FLORIDA BEACON

From the President's Desk Ryan Goldman



Florida Association of Environmental Professionals

Winter 2021



Dear FAEP Members,

Happy New Year and Welcome 2021! As an organization of professionals we have certainly demonstrated our strengths in flexibility, pivoting, and rearranging of our priorities. It would have been hard at this time last year to forecast all of the challenges that were faced in 2020. However, I am thankful and appreciative to the FAEP organization, its chapters, and all of the volunteers who have persevered this year to continue to present topical information, forums for interaction and sharing of information, and training to professionals in our field. Staying focused, contributing additional efforts when needed, transformation of an In-person conference to a virtual format, all while providing monthly events is commendable. Thank you everyone.

The New Year and Holiday season provides a time for reflecting on the past and looking to the future. As a reminder, the Florida Association of Environmental Professionals will hold a conference in the fall of 2021. The format whether digital, in-person, or a hybrid of both formats is being discussed and we will provide updates as they are available. The location of an in-person conference is one detail that is undecided as we wait to hear from Chapters interested in hosting this event. The 2019 FAEP Conference hosted by the Tampa Bay Chapter was excellent, and I am looking forward to what 2021 brings.

In addition to the FAEP conference, we have the National conference to host next year. The National Association of Environmental Professionals (NAEP) annual conference that was scheduled for in-person in Fort Lauderdale in May of 2020 was rescheduled and will take place in May of 2022. The vast majority of the planning, scheduling, and content call for proposals will take place this year. If you or someone in your organization would like a national audience of peers to showcase a case study, provide a regulatory update, share a new technology, or present on the NEPA process, please reach out to the FAEP and begin the conversation. We are not only looking for presenters, but conference volunteers to work with the NAEP Conference Committee would be appreciated as well.

Continued on next page...

Next FAEP Board Meeting!!

The next FAEP Board of Directors Meeting is January 25, 2021 at 12:00

(contact info@faep-fl.org for meeting logon information)

FAEP Board of Directors

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Amy Guilfoyle – Past President

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Tim Perry – At Large & NAEP Rep.

Check the last page of our newsletter to determine if you qualify for a discount on your FAEP membership!

Find out more about FAEP
Member's Benefits at our website:
WWW.FAEP-FL.ORG

From the President's Desk cont'd

In a year that was full of uncertainty, I must thank all of those who volunteer for the FAEP organization and its regional Chapters. I know that additional efforts were required of you in many aspects of work and life, thank you for continuing to make time to volunteer for the FAEP and its Chapters. It is your volunteerism that allows us as an organization to continue to operate and move forward. Thank you for volunteering and I hope that you continue to make the time for the FAEP organization in 2021.

Happy New Year as we look forward to continuing our efforts of education, networking, and sharing information in among our interrelated environmental fields. I wish everyone a happy and healthy New Year and look forward to seeing you virtually in the near term and in person within the year.

Thank you and Happy New Year,

Rvan Goldman

FAEP President

NAEP Update

THE 2021 NAEP CONFERENCE AND TRAINING SYMPOSIUM GOES VIRTUAL!

Save the Date for the 2021 NAEP Virtual Conference and Training Symposium co-hosted by NAEP and the Transportation Research Board May 16-20, 2021. NAEP is currently accepting abstracts to showcase your work to an audience of environmental professionals at its 2021 conference. Abstracts can be submitted

Association of Environmental Professionals

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National

for oral presentations, posters, workshops, and special sessions of national concern.

More information here: https://naep.memberclicks.net/2021-conference-call-for-abstracts. Stay tuned to the NAEP website as sponsorship and virtual exhibitor opportunities will be coming soon!

CALL FOR ARTICLES FOR THE ENVIRONMENTAL PRACTICE BULLETIN

The NAEP Environmental Practice Bulletin is published four times a year and emailed to all NAEP members. The newsletter is published in mid-February, May, August and November. Deadline for submissions is the end of the month prior to publication. NAEP is always looking for articles for this great practitioner-based publication. Consider providing NAEP's nationwide audience a bit of your professional experience and insight. For more information about publishing in the Environmental Practice Bulletin visit: https://www.naep.org/publications.

News for the Tallahassee Chapter!

The Tallahassee Area Association of Environmental Professionals has had a busy Fall 2020. The season started with the Chapter's Photo Calendar Contest. Winners will receive a framed print of their photograph and a copy of the 2021 TAAEP Photo Calendar. All TAAEP Members will also receive a calendar in appreciation of their membership.

At the end of September, TAAEP held a Virtual Social. TAAEP Members that registered for the Virtual Social received a \$10 Growler Country coupon to use towards food or drink to be enjoyed during the Virtual Social. As part of the entertainment for the event, we held a competition to determine the best virtual background.

In November, TAAEP Members enjoyed a tour of the City of Tallahassee's new solar facility at the Tallahassee Airport — the world's largest on-airport solar farm! The tour was held outdoors, masks were required, and a tour guide system was used to allow for social distancing. Ben Cowart, the City's manager of alternative energy, discussed the City's solar farm and alternative energy programs, as well as the environmental assessments, permitting and listed species relocations conducted in support of the solar farm project.

The TAAEP's December event was a webinar by Robert Williams and Nicole Poot with Lewis, Longman and Walker on Enforcement of Environmental Laws.

The TAAEP wishes all FAEP Members a healthy and prosperous New Year!

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Household Environmental Sustainability: Save Energy and Money – Emma Fain, SWFAEP

Roughly 20% of greenhouse gas emissions is residential in the United States (Goldstein et al., 2020). Fortunately, you can reduce your carbon footprint by making environmentally sustainable choices that are rewarding to your pocket. Although small changes may not appear to make a large impact on the world, over time a significant amount of energy and money can be saved. Making a few tweaks to your home can cut costs and save energy in the long-term by a combination of replacing and installing energy efficient household items. Looking for products certified as ENERGY STAR by the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy ensures both energy efficiency and economy.

Smart Thermostat

According to Jiakang Lu and others at the University of Virginia, the largest source of residential energy consumption comes from heating, ventilation, and cooling (HVAC). Installing a sensing technology, known as smart thermostats, can be energy efficient and save money. This technology works by turning off the home's HVAC system by using door sensors installed throughout the home. On average, this device can save 28% of energy and can cost as little as \$25 over the counter. In a year, the cost of this technically could potentially cut annual electric air-conditioning by half. The majority of ENERGY STAR smart thermostat products are between \$45 and \$160 on Amazon.

Don't have the money or time to install a smart thermostat? By turning off the HVAC system when sleeping or away from home can save up to 30% of the HVAC energy, saving an average of \$15 per month. In the hot summer months, change your temperature dial to a higher temperature, such as 80 degrees Fahrenheit, when you are leaving your home to save energy and cut costs.

Household Lights

The amount of energy you save depends on the type of light bulb you use. According to the Department of Energy, the most economical choice is the 12 Watts (W) light-emitting diodes (LED) light bulb. The 12W LED light bulb is 80% more efficient than 60W traditional incandescent bulbs and costs only \$1.32 to operate for 1,000 hours. Whereas a 60W incandescent light bulb costs \$6.60 to operate for 1,000 hours. This cost may seem insubstantial, but overall, the use of a single 60W traditional incandescent light bulb is \$46 more per year than a 12W LED light bulb. In addition, the 12W LED light bulb lasts 10 times longer, which can also cut costs from replacing light bulbs.

Most people think of turning off lights when we leave a room to save energy and reduce costs. However, the amount of energy saved depends on the light bulb being used. For example, incandescent lights are the least energy efficient. Only 10% of the energy is light while the other 90% of the energy is heat. Therefore, turning off the lights will keep the room cooler and require less cooling during the summer. Although it is a good practice to conserve energy and always turn off the light, LED lights are so energy efficient that forgetting to turn off lights will result in little energy lost and little cost saved.

Water Use

According to the EPA, you can save up to 30% of indoor water use with high-efficiency appliances and plumbing fixtures. One way to save money on water and energy bills is to repair all leaks in your home. For example, a leaking toilet can waste up to 200 gallons of water per day. Another option is to install low-flow faucet aerators and showerheads to save several hundred gallons of water per year. Low-flow faucet aerators cost only \$5 to \$8 and are easy to install by simply screwing the aerator to the faucet head. The aerator limits the water flow and creates a stream mixed with water and air. As a result, less water and energy are used.

Continued on next page...

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Household Environmental Sustainability cont'd

Another option is to replace standard washing machines that use 20 to 30 gallons of water per load of laundry with washing machines certified as Energy Star. Washing machines certified as ENERGY STAR use only 10 to 15 gallons of water per load of laundry. This may especially save money and energy to those households with washing machines more than 10 years old, costing over \$135 each year in utility bills. Energy efficient washing machines not only save money and reduce your carbon footprint, but also increase the life span of your clothes.

References

Lu, Jiakang, et al. "The smart thermostat: using occupancy sensors to save energy in homes." *Proceedings of the 8th ACM conference on embedded networked sensor systems.* 2010.

Goldstein, B., Gounaridis, D., & Newell, J.P. (2020). The carbon footprint of household energy use in the United States. Proceedings of the National Academy of Sciences.















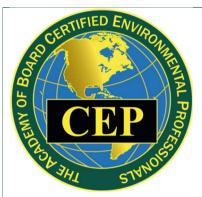
See things differently.

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The Academy of Board Certified Professionals (ABCEP) is the certifying body for NAEP and the lead organization certifying environmental professionals; maintaining exemplary standards of ethics and technical practice; and supporting individuals, our profession, and the public relying upon our services. It is a board-certified recognition. Beyond the acknowledgement by your peers, earning and maintaining the Certified Environmental Professional (CEP) designation is beneficial as a key differentiator when bidding on projects. It also opens new doors personally and professionally.

ABCEP would like to enhance the CEP (and CEP-IT) by growing our numbers and raising the awareness and value of the credential. If interested, you can find more details about the CEP and the application process on our website https://www.abcep.org. If

you email the office (office@abcep.org), our Administrator will follow up to see if you have additional questions about the application process, and offer to assign a mentor to help guide you through it.

The initial CEP application fee is typically \$200. ABCEP is offering a 10% discount through the end of 2020 reducing the initial CEP application fee to \$180. This is a great time to submit your application! We also have a CEP-IT application for those that don't quite meet the CEP requirements.

Making the decision to pursue a certification can feel like a daunting task, but in this climate, having the designation after your name can prove that crucial differentiator. Please share this with anyone in your office that might be interested.

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2020 In the Rear-View Mirror – A Chronicle of Events by Treasure Coast Chapter

It goes without saying that this year has been unique. By the end of spring, the TCC chapter, along with the rest of FAEP, was challenged with finding new and exciting ways to engage our members while the world was shut down and many individuals had become "Zoomed out", in more ways than one.

Before COVID-19 had shut all of us in for the long summer, our chapter had planned some amazing events, three of which we were able to see come to fruition. Our January event was a great success, featuring the only biologist studying manta rays in South Florida. She gave a fascinating presentation about her research on these gentle giants. February brought us to the Loggerhead Marinelife Center where the Florida Inland Navigation District (FIND) discussed their current waterway projects and how those projects impact our marine corridor. In March, we held a laid-back social event at Civil Society, a local craft brewery that sports an industrial taproom onsite.

As April rolled in, our board had to quickly shift gears and figure out how to plan a professional and entertaining event for our members without a fun location or refreshments. What could we offer that might draw interest? Contests and prizes! We decided on a month-long "scavenger bingo" contest with 13 chances to win a prize by submitting photos of the completed scavenger items and achieving a BINGO. The scavenger bingo card included items and activities that encouraged our members to get outside and have some fun in a safe and healthy manner. Activities included taking a walk outside, watching the sunset, and spotting a gopher tortoise. At this point, our board also felt that some live human interaction was much needed, even if it was virtual. TCC's Virtual Science-themed Trivia Night was born and it was a hit! Members were able to safely interact with one another in a relaxed happy hourtype atmosphere in the comfort of their own home.

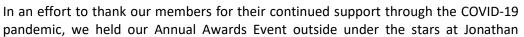
Continuing the contest prize theme, our chapter kicked off the summer with a virtual running challenge. As virtual events started to become normalized our chapter continued the summer with a series of informative presentations via Zoom. They included: a Florida Bonneted Bat presentation featuring case studies from South Florida; a fun and informative collaborative discussion on the global movement "Plastic Free July" showcasing a talented panel of local environmentally friendly small business owners; a presentation on the extensive research efforts on southeast Florida's endangered Leatherback sea turtles; and finally a lunch time event in which the USACE Jacksonville District Program



TCC FAEP Nature Bingo

Manager provided much anticipated guidance on the new Navigable Waters Protection Rule.

With several virtual events under our belt, we wrapped up 2020 with a biodiversity and climate change focused presentation by the founder of the Institute of Regional Conservation in October and hosted a refreshing career mentoring night with students from Florida Atlantic University's Harbor Branch Student Association to mentor students in a virtual round-table networking event in November.





Dickinson State Park. All aspects of this event were planned with safety and social distancing as our number one priority. It was an all-outdoor soiree with ample space for social distancing under one of the park's largest pavilions. It was a beautiful chilly evening which was perfect for roasting up marshmallows around a bonfire from the pre-packaged s'mores kits we provided!

Like most everyone else, our board will not soon forget 2020 and the lessons it has taught us. Our goal was to plan enjoyable and relevant events to keep our members engaged despite being held to a virtual platform. Going forward, we are dedicated to maintaining the same stream of creativity and we will continue to strive to plan events that keep our members inspired and coming back for more no matter what next year brings us!

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NOAA Fisheries Announces New Southeast Inland Mapper

We are so excited to announce the launch of our new pilot program, the Southeast Inland Mapper. My name is Allison Garrett and I work in the Office of Public Affairs for NOAA Fisheries in the Southeast.

The new Southeast Inland Mapper is now available to those wanting to know if they need an essential fish habitat consultation along the Gulf of Mexico and/or Southeast coasts.

This new tool is designed to focus on the inland extent of EFH, complementing the current NOAA Fisheries offshore EFH Mapper.

We are making a formal announcement about the new mapping tool using social media @NOAAFish_SERO, NOAA Fisheries' Facebook page and posting this web story.

We wanted you, our partners, to know about this in case you wanted to amplify our announcement via your own social media platforms.

Thanks so much. We hope you find this new tool helpful.

Allison Garrett

Communications Specialist
NOAA Fisheries/U.S. Department of Commerce



U.S. Disaster Costs Doubled in 2020, Reflecting Costs of Climate Change

The \$95 billion in damage came in a year marked by a record number of Atlantic storms, as well as the largest wildfires recorded in California.

Hurricanes, wildfires and other disasters across the United States caused \$95 billion in damage last year, according to new data, almost double the amount in 2019 and the third-highest losses since 2010.

The new figures, reported by Munich Re, a company that provides insurance to other insurance companies, are the latest signal of the growing cost of climate change. They reflect a year marked by a record number of named Atlantic storms, as well as the largest wildfires ever recorded in California.

Those losses occurred during a year that was one of the warmest on record, a trend that makes extreme rainfall, wildfires, droughts and other environmental catastrophes more frequent and intense.

"Climate change plays a role in this upward trend of losses," Ernst Rauch, the chief climate scientist at Munich Re, said in an

Damage from the Silverado Fire near Irvine, CA., last year.

interview. He said continued building in high-risk areas had also contributed to the growing losses.

Topping the list was Hurricane Laura, which caused \$13 billion in damage when it struck Southwestern Louisiana in late August. Laura was one of the year's record number of 30 named storms in 2020; 12 of those storms made landfall, another record. The storms caused \$43 billion in losses, almost half the total for all U.S. disasters last year.

In addition to the number of storms, the 2020 hurricane season was unusually devastating because climate change is making storms more likely to stall once they hit land, pumping more rain and wind into coastal towns and cities for longer periods of time, Mr. Rauch said.

The next costliest category of natural disasters was convective storms, which includes thunderstorms, tornadoes, hailstorms and derechos, and caused \$40 billion in losses last year. The derecho that struck lowa and other Midwestern states in August caused almost \$7 billion in damage, destroying huge amounts of corn and soybean crops.

Wildfires caused another \$16 billion in losses. Last year's wildfires stood out not just because of the numbers of acres

burned or houses destroyed, Munich Re said, but also because so much of that damage was outside of California. Some 4,000 homes were damaged or destroyed in Oregon alone.

The new numbers come as the insurance industry struggles to adjust to the effects of climate change. In California, officials have tried a series of rule changes designed to stop insurers from pulling out of fire-prone areas, leaving homeowners with few options for insurance.

Homeowners and governments around the United States need to do a better job of making buildings and communities more resilient to natural disasters, said Donald L. Griffin, a vice president at the American Property Casualty Insurance Association, which represents insurance companies.



Damage in the aftermath from Hurricane Laura in Iowa, LA., in October.

"We can't, as an industry, continue to just collect more and more money, and rebuild and rebuild in the same way," Mr. Griffin said in an interview. "We've got to place an emphasis on preventing and reducing loss."

The data also shows another worrying trend: The lack of insurance coverage in developing countries, which makes it harder for people there to recover after a disaster.

The single costliest disaster of 2020 was a series of floods that hit China last summer, which according to Munich Re caused \$17 billion worth of damage. Only 2 percent of those losses were insured, the company said.

Similarly, Cyclone Amphan, which struck India and Bangladesh in May, caused \$14 billion of damage, "very little of which was insured," according to Munich Re. Of the \$67 billion in losses from natural disasters across Asia last year, only \$3 billion, or 4.5 percent, was covered by insurance.

Without insurance, Mr. Rauch said, "the opportunity to recover fast after such an event is simply not there."

From The New York Times Climate and the Environment

Science Shorts ~NPR Short Wave ~ The Science Behind the Headlines			
The Hunt for the World's Oldest Ice	Hit Scientists think the world's oldest ice is hiding somewhere in Antarctica. NPR science correspondent Nell Greenfieldboyce tells us how researchers plan to find it—and why		
How COVID-19 Has Changed Science	2020 was a year like no other, especially for science. The pandemic has caused massive shifts in scientific research – how it's being done, what's being focused on, and who's doing it. Ed Yong of The Atlantic explains some of the ways, both good and bad, that COVID-19 has changed science.		
Meet The Ko'Ko', The Comeback Bird	For nearly 40 years, the Guam Rail bird (locally known as Ko'Ko') has been extinct in wild-decimated by the invasive brown tree snake. But the Ko'Ko' has been successfully re-introduced. It is the second bird in history to recover from extinction in the wild. Wildlife biologist Suzanne Medina tells us a story of how the Guam Department of Agriculture brought the Ko'Ko' back, with a little matchmaking and a lot of patience.		

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FAEP Group Discount Memberships

Did you know that FAEP provides a discount on our membership to employers who have 5 or more members? If your company or organization qualifies for the Group Membership you save \$5 on each FAEP new member or renewing member, lowering the FAEP membership fee from \$40 to \$35 for everyone from your company or organization. If your company or organization is on this list, you are eligible to join or renew at the discounted Group rate. Some of our member organizations renew all of their employee-members at the same time with a single payment. The FAEP Board would like to extend a thank you to the following employers for supporting their employee's professional development and the FAEP mission:

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Broward County	EarthBalance	Johnson Engineering Inc.	Turrell, Hall & Associates
Cardno	Flatwoods Consulting Group	Mosaic	USF
Clark Environmental	Florida Water Management Districts	MSE Group	WGI
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