attend. Guest tickets and late RSVPs may be available if you wish to add the event at this time; check at the registration desk.

See pages 38–39 for more information.



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# Saturday

## Early Morning

### Birdwatching

**7:00 AM-8:00 AM, Luis Muñoz Rivera Park**

Join an expert birder from Puerto Rico for a walk through the coastal zone and urban forest of the Luis Muñoz Rivera Park. Meet at the hotel entrance. No transportation is required. Sign up at the Information Station.

## Saturday 8:30 AM

### Symposia

**8:30 AM-10:00 AM**

#### A National Collaborative for Food, Energy, and Water Education

**8:30 AM-10:00 AM, Guayacán**

This symposium highlights efforts to cultivate a national, transdisciplinary network of educators and education researchers focused on the Food-Energy-Water-Nexus. This symposium will involve a panel of experts and an opportunity to explore synergies and shared commitments between the Collaborative for Food, Energy, and Water Education (NC-FEW) and the NAAEE community.

Presenter(s): Cory Forbes, University of Nebraska-Lincoln; Christine Jie Li, University of Missouri; Tracey Ann Ritchie, University of Florida; Bora Simmons, National Project for Excellence in Environmental Education; Nicole Ardoin, Stanford University; Danielle Alexis Lawson, North Carolina State University; Martha C. Monroe, University of Florida  
Strand: ●

### Strands

- Applying Research to Increase Our Impact
- Building Leadership for Environmental Literacy
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools
- Inspiring Connections to the Outdoors
- Addresses Diversity, Equity, and Inclusion
- Ⓢ Spanish    ⓑ Bilingual

#### Imagine Celebrating 20 Years of EE for Preservice Teachers

**8:30 AM-10:00 AM, Auditorium**

Stephen F. Austin State University has 20 years experience integrating EE into its preservice teacher preparation program. With the help of national, state, and local partners, they have developed three unique programs for the science methods course, social studies courses, and reading courses. We will discuss funding, research, and sustainability.

Presenter(s): Cheryl T. Boyette, Boyette Consulting; Paula Barton Griffin, Stephen F. Austin State University; Alan Sowards, Stephen F. Austin State University; Elyce Rodewald, Stephen F. Austin State University Gardens; Zoe Ann Stinchcomb, TPWD Texas Freshwater Fisheries Center

Strand: ●

# Saturday

## Field Trips

Meet the buses at the front entrance to the Caribe Hilton 15 minutes before the stated departure time. Lunch is provide unless otherwise stated. Note: Field trips require pre-registration and an additional fee. Check at the Registration Desk for limited remaining availability.



### **Moonlight Kayak on Laguna Grande** **5:00 PM-10:00 PM** **Cabezas de San Juan Nature Reserve**

Discover the secrets of the night at Las Cabezas de San Juan Nature Reserve. During this moonlit tour, see the nighttime biodiversity of the Reserve, experience the extraordinary natural phenomenon of bioluminescence as you quietly kayak along the majestic Laguna Grande, and learn about the importance of conserving this valuable ecosystem. SOLD OUT

# Sunday

## **Nature and Old San Juan** **9:00 AM-2:30 PM** **Old San Juan**

In collaboration with the National Park Service, this walking tour will explore the crucial role of nature in shaping the structures and fortifications of Old San Juan. We'll walk through bastions and historical sites, and visit the restoration laboratory in Polvorín Santa Elena to learn about the use of lime in the restoration of historical structures.



## **Wetlands Adventure** **9:00 AM-4:30 PM** **Los Machos Wetlands, Ceiba**

Paddle, swim, snorkel, and gather scientific data! Search for and identify birds and take limnological samples on the grounds of the former naval station, and contribute your findings to Ebird and Para la Naturaleza databases. Then kayak through the channels of Los Machos Wetlands, snorkel along the mangrove roots, and discover the wildlife of the pristine red mangrove ecosystem.

## **Moonlight Kayak on Laguna Grande** **5:00 PM-10:00 PM** **Cabezas de San Juan Nature Reserve**

Discover the secrets of the night at Las Cabezas de San Juan Nature Reserve. During this moonlit tour, see the nighttime biodiversity of the Reserve, experience the extraordinary natural phenomenon of bioluminescence as you quietly kayak along the majestic Laguna Grande, and learn about the importance of conserving this valuable ecosystem.

## Hands-on Presentations

8:30 AM–10:00 AM

### Bridging Worlds: International Urban Environmental Education for Global Stewardship

8:30 AM–10:00 AM, Flamboyán

Place-based learning is all the rage in international education. Can we normalize urban environmental education in study abroad such that all learners understand the ecological realities both within and without their city of study? Bring your expertise about your own community to help design a transformative, intercultural learning experience.

Presenter(s): Annalise Ritter, Islandwood

Strand: ●

### Building Bridges Between Conservation Psychology and Education

8:30 AM–10:00 AM, Magüey

This workshop will review the current research in conservation psychology related to environmental behaviors and discuss how those themes can be applied to a variety of educational contexts to inspire environmental behavior and actions in youth. Participants will have an opportunity to apply conservation psychology best practices to their environmental education projects to increase conservation action.

Presenter(s): Ruth Kermish-Allen, Maine Math and Science Alliance

Strand: ●

### Foster Student Innovation and Environmental Literacy with Biomimicry!

8:30 AM–10:00 AM, Caribe

Learn how educators around the world are using biomimicry to increase student engagement in STEM classrooms while promoting environmental literacy. Experience a set of free bio-inspired design lessons that foster student innovation and critical thinking skills and empower your students to enter the Biomimicry Global Design Challenge.

Presenter(s): Gretchen Hooker, Biomimicry Institute; Abby Randall, EcoRise

Strand: ●

### Ludoteca Escuelas Azules: Estrategias Didácticas para la Sierra Mazateca

8:30 AM–10:00 AM, Salon Del Mar AB

Conoce diversas estrategias didácticas para la apropiación y transferencia de tecnologías como la captación de agua de lluvia, huertos escolares, y promoción de la salud. Te mostraremos el proceso de diseño, producción, y adaptación de estas herramientas lúdicas y dinámicas adecuadas al entorno rural e indígena.

Presenter(s): Ileana Alcocer, Centro de Información y Comunicación Ambiental de Norte America A.C. (CICEANA); Edgar Ramirez Regalado, Centro de Información y Comunicación Ambiental de Norte America A.C. (CICEANA)

Strand: ● (B)

### Teaching In Place: Connecting Neighborhoods to Nature Using Block Walks

8:30 AM–10:00 AM, Garita

Join me for a Block Walk where we will discover exciting things living in the cracks, and uncover ways in which we can connect urban residents to nature right outside their door. We will also discuss opportunities for using local resources and ways to make nature relevant in urban settings.

Presenter(s): Kelly Wenzel, New Jersey Audubon

Strand: ●

## Traditional Presentations

8:30 AM–9:10 AM

### Elementary Snails on an Everglades Trail

8:30 AM–9:10 AM, Flamingo B

Try to remember the first time nature spoke to you—what did it say? Not all animals can call out to us, so our Apple Snail Adoption Program bridges the gap! It gives a voice to these small creatures by training local elementary schools around the Everglades to care for them.

Presenter(s): Carmen Rodriguez, Florida Atlantic University Pine Jog Environmental Education Center; Molly Thistle, Florida Atlantic University Pine Jog Environmental Education Center; Natalie Frendberg, Florida Atlantic University Pine Jog Environmental Education Center

Strand: ●



## Mobilizing the World's Largest Untapped Natural Resource: Our Students

8:30 AM-9:10 AM, Flamingo A

Our children spend 14,000 hours sitting in school. Imagine if every campus acted as an incubator for social change and teachers dedicated their classrooms to solving real-world problems. EcoRise and the City of Austin share resources and strategies to mobilize and fund youth-driven solutions for a sustainable world.

Presenter(s): Gina LaMotte, EcoRise Youth Innovations; Lucia Athens, City of Austin

Strand: ● 

## Successfully Integrating Climate Change Education into School System Curriculum

8:30 AM-9:10 AM, Conference 2

Join Audubon to learn about how it worked with local school teachers and system administrators to seamlessly integrate climate change education into their county school system's sixth-grade curriculum. We'll explore teacher professional development, content, student action, and climate solutions in putting you on a path for climate education success.

Presenter(s): Mark Scallion, Pickering Creek Audubon Center

Strand: ●

## Roundtable Discussions

8:30 AM-9:10 AM

### Affiliates' Regional Collaboration—What's in It for You?

Table 1

Learn about the value of regional collaborations and how several Affiliates from different states have used this model to build capacity for their organizations and eliminate silos. Participate in discussion about the benefits and challenges of partnering across state lines and share ideas for strengthening the full Affiliate Network through regional collaboration.

Presenter(s): Adrian Ayson, Maine EE Association; LoriAnne Barnett, Arizona Association for Environmental Education; Thom Benedict, Utah Society for Environmental Education; Beth Jones Cranford, Southeastern Environmental Education Alliance

Strand: ●

**naaee**  
Affiliate

## Becoming Better Educators: Connecting Research to Planning and Practice

Table 2

How do educators integrate available research into the practice of planning and implementing environmental education programs? Join us to learn how a zoo and an aquarium have addressed this challenge, and share your experiences bridging the gap between research and practice. Challenges, potential solutions, and useful resources will be discussed.

Presenter(s): Lauren Terwilliger, Lincoln Park Zoo; Sue Magdziarz, John G. Shedd Aquarium

Strand: ●

## Data Jam: Enhancing Data Literacy and Communicating Ecology Through Art

Table 3

Ecology research sites around the country, including multiple Long-Term Ecological Research (LTER) sites, have developed an innovative method for engaging students in authentic ecology learning. Through Data Jam competitions, middle and high school students analyze and interpret data and communicate their findings to the public through original art.

Presenter(s): Michelle Forster, Cary Institute of Ecosystem Studies; Noelia Báez, Luquillo LTER Schoolyard, University of Puerto Rico

Strand: ●

## Saturday 9:20 AM

### NAAEE Annual Business Meeting

9:20 AM-10:00 AM, Conference 6-7

Join NAAEE's board chair, executive director, board members, and staff for a discussion of the current state of the organization and future directions for NAAEE. Topics will include strategic planning, a financial report, and your questions. We welcome your input!

Presenters: Judy Braus, NAAEE; Charlotte Clark, Duke University

## Traditional Presentations

9:20 AM-10:00 AM

### Engaging Communities to Address Local Issues: A New Florida Extension Program

9:20 AM-10:00 AM, Conference 2

This presentation will describe a new Extension program in Florida that is adapting the deliberative forum process to help communities discuss and address controversial issues together. Recommendations for others who may be interested in following a similar model for community engagement will be provided.

Presenter(s): Martha C. Monroe, University of Florida; Ramona Madhosingh-Hector, University of Florida/IFAS Extension; Lara Milligan, UF/IFAS Extension Pinellas County; Jennison Kipp Searcy, University of Florida

Strand: ●

### Investigating the Links Between Teaching Approaches, Student Engagement, and Outcomes

9:20 AM-10:00 AM, Conference 3-4-5

Which characteristics of an environmental educator matter? Are certain pedagogies more effective in engaging diverse student audiences and influencing outcomes? These questions and more will be discussed as we explore a novel case study investigating the links between teaching approaches, student engagement, and outcomes at a residential environmental education center.

Presenter(s): Troy Frensley, Virginia Tech

Strand: ●

### Migration Flow Shaping Environmental Awareness: the Greek Islands' Experience

9:20 AM-10:00 AM, Conference 10

With the European migrant crisis, Greece is facing environmental challenges such as increased waste production. This presentation explores the knowledge, attitudes, and behavior towards waste in residential areas of two Greek Aegean Islands.

Presenter(s): Constantina Skanavis, University of the Aegean

Strand: ● 

### School Grounds for Learning: Habitat and Urban Education in Baltimore

9:20 AM-10:00 AM, Flamingo B

The National Wildlife Federation and NAAEE's Maryland Affiliate, MAEOE, will share the innovative program they launched in Baltimore this year to support green schools, create native habitat in an urban environment, and empower teachers to use the schools grounds as a venue for outdoor, place-based, experiential learning.

Presenter(s): Holly Shields, National Wildlife Federation; Laura Johnson Collard, Maryland Association for Environmental and Outdoor Education  
Strand: ●

### The E Movement: Making Environmental Literacy Systemic Countywide

9:20 AM-10:00 AM, Conference 8-9

Are you working on systemic environmental literacy or looking for tangible ways to implement Environmental Literacy Plans? Join us to explore a model where EE organizations, school districts, and government agencies work collaboratively to build capacity for EE across a region. Explore resources that can be adapted to meet your needs.

Presenter(s): Erin Saunders, Thorne Nature Experience; Angela Myers, Thorne Nature Experience; Katie M. Navin, Colorado Alliance for Environmental Education  
Strand: ●

**naaee**  
Affiliate

### The Gray and The Green: Teaching Water Infrastructure

9:20 AM-10:00 AM, Flamingo A

Gray infrastructure is hard and angular. Green infrastructure is soft and rounded. Your students can transform gray into green, while learning myriad environmental concepts, life-long civic skills, and the practice of science and engineering. A bonus: improved water quality on your campus.

Presenter(s): Donny Roush, Denver Public Works  
Strand: ●

### The Results of Water Quality Monitoring by High School Students

9:20 AM-10:00 AM, Tropical A

Water monitoring enables students to apply science skills while providing outdoor education experiences connecting them to their local community. Teaching students to measure physical parameters, conduct biotic indices, and use water chemistry tests to evaluate the quality of a local stream, helps them study science while protecting a local resource.

Presenter(s): Dina DiSantis, Downingtown Area School District  
Strand: ●

## Bright Spots

9:20 AM–10:00 AM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Certified Local Phenology Leaders: Creating Successful Communities Through Citizen Science

Learn more about becoming a Certified Phenology Leader in your community! Join us for a discussion of the Nature's Notebook Local Phenology Leader Certification Program, bringing educators together with new audiences, natural resource managers, practitioners, and other leaders across the United States who are teaching about climate change through citizen science.

Presenter(s): [LoriAnne Barnett, USA National Phenology Network](#)

Strand: ●

#### North American Monarch Institute: Conservation Education That Impacts Communities

The North American Monarch Institute (NAMI) demonstrates a strong model for conservation education and collaboration across education settings. In addition, this model exemplifies a successful approach for educator preparation in citizen science instruction. The monarch butterfly engages people of all ages to the wonders of ecology and nature.

Presenter(s): [Katie-Lyn Bunney, Monarch Lab, University of Minnesota](#); [Sarah Weaver, Monarch Lab, University of Minnesota](#)

Strand: ●

#### Science Fights Back: Using the Civic-Citizen Science Framework in EE

This talk will explain how the Civic-Citizen Science Framework can help educators clarify the goals of programs that engage participants in scientific inquiry. Amidst unsettling attacks on science, the environment, and even reality, the framework can help recalibrate the role of good science in our programs.

Presenter(s): [Bryan Nichols, Florida Atlantic University](#)

Strand: ●

## Roundtable Discussions

9:20 AM–10:00 AM

### Advancing EE in School Systems

#### Table 1

Discuss the most effective ways to advance EE within school districts. What are the best models of partnerships, planning, and implementation for systemic integration of EE within formal education? How can EE providers work with district leadership to make significant impacts within school systems and promote access to all students?

Presenter(s): [Don Baugh, Upstream Alliance](#); [Kirk Anne Taylor, ChangeScale](#); [Candice Dickens-Russell, TreePeople](#); [Jason Walter Morris, Pisces Foundation](#); [Kaylee Mulligan, Pisces Foundation](#); [Erica Baugh, Upstream Alliance](#)

Strand: ●

### Infusing Writing Into EE Curriculum to Increase Access

#### Table 2

We discuss our work with a middle school summer program for migrant students. Our goals were to highlight students' connections to the land and to incorporate writing strategies to build students' content and literacy skills. We will discuss how practitioners and researchers can work together to create inclusive curriculum.

Presenter(s): [Lacey Denise Huffling, Georgia Southern University](#)

Strand: ●

### Oracular EE: Collaborative Storytelling for Visionary, Socially Just, Regenerative Futures

#### Table 3

This session simulates a year in a small, diverse community establishing itself after Western civilization collapses. Questions of identity, oppression, sustainability, and justice will be centered. This game involves emergent co-design and collaborative storytelling with a simple card-draw mechanic. Come catalyze justice and regeneration in the ashes of empire.

Presenter(s): [Amanda Leetch, Prescott College](#)

Strand: ●

## Perspectives from Graduate Students on Climate Change Mitigation and Adaptation

### Table 4

This presentation/discussion focuses on climate vulnerability and climate change mitigation and adaptation, specifically an opportunity to build community and foster relationships (with people and non-human beings). The presentation will summarize findings from an environmental education research study conducted in Spring 2017 on environmental perspectives of 16 graduate students.

Presenter(s): Kristy Franks, Concordia University

Strand: ●

## Strategies for Affiliate Capacity Building

### Table 5

Join a discussion on how to build your Affiliate capacity to advance EE. Leaders from California will share advances and growth over the past three years. Virginia has established a new Affiliate with a regional team structure to support and represent local environmental educators and efforts. Come share ideas for growth opportunities!

Presenter(s): Tracey Weiss, Exploring New Horizons; Steve Morris, AEOE; Greg K. Eaton, Claytor Nature Center of Lynchburg College; Cindy Duncan, Chesapeake Bay Foundation

Strand: ●

**naaee**  
Affiliate

## Saturday 10:00 AM

### Coffee Break

10:00 AM-10:30 AM, San Cristóbal Ballroom

## Saturday 10:30 AM

### Symposia

10:30 AM-12:00 PM

#### Reason, Truth, and Critical Thinking: Integrating Media Literacy Into EE

10:30 AM-12:00 PM, Guayacán

How do we teach our students to be skeptical yet open-minded, to be self-reflective yet able to take strong independent positions on controversial issues that we are passionate about? This lively, interactive symposium covers the pedagogy and practice of inquiry-based media literacy, highlighting hundreds of K-16 lessons integrated into EE.

Presenter(s): Chris Sperry, Project Look Sharp, Ithaca College; Cyndy Scheibe, Project Look Sharp, Ithaca College

Strand: ●

## Service Learning: Empowering Marginalized High School Students to Transform Communities

10:30 AM-12:00 PM, Auditorium

Is it possible to have true collaboration among community partners, educators, and students? Learn from educators, at Common Ground, Environmental Charter Schools, and Escuela Verde, three innovative urban environmental charter schools, as they share stories about successes and struggles while growing their service-learning programs.

Presenter(s): Joey Zocher, Escuela Verde; Sammy Lyon, Environmental Charter Schools; Joel Tolman, Common Ground High School, Urban Farm, and Environmental Education Center; Tashanda Giles, Environmental Charter Middle School Inglewood

Strand: ●  (B)

## Hands-on Presentation

10:30 AM-12:00 PM

#### Air Quality and the Benefits of Trees: A Student-Led Investigation

10:30 AM-12:00 PM, Flamboyán

Using the Caribe Hilton as our campus, participants will use locally collected AirBeams (Particulate Matter 2.5) data to investigate the NGSS DCI Human Impacts on earth systems and manipulate i-tree design to research the environmental services trees provide. Bring laptop for use with i-tree.

Presenter(s): Rebecca N. Davis, DC Environmental Education Consortium; Grace Manubay, DC Office of the State Superintendent of Education

Strand: ●

#### Beyond the Questionnaire: Alternative Methods for Gathering (and Using!) Evaluation Data

10:30 AM-12:00 PM, Las Olas

Evaluation is an important tool in helping you communicate the impact of your work. Increase your capacity to learn more about what your visitors know and want to know. This session will provide a toolbox of ideas that will enable you to take your evaluation practices to the next level.

Presenter(s): Erin E. Anderson, Audubon Center of the North Woods, Charter School Division; Michael Dentzau, Columbus State University

Strand: ●

### Cool Science Explains a Warming World: Engaging in Lively Activities

10:30 AM-12:00 PM, Caribe

Climate change is, arguably, the most important environmental science topic in human history. Interact with an ice core scientist and leave with data-driven resources from the most current research that will engage all students.

Presenter(s): Louise Huffman, US Ice Drilling Program Office (IDPO)

Strand: ●

### Experiencias de Reconexión con la Naturaleza: Ruta a la Sostenibilidad

10:30 AM-12:00 PM, Salon Del Mar AB

Presentación interactiva donde se realizarán actividades fundamentadas en los principios de la Carta de la Tierra y orientadas a reconectarnos con la naturaleza. Se compartirán ejemplos de iniciativas de educación ambiental y de alianzas realizadas en Puerto Rico para promover conceptos de integridad ecológica, biosensibilidad y ética del cuidado.

Presenter(s): Maria A. Vilches, Universidad Metropolitana; Marisol Quiñones

Strand: ●  

### Exploring Data Literacy Using Local Environmental Data for NGSS-Aligned Curricula

10:30 AM-12:00 PM, Magüey

In this data literacy focused activity, participants will explore a case study of data on PCBs in fish from the Hudson River Superfund Site. We will analyze trends across time, space, and species in a student-friendly, inquiry-based format.

Presenter(s): Rhea Esposito, Cary Institute of Ecosystem Studies

Strand: ●

### Monarch Mission: Empowering Students to Improve Monarch Habitat and Recovery

10:30 AM-12:00 PM, Garita

Monarch butterflies and other pollinator species are in severe decline across the United States. Since 2015, National Wildlife Federation has been actively involved in a comprehensive initiative to network, educate, and support community action for monarch conservation. Come learn about our new monarch curriculum, citizen engagement, and urban flyway protection networks.

Presenter(s): Jennifer Hammonds, National Wildlife Federation; Elizabeth Soper, National Wildlife Federation

Strand: ●

## Meeting

10:30 AM-11:10 AM

### NAAEE 2018: Share Your Ideas!

10:30 AM-11:10 AM, Conference 8-9

How can we improve on this year? We'd love to hear your thoughts. Come share your ideas and suggestions for our 47th annual conference, scheduled for October 9-13, 2018 in Spokane, Washington.

Coordinator: Lori Mann, NAAEE

## Traditional Presentations

10:30 AM-11:10 AM

### Aristotle Meets the Lorax: How to Join Philosophy and EE

10:30 AM-11:10 AM, Conference 3-4-5

Environmental education empowers students to put scientific information to work. Philosophy provides students with the necessary tools to assess ethical action based on this same scientific information. Learn concrete, successful strategies for integrating philosophy into science education experiences for students of all ages.

Presenter(s): Erin Griffin, SUNY College of Environmental Science and Forestry

Strand: ●

### Curriculum Principles for a Nature-Based Preschool: Case Study from Wisconsin

10:30 AM-11:10 AM, Flamingo A

A nature-based four-year-old kindergarten program was established in 2013 at the Bay Beach Wildlife Sanctuary in Green Bay, Wisconsin. This tuition-free program is a partnership among the Sanctuary, Green Bay Area Public School District, and the University of Wisconsin-Green Bay. We will describe the evolution of the curriculum.

Presenter(s): Scott Ashmann, University of Wisconsin-Green Bay

Strand: ●

**Residential EE in the 21st Century****10:30 AM-11:10 AM, Tropical A**

This presentation will focus on exploring dissertation results of a case study conducted at Bradford Woods Residential EE Center. The study sought to better understand 21st century classroom teacher perspectives and needs from these facilities in order to increase overall EE impact.

Presenter(s): Jenna M. Gatzke, Carroll University

Strand: ●

**Using Sustainability to Create a Culture of Change and Advocacy****10:30 AM-11:10 AM, Conference 6-7**

An interactive exploration of the whole-school sustainability framework, from concept to implementation. Learn how school leadership can strategically foster a culture of school sustainability, while improving occupants' well-being and student outcomes.

Presenter(s): Sharon Jaye, Green Schools Alliance; Megan Garner, The School District of Philadelphia

Strand: ●

**Bright Spots****10:30 AM-11:10 AM**

Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

**GROUP 1, Flamingo C****The Phenomena Are Happening Right Outside!**

Exciting ecological research happening across the Americas provides meaningful resources for learners to more fully understand their local environment in relevant ways. Utilizing the Long Term Ecological Research Program's network resources, and the Next Generation Science Standards EQuIP rubric, we will demonstrate the effectiveness of ecological phenomena to naturally provoke higher-level thinking.

Presenter(s): Lisa Herrmann, Arizona State University

Strand: ● 

**Using Local Environmental Issues as a Framework to Engage Students**

The Everglades is a unique American treasure and a rich subject that can be approached at all levels, to explore a myriad of integrated curricular topics and STEM-based concepts. In this interactive session, participants will learn how to use local environmental issues as a framework for their educational goals.

Presenter(s): Anne Margaret Henderson, Florida Atlantic University Pine Jog Environmental Education Center; Jennifer Diaz, The Everglades Foundation, Inc.; Wen Zhang, Florida Atlantic University Pine Jog Environmental Education Center

Strand: ●

**Saturday 11:20 AM****Traditional Presentations****11:20 AM-12:00 PM****Butterfly Gardening at Miami Urban Schools: Plugging Students Into Nature****11:20 AM-12:00 PM, Conference 2**

Habitat loss is a major factor contributing to insect declines in south Florida. Teacher collaborations with scientists present an opportunity to rehabilitate school grounds for flora and fauna through native plant gardens and integrated insect curriculum units, which apply real-world, practical active learning techniques in the classroom and school grounds.

Presenter(s): Jaeson Clayborn, Florida International University

Strand: ●

**Pollinator-Friendly Gardens as a Conservation Education Tool in Puerto Rico****11:20 AM-12:00 PM, Conference 6-7**

Pollinators are important animals for humans and ecosystems, yet they are declining. Through various federal conservation education initiatives, the Luis Muñoz Marín Foundation and the Organization for the Sustainable Environment partnered to raise public awareness and educate thousands of students, teachers, and visitors on the importance of pollinators in our lives.

Presenter(s): Christian Torres-Santana, Luis Muñoz Marín Foundation


Strand: ●

### STEM Pathways: Wind River EPSCoR and New Mexico Highlands University

11:20 AM-12:00 PM, Flamingo A

This talk showcases proven practices for environmental education with Native American students on the Wind River Reservation in Wyoming and with Hispanic students attending New Mexico Highlands University. Educational technology, outdoor classrooms, and community-based events support experiential learning for improved watershed protection and management.

Presenter(s): Jennifer Wellman, University of Wyoming, Wind River EPSCoR; Julie Tsatsaros, Natural Resources Management Department, New Mexico Highlands University

Strand: ● 

### Student-Led Whole School Energy Efficiency Engagement

11:20 AM-12:00 PM, Conference 3-4-5

While schools are a microcosm for energy use at large, they are an oft missed opportunity for teaching and learning about energy. With increasing achievement demands, how can the entire school be engaged in learning about energy efficiency? Learn how student energy efficiency leaders designed a school-wide energy engagement plan.

Presenter(s): Jennifer Alldredge, Alliance to Save Energy; Tanna H. Nicely, Knox County Schools/TEEA

Strand: ●

### ThinkWater: Building a Movement of People Who Think Deeply and Care About Water

11:20 AM-12:00 PM, Flamingo B

ThinkWater is a national movement of educators, students, managers, stewards, scientists, and citizens who think and care deeply about water. The presentation will highlight the ThinkWater systems-thinking framework and the state and national-level strategies and resources ThinkWater is using to build the movement of water thinkers across the country.

Presenter(s): Jeremy Solin, ThinkWater, University of Wisconsin Extension

Strand: ●

### Transforming Spaces, Transforming Lives: Increasing Nature Access for Improved Learning and Health

11:20 AM-12:00 PM, Conference 8-9

Learn about a variety of replicable models for engaging children in nature-based settings to improve environmental literacy, cognitive learning, and motor skills, as well as lead to mental, physical, and emotional health benefits.

Presenter(s): Tamberly Conway, USDA Forest Service; Julie Rose, Dimensions Educational Research Foundation/Nature Explore

Strand: ●

### Zoo Play: Nature and Science for the Urban Preschooler

11:20 AM-12:00 PM, Tropical A

Nature experiences and scientific curiosity are vital for preschool-aged children. Wildlife Conservation Society Bronx Zoo will discuss our efforts to support early childhood educators in engaging this youngest audience in authentic nature play. Attendees will gain knowledge of our process and practices as well as ideas for application at their home facilities.

Presenter(s): Anine Booth, Wildlife Conservation Society

Strand: ●

### Bright Spots

11:20 AM-12:00 PM



Learn about two or three successful and loosely related programs in each 40-minute Bright Spots session. Sessions are presented in the order listed.

### GROUP 1, Flamingo C

#### Feed Kids/Save the Environment: Successful Seed to Table Program

It's clear that growing food can be very devastating to our environment, our planet. It's also becoming very clear that growing food sustainably can be one of the best ways to clean up the environment while engaging young people for a lifetime. We will discuss the importance of school and community organic gardens!

Presenter(s): Bob Densmore, Marin Country Day School

Strand: ●

**Growing Emotions for the Environment: Gardening and Environmental Sensitivity**

The benefits of youth gardening programs are numerous—but what if they help foster a connection to the environment, too? Where access to wild spaces is decreasing, youth garden programs provide exposure to nature that is associated with environmental sensitivity, the emotional connection to nature that can lead to environmental behaviors.

Presenter(s): Claire Mitchell, University of Florida; Jerry Culen, University of Florida

Strand: ●



GOOD TO KNOW

**The national bird of Puerto Rican: Spindalis**

The Puerto Rican spindalis (*Spindalis portoricensis*) is a bird endemic to the island of Puerto Rico, where it is commonly known as *reina mora*.

**Saturday 12:00 PM**



**NAAEE Awards Luncheon and Closing Panel**

12:00 PM-2:30 PM, San Gerónimo Ballroom

Join us in congratulating the 2017 NAAEE award recipients, individuals and organizations demonstrating exemplary leadership in our field.

**EE 30 Under 30: Young Leaders Making a Difference**



Ankita Bhalla, Connel Bradwell, Lucila Castro  
Leandra Taylor, Moderated by Ana María García

See pages 33 and 40 for more information.

**Past Conference Venues**



**naaee**

North American Association  
for Environmental Education

1972 Hot Springs, Arkansas	1987 Quebec City, Quebec	2003 Anchorage, Alaska
1973 St Louis, Missouri	1988 Orlando, Florida	2004 Biloxi, Mississippi
1974 San Francisco, California	1989 Estes Park, Colorado	2005 Albuquerque, New Mexico
1975 New Orleans, Louisiana	1990 San Antonio, Texas	2006 St. Paul, Minnesota
1976 Atlanta, Georgia	1991 St. Paul, Minnesota	2007 Virginia Beach, Virginia
1977 Estes Park, Colorado	1992 Toronto, Ontario	2008 Wichita, Kansas
1978 Chicago, Illinois	1993 Big Sky, Montana	2009 Portland, Oregon
1979 Blacksburg, Virginia	1994 Cancun, Quintana Roo	2010 Buffalo-Niagara, New York
1980 Albuquerque, New Mexico	1995 Portland, Maine	2011 Raleigh-Durham, North Carolina
1981 Kentucky Dam Village State Park, Kentucky	1996 Burlingame, California	2012 Oakland, California
1982 Silver Bay, New York	1997 Vancouver, British Columbia	2013 Baltimore, Maryland
1983 Ypsilanti, Michigan	1998 Atlanta, Georgia	2014 Ottawa, Ontario
1984 Lake Louise, Alberta	1999 Cincinnati, Ohio	2015 San Diego, California
1985 Chevy Chase, Maryland	2000 South Padre Island, Texas	2016 Madison, Wisconsin
1986 Eugene, Oregon	2001 Little Rock, Arkansas	
	2002 Boston, Massachusetts	



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### Consultants

Alicia Dimaio, *Conference Planning*  
Bob Ertter, *Human Resources*  
Bill Finnegan, *Web Developer and Videographer*  
Joe Shull, *Venable LLP, Legal Counsel*  
Rob Stewart, *Technology*  
Brian Sweeney, *Accounting*  
Katrina Sweeney, *Accounting*  
Steve Weir, *weirdesign.com*  
Sylvia Weir, *weirdesign.com*

### Interns

Quint Doan  
Ansley Groff  
Ben Rankin  
Taylor Schenker  
David Segovia  
Grace Stewart

# NAAEE Affiliate Network

## From Alberta, Canada to Coyoacán, Mexico

- Environmental Education Association of Alabama
- Alberta Council for Environmental Education
- Alaska Natural Resources and Outdoor Education Association
- Arizona Association for Environmental Education
- Arkansas Environmental Education Association
- California Association for Environmental and Outdoor Education
- Canadian Network for Environmental Education and Communication (EECOM) /Le réseau canadien pour d'éducation et de communication relatives à l'environnement
- Colorado Alliance for Environmental Education
- Connecticut Outdoor and Environmental Education Association
- Delaware Association for Environmental Education
- District of Columbia Environmental Education Consortium
- Distrito Federal
- League of Environmental Educators in Florida
- Environmental Education Alliance of Georgia
- Hawaii Environmental Education Alliance
- Idaho Environmental Education Association
- Environmental Education Association of Illinois
- Environmental Education Association of Indiana
- Iowa Conservation Education Coalition
- Kansas Association for Conservation and Environmental Education
- Kentucky Association for Environmental Education
- Louisiana Environmental Education Association
- Maine Environmental Education Association
- Maryland Association for Environmental & Outdoor Education
- Massachusetts Environmental Education Society
- Mexico Centro de Información y Comunicación Ambiental de Norte América
- Michigan Alliance for Environmental and Outdoor Education
- Minnesota Association for Environmental Education
- Mississippi Environmental Education Alliance
- Missouri Environmental Education Association
- Montana Environmental Education Association
- Nebraska Alliance for Conservation and Environmental Education
- New England Environmental Education Alliance
- New Hampshire Environmental Educators
- Alliance for New Jersey Environmental Education
- Environmental Education Association of New Mexico
- New York State Outdoor Education Association
- Environmental Educators of North Carolina
- North Dakota Coalition for Conservation and Environmental Education
- Environmental Education Council of Ohio
- Oklahoma Association for Environmental Education
- Environmental Education Association of Oregon
- Pennsylvania Association of Environmental Educators
- Rhode Island Environmental Education Association
- Saskatchewan Outdoor and Environmental Education Association
- Environmental Education Association of South Carolina
- Environment Education Connections of South Dakota
- Southeastern Environmental Education Alliance
- Tennessee Environmental Education Association
- Texas Association for Environmental Education
- Utah Society for Environmental Education
- Vermont Statewide Environmental Education Programs
- Virginia Association for Environmental Education
- E3 Washington
- West Virginia Environmental Education Association
- Wisconsin Association for Environmental Education
- Wyoming Association for Environmental Education

## Getting Around Town

Puerto Rico has fantastic beaches, year-round sun, limestone caves, and great opportunities for diving and snorkeling, as well as a multitude of cultural and historic experience—not to mention amazing food and world-class rum. We invite to you explore a variety of places, from our green mountains to our calm, blue coastal waters.



### Places to Visit

#### Balnearios (Public beaches)

The Puerto Rico National Parks Recreation Department manages 11 spas, or public beaches, across the island located in the most pleasant and fascinating landscapes. Five of these hold the Blue Flag award, an international recognition program awarded to beaches and marinas that meet high standards of safety, services, environmental management, water quality, information, and environmental education. These are La Monserrate spas in Luquillo, Punta Salinas in Toa Baja, Seven Seas in Fajardo, Sun Bay Spa in Vieques, and Boquerón in Cabo Rojo.  
[www.pr.gov/agencias/cdpn/balnearios/](http://www.pr.gov/agencias/cdpn/balnearios/)  
[drdpuertorico.com/parquesnacionales/balnearios/](http://drdpuertorico.com/parquesnacionales/balnearios/)

#### Cabezas de San Juan Nature Reserve, Fajardo

A bioluminescent lagoon, mangroves, coral reefs, dry forests, sandy and rocky beaches set between headlands—visit all these ecosystems in one place: the Cabezas de San Juan Nature Reserve in Fajardo. The reserve includes a popular visitor center. Traditional, night, and thematic tours are offered—on bike, kayak, or trolley—always in the company of a history and nature specialist who will show you everything about the ecosystems, landscapes, and wildlife of the reserve, including the breathtaking view of the northeast tip of Puerto Rico from the top of the Fajardo Lighthouse. Wednesday–Sunday, 9:00 AM to 5:00 PM.

Driving Distance from San Juan: 1½ hours  
Carr 987 km. 5.9 Las Croabas, Fajardo, PR  
787-860-2562 or 787-722-5882 (information and reservations)

#### Caribbean National Rainforest (El Yunque)

El Yunque, nominated as one of the natural wonders of the world, is located in Rio Grande on the east coast of Puerto Rico. The forest offers cool, breezy, crisp air; lush greens; and refreshing spring waters you can jump into. It is one of the most biologically diverse of the national forests, hosting hundreds of animal and plant species, some of which are found only here. El Yunque National Rainforest is one of the places you can't miss.

Driving Distance from San Juan: 45 minutes.  
787-888-1880  
[www.fs.usda.gov/elyunque](http://www.fs.usda.gov/elyunque)

#### Casa del Libro

A small but invaluable jewel in Old San Juan, Casa del Libro is a must destination for any lover of books. Among its treasures are documents signed by Catholic monarchs during the second voyage of Christopher Columbus in 1493 and more than 300 volumes of the fifteenth century.  
255 Cristo Street, Old San Juan  
787-722-3791  
[www.lacasadellibro.org](http://www.lacasadellibro.org)  
[www.seepuertorico.com](http://www.seepuertorico.com)



### **Fundación Luis Muñoz Marín**

The Luis Muñoz Marín Foundation (FLMM) is a non-profit institution incorporated in 1980 that promotes the study of the contemporary history of Puerto Rico, conservation of the environment and natural resources of Puerto Rico and the Caribbean, and cultural manifestations of the fine arts. Four main areas contribute to the vitality of the institution: the Historical Archive; the Historical Building, which houses the Muñoz Mendoza Museum House, the Historical Gardens and El Bohío; the Doña Inés Park; and the educational program. This institution is a living legacy, not only of one of the country's heroes, but of the most productive period of Puerto Rican history. Carretera Estatal #877, Km. 0.4, San Juan 787-755-7979 [www.flmm.org](http://www.flmm.org)

### **Hacienda Buena Vista, Ponce**

Come up to the mountains and follow old channels up to the waterfall that gave its name to Hacienda Buena Vista en Ponce. What used to be an important coffee plantation was also the scene of a unique relationship between land, water, and slavery. Today, at the heart of the former hacienda is a carefully restored historical site containing structures more than a century old and a hydraulic turbine that's the only one of its kind in existence. Completely refurbished and in working condition, the turbine is still powered by the water of Río Canas and serves as the main engine for other machines of the time. Tours available. Wednesday-Sunday, 9:00 AM to 5:00 PM. Driving Distance from San Juan: 1¼ hours Carr 123 km. 17.3, Ponce 787-284-7020 or 787-722-5882 (information and reservations)

### **Hacienda La Esperanza Nature Reserve, Manatí**

Venture knee-deep into wetlands or walk across grasslands that disappear in the horizon. Hike your way through mangroves to an estuary with crystal clear waters, or climb to the top of a karst hill: there is so much to see and do for every skill level at Hacienda La Esperanza Nature Reserve in Manatí. The visitor center at La Esperanza is part of a carefully rehabilitated historical site that conserves the only sugar mill steam engine of its kind in existence, completely restored so you can see it in operation. The old manor house at the site serves today as Para la Naturaleza's regional headquarters, complete with its own scientific lab. Tour the area with an expert guide, or take part in citizen science research about birds, crustaceans, bats, coasts, and archaeology. Wednesday-Sunday, 9:00 AM to 5:00 PM.

Driving Distance from San Juan: 45 minutes.

Carr 616 km. 6.5 Bo Cantito, Manatí  
787-722-5834 ext. 261, 787-552-9515, 787-722-5882 (information and reservations)  
[www.paranaturaleza.org/en/hacienda-la-esperanza/](http://www.paranaturaleza.org/en/hacienda-la-esperanza/)



### **San Juan National Historic Site-El Morro**

The San Juan National Historic Site, San Felipe del Morro, is one of the most beloved landmarks on the island rich in history. This historic citadel, a United Nations World Heritage Site, was designed to guard the entrance to San Juan Bay. Careful efforts preserve the stories of great ambition, architectural beauty, and design and engineering ingenuity. On the grounds outside the fort's walls, enjoy the constant refreshing trade winds, so sit down, rest your feet, and then get ready to run around flying a kite. Walking distance from Caribe Hilton Hotel 501 Norzagaray Street, San Juan 787-729-6777

## Places to Eat

### **Aurorita**

Mexican food at its authentic best, although a little further away. Mariachis, Wednesday through Sunday. 303 Avenida de Diego, Puerto Nuevo, San Juan 787-783-2899  
[www.facebook.com/restaurantaurorita/](http://www.facebook.com/restaurantaurorita/)  
[www.restauranteaurorita.com](http://www.restauranteaurorita.com)

### **Bistro Café**

The best brunch in town—cool, hip, and the omelets are amazing. Pancakes, salads, wraps, and more. Creative coffee options. Breakfast and lunch. Ave. Isla Verde Esq. Júpiter #29, Carolina 787-603-5757  
[www.facebook.com/Bistro-Café-Isla-Verde-1788292321496976/](http://www.facebook.com/Bistro-Café-Isla-Verde-1788292321496976/)

### **Casita Miramar**

Nice atmosphere with authentic local food—Caribbean, Latin, Spanish, Puerto Rican. Lunch, dinner, and late night with full bar, vegetarian friendly. Avenida Miramar 605, Esq. Calle McKinley, San Juan 787-200-8227  
[www.sal.pr/place/casita-miramar/](http://www.sal.pr/place/casita-miramar/)

### **Chicharrón**

Latin American and Caribbean cuisine, paying homage to crispy pork skin! Conveniently located at the Placate de Santurce. Calle Dos Hermanos 176, Santurce, San Juan 787-724-8730  
[www.facebook.com/chicharronpr/](http://www.facebook.com/chicharronpr/)

### **El Mercado Paseo Caribe**

An upscale food court with 15 culinary experiences from award-winning local chefs and purveyors in Paseo Caribe's oceanfront market, often featuring music, art, and entertainment. Coffee, breakfast, pastries, lunch, dinner, wine, and cocktails. Easy walking distance from the Hilton. #15 Avenida Luis Muñoz Rivera, San Juan 787-721-2100  
[www.paseocaribep.com/el-mercado/](http://www.paseocaribep.com/el-mercado/)

### **Gallo Negro**

It could be labeled as “a fantastic bar with amazing food” or a “delectable restaurant with an exciting bar.” A cozy restaurant and tapas bar with creative and foodie-worthy recipes alongside hip cocktails. 1107 Avenida Ponce de Leon, Santurce 787-554-5445  
[www.facebook.com/gallonegrosanturce/](http://www.facebook.com/gallonegrosanturce/)

### **La Pradera**

Very good local food for breakfast and lunch. Caribbean Office Plaza Avenida Juan Ponce De León, Miramar Tel. (787) 723-2795 (787) 723-1001

### **Los Pinos**

Local food, open daily, 24 hours. 655 Avenida Ponce de León, Miramar 787-722-6862  
[www.sal.pr/place/los-pinos/](http://www.sal.pr/place/los-pinos/)

### **Pera Maraya**

Located in the heart of Isla Verde. Great food, including vegan dishes, and intriguing cocktails. A good spot for late night eats. 5970 Avenida Isla Verde, Carolina 939-437-4193  
[www.peramaraya.com](http://www.peramaraya.com)

### **Pizza & Birra**

A great place for connoisseurs of craft beers, offers a variety of more than 45 beers from different countries that can be accompanied by tasty pizzas. #653 Avenida Ponce de León, Miramar 787-729-8866  
[www.sal.pr/place/pizza-e-birra-2/](http://www.sal.pr/place/pizza-e-birra-2/)

### **The Place**

A casual diner serving burgers in local buns, pizza, coffee, draft beer, natural shakes, and gelato. 1368 Avenida Ashford, Condado, San Juan 787-998-4209  
[www.facebook.com/theplaceatcondado/](http://www.facebook.com/theplaceatcondado/)

### **Qué Pezca'o**

An open-air seafood restaurant offering locally sourced, fresh fish. Known for its Spicy Ceviche Nachos with hints of mango, coconut, apple, and pineapple. Lunch, dinner, and drinks. Parque Central, Villa Pesquera, San Juan 787-977-7290  
[quepezcao1.wixsite.com/que-pezcao](http://quepezcao1.wixsite.com/que-pezcao)  
[www.facebook.com/QuePezcao/](http://www.facebook.com/QuePezcao/)

### **Soda Estudio de Cocina**

A casual and creative tapas bar serving lunch, dinner, coffee, and drinks. 562 Calle Cuevillas, San Juan 787-998-9920  
[www.facebook.com/SodaEstudioDeCocina/](http://www.facebook.com/SodaEstudioDeCocina/)

### **Yam Burger**

Great variety of hamburgers with an impressive mixture of flavors and toppings. Vegetarian friendly options. Casual atmosphere, full bar. 621 Avenida Juan Ponce de León, San Juan 787-723-7433  
[www.facebook.com/yamburger1/](http://www.facebook.com/yamburger1/)

## Environmental Sustainability at the Caribe Hilton

The Caribe Hilton is a three-time recipient of the Green Hotel of the year award by the Puerto Rico Hotel & Tourism Association. A Green Key certified hotel, the Caribe Hilton has initiatives in place that last year resulted in:

- Recycling 1,944,920 pounds of waste
- Saving 3,474,655 gallons of water
- Saving 2,863,600 kw of electricity



The **Green Key** award is a leading standard of excellence in the field of environmental responsibility and sustainable operation within the tourism industry as stipulated by the Foundation for Environmental Education, which is the recipient of the 2017 NAAEE award for Outstanding Service to EE by an Organization at the Global Level (see page 41). Here is a small sampling of the hotel's ongoing operational efforts:

- Donate leftover food to a homeless shelter, and food waste goes to pig farm feeding
- Recycle plastic, aluminum, paper, clothes hangers, alkaline batteries, print toners, cell phones, frying oil, cartons, newspapers and magazines
- Housekeeping Staff uniforms made of 100% recycled plastic bottles
- Use earth-friendly cleaning products
- Discarded towels reused as cleaning rags
- Guests rooms feature low flow shower heads, low energy consumption television sets, biodegradable key cards and desk chairs, and pens made of recycled materials
- Environmentally friendly promotional items (such as battery-free flashlights)
- LEED compliant vacuum cleaners
- Paper products are made of 100% recycled material
- Materials printed on 100% recycled paper with 20-30% post consumer content
- Banquet tables made of 100% recycled aluminum
- Reconditioned roofs, pavers, and planters reduce building temperature by 15 degrees

In addition, the hotel participates in and contributes to a number of environmentally and socially responsible programs including:

- Camp Coco summer camp for kids promotes recycling and includes a recycling arts and crafts fair and contest
- Help restore mangroves to protect the shoreline at the Estuary of San Juan from erosion
- Tree planting projects
- Beach cleaning, including a cigarette butt awareness campaign
- Collect and donate prom dresses for high school girls
- Sponsor PLEDGE shoe donations to Headstart preschool programs
- Earth Hour participant
- National Water Quality Monitoring participant

## Going Green with NAAEE

NAAEE is working with **Renewable Choice Energy** to reduce the environmental impact of our conference. You can purchase verified emission reductions (VERs) at the registration desk to help balance the carbon dioxide emissions associated with your travel to the conference and use of resources during your stay in San Juan. Renewable Choice Energy supports a variety of domestic and international carbon projects that conform to leading standards.

**Let's aim for a record year!**



renewable choice  
ENERGY

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# See you next year! Spokane 2018

October 9 -13

Spokane

Experience scenic beauty and nature

## ► Fun Facts:

- ✓ Spokane is one of "6 Great Small Cities for Food Lovers" – *The Wall Street Journal*
- ✓ Enjoy the riotous colors of yellows, golds, oranges, and reds during this time of year.
- ✓ We're the gateway to Yellowstone, Glacier National Park, and the Columbia River.
- ✓ Spokane Falls is the second longest urban falls in the United States—go check it out!
- ✓ Bring extra luggage for the great shopping.
- ✓ Walk, bike, and explore the 60+ mile paved Centennial Trail.
- ✓ It's just 20 minutes to the Idaho border and 115 miles to Canada.



## ► WHAT TO DO IN SPOKANE:

- Ride the gondola over Spokane Falls.
- See the five gardens in historic Manito Park.
- Sip your way through the Cork District or Ale Trail.
- Explore historic Spokane—tour The Historic Davenport Hotel and Browne's Addition.
- Visit Green Bluff—U-pick fruit and fun for the whole family.
- Visit the NW Museum of Arts and Culture and explore 100-acre Riverfront Park.

For more information check out [VisitSpokane.com](http://VisitSpokane.com)

1.888.SPOKANE



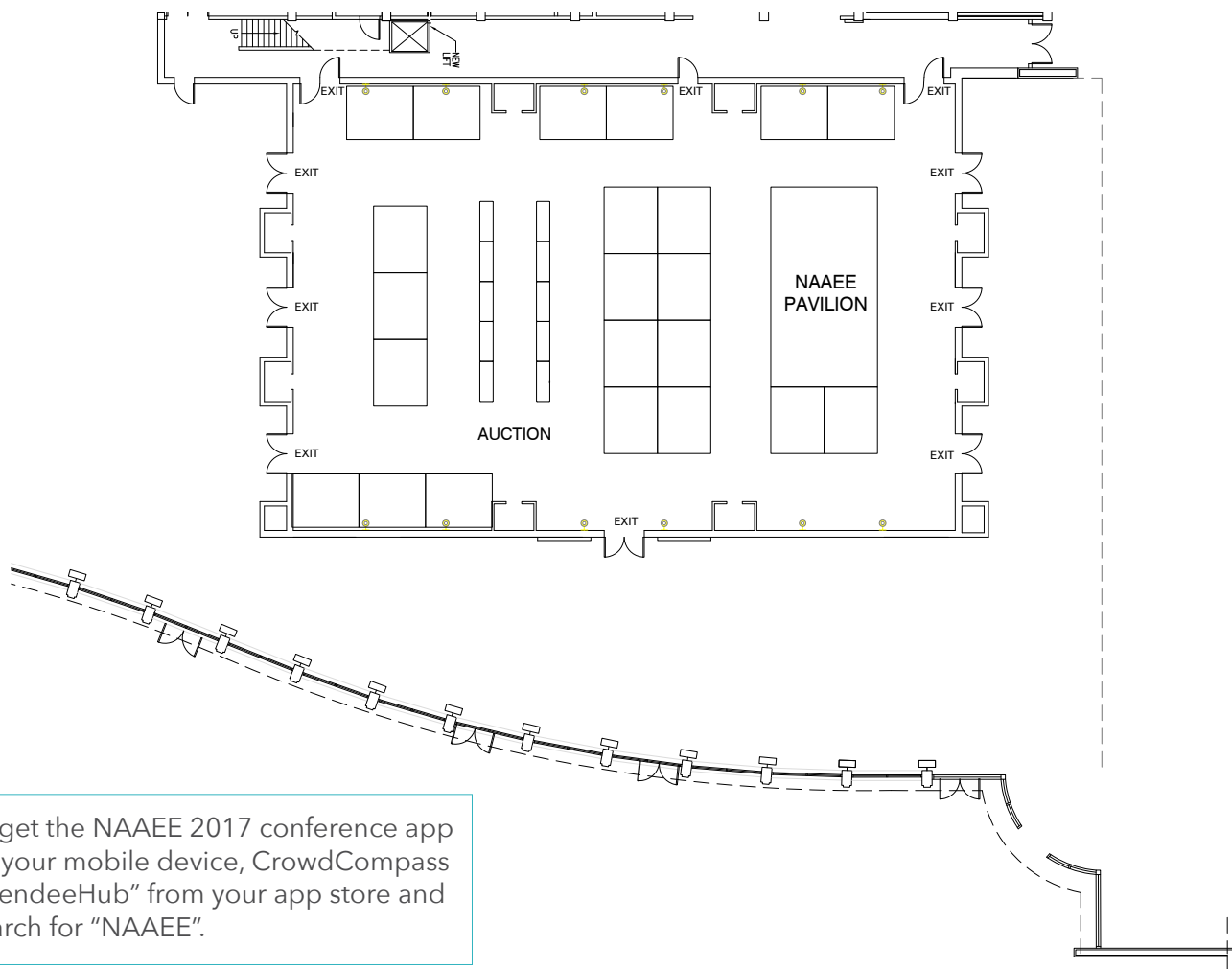
#lovespokane

# Exhibitors

## Exhibit Fair Hours:

Wednesday 5:00 PM-6:30 PM, Thursday 9:00 AM-5:00 PM, Friday 9:00 AM-2:30 PM

Antioch University-New England	206	Project Archaeology,	
DiscoverE	101	Bureau of Land Management	208
Earth Seasoned...#GapYear		Project Learning Tree	309
a documentary film	213	Project Look Sharp	106
Environment for the Americas	108	Project WILD-AFWA	113
Green Schools Alliance	307	School for International Training (SIT)	
HHMI BioInteractive	314, 413	Graduate Institute	204
Isla Mar Research Expeditions	114	Sea Grant College Program-University of	
Merry Lea Environmental Learning Center	214	Puerto Rico at Mayagüez Campus	210
NAAEE	Pavilion	Student Conservation Association	305
North Cascades Institute	110	US Environmental Protection Agency	304
Para La Naturaleza	403	US Forest Service	303
		Wildlife Acoustics	102



To get the NAAEE 2017 conference app on your mobile device, CrowdCompass AttendeeHub" from your app store and search for "NAAEE".



# SAN JUAN 2017

IMAGINE A WORLD

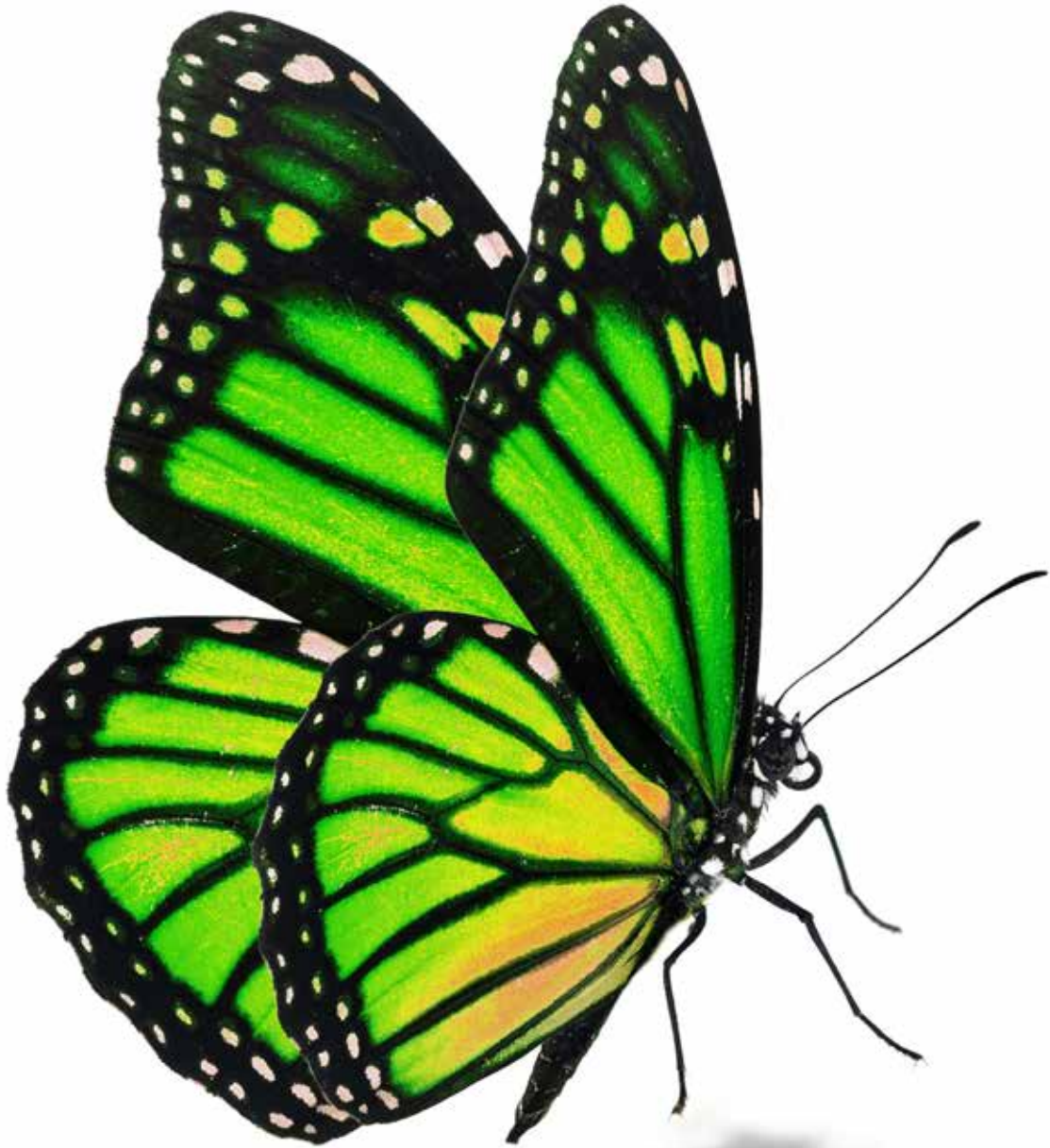


Thank you to our amazing network of volunteers!



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