

October News



Photo By: Aniya Bourne with Bourne to Film

EDITOR NOTE

This past month, Lana Bess has stepped into the role of the Newsletter Editor. With previous experience in Canva and graphic design, we are excited to have her grow and develop our monthly newsletter.

This past month we had our first Guest Speaker from UCAN Farms, Delphine Sellars, at our monthly chapter meeting. Delphine gave an inspiring presentation on the history and mission of UCAN Farm, and we hope to continue partnering with them.

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Join Us!

Our Next Monthly Chapter Meeting

will be *in person* (and via Zoom if you are remote)!

When: 10/17/2023

Where: 421 N Harrington St,

Raleigh. Room 420 (parking

garage next door or street

parking on Glenwood St)

Time: 5:30pm

Zoom Link: HERE

Chipozo, Guatemala

The work to prepare for doing Phase 3 of the Chipozo Solar-powered water pumping project in December continues at a rapid pace. Phase 3 is the final phase of the project in which we will install and test the actual solar powered pumping system which will use the two large tanks and the ten community water access points built in Phase 1, and the water conveyance and distribution piping built in Phase 2.

The plan is that the EWB RTP team will travel to Guatemala on November 30th to do final preparations, and then that the Guatemala Solar team will arrive on December 4th to commence the installation and testing of the system. Of course the community will be heavily involved in all of the work and also in learning how to operate the system.

During the last month, the team in Guatemala has completed the building of the "caseta" which is colocated at the site where the solar panels will be installed. The caseta will house the pumping system control components and also will be where the community guard will stand their watch. Here is a photo of the caseta with team member Rudy Lem showing the strength of the techo (roof). Notice the beautiful countryside at a mile of elevation in the mountains:



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Another recent accomplishment was connection of the piping to the upper tank as shown in the following photo. This configuration will be used to conduct a leak test of the supply and distribution piping using rainwater that is being collected in the upper tank as was described in the last newsletter.

In October the effort will include conduct of the leak test, doing an update to the community survey, and making final decisions on procurement of the chlorination system. Stay tuned for those updates, and let's hope that the current political unrest is resolved both for the sake of the people as well as for the project.





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Triangle Land Conservancy Projects

The footbridge at Swift Creek Bluffs Preserve in Cary, NC has been completed. This project was something the preserve owner, Triangle Land Conservancy, had wanted replaced for years and were happy to see EWB-RTP help with design and labor for the non-profit. Special thanks to team member Mark Jolly and his friend Randy Hrnicek.





The <u>Triangle Land Conservancy</u> (TLC) has asked EWB-RTP to help build an outdoor learning center for the Knightdale school district at their Williamson Preserve. The goal is to use materials from the preserve. The project is part of an educational outreach expansion which adds to other resources there such as mountain bike trails, walking trails, rand egenerative farming center. TLC management is finalizing their requirements. The project is expected to be completed by spring. The preserve is located south of Knightdale.



Alan Davidovich <u>adavoleyahoo.com</u> 919.741.3033

Anyone interested in participating in designing and building benches, gates, billboards, fences and such out of stuff from the woods, get your boots and coon-skinned caps out and contact Alan Davidovich.

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PMEL - Collecting Data/Evaluating Results

Newsletter Article Part 2

In Part 1 of this series (September newsletter), Introduction to PMEL, the purpose, general design, and benefits of using the PMEL framework on every EWB project were presented. EWB is about providing solutions, not executing engineering projects. In this article we will dive a little deeper into one of the key aspects of PMEL; collecting data and analyzing results.

Design Data

We can talk about two kinds of data; both are important. The first is information (both qualitative and quantitative) necessary to understand the design requirements and constraints, evaluate options, and generate a design that will meet the needs of the partner today and long into the future. The value and importance of this data is obvious. Let's call this Design Data, but it is design in the broadest sense and includes things like how the community is organized, topography, availability of land; availability of materials, construction equipment and power; technical competencies and availability of labor of the partner; and how much the community is willing to spend to operate and maintain the new system. Of course, technical data like required bridge capacity, water flow, or power; GPS coordinates; water source quality & elevation; and drawings of the existing system are necessary to design a solution. It is fair to say that this type of data would be collected in any well-run engineering project even without the PMEL framework.

Monitoring Data

The other kind of data, let's call it Monitoring Data is closely integrated with the PMEL framework. This information is aimed at three specific purposes:

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- a) allow us and our partners to understand how our solution is actually working
- b) collect system performance data in a standardized form so that the results/ benefits from each EWB-USA projects can be rolled up as an aggregate total of all EWB projects and
- c) capture the realized impact of the project on the quality of life of our partners. The aggregation data of (b) and (c) are used to demonstrate the effectiveness of EWB-USA to potential donors, the UN (we are affiliated), and potential partners like ASCE.

The type a Monitoring data would be things like how much water did we deliver each month? how many days was the water quality off spec? what's the on-stream time? which scheduled maintenance activities have been completed? what proportion of the community has paid their monthly water dues? Satisfaction level of the community? During the design & construction phases typical metrics like actual spend/ budget and project status vs planned schedule are important.

The type b data are standardized by EWB HQ as much as possible so that the numbers from different project teams can be meaningfully added together. For example, the same questions are asked of all water projects, and the answers are required in fixed engineering units and format, or drop-down lists. Questions for a water system include: community % satisfaction from a survey. Water quantity and quality – dry period and wet period, were women consulted in the design? percentage of system users practicing safe water storage, water collection distance, is scheduled maintenance being done?

The type c data is more-challenging to collect but of most interest to local and national donors.

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One important thing to keep in mind is impact data collected after the project is operating is useless without baseline data collected before the EWB project. That is why the baseline data collected during the Assessment and perhaps early Implementation phases is so important. You can't measure improvement if you don't know where you started. It is great when we capture improvements in health, time spent collecting water, educational outcomes, financial improvements . . .

Evaluation

Evaluation is taking PMEL data and turning it to information, and, most importantly, action. All sorts of steps might be taken by the project team when it is aware the project execution or system performance or community engagement is not as planned. EWB calls itself a learning organization because it prides itself on one chapter learning from another and the national organization improving resources and policies to make every chapter better. How is that done? Read all about Lessons Learned in part 4 of our series. Up next month – Truly Communicating and Partnering with the Community.

Any questions / comments about this series? Feel free to contact Alan Zagoria



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Chapter Activities

Some highlights from Septembers group events. From top-left counter clockwise: we collected trash at Shelley Lake in Raleigh, finished the foot bridge at Swift Creek Bluffs, cleaned bottle caps with UCAN, and had drinks after our chapter meeting. We will be doing many similar events in October too!











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Chapter Activities - Upcoming Events

- 1. **Thursday, Oct 19** is the NC State Fair. Be a part of Hunger Relief Day at the NC State Fair with EWB RTP! Fairgoers can bring six cans of food to the fair gates to exchange for free admission. Hunger Relief Day began at the N.C. State Fair in 1993 and since then, fairgoers have donated over 5.8 million pounds of food to the Food Bank of Central & Eastern North Carolina and its partners. It has become one of the largest one-day canned-food drives in North Carolina.
- 2. **Umstead Group Hike!** Stay fune of For dates, we will decide in the chapter meeting.
- 3. **Social Event In Need of Location** We want to get everyone together for an EWB-RTP social event dancing, exercise, all fun. The problem is that we have not yet identified a location. Can you suggest a location large enough for us to get together, sit, and dance. With availability of a display screen? Please contact Alan Z (<u>alzagoria@gmail.com</u>) with any leads.

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Community News

EWB is centered around community relationships, this is at the core of EWB's mission. That goes for the communities we partner with, but also our internal community within the chapter. A new segment for our newsletter Community News is an effort to connect our members across the state with their exciting news and updates. If you have something fun you want to share with the group at the next newsletter, please submit here: Newsletter Submissions

Please welcome to the world our member Vessi Radieva's new nephew, Conrad! Born the evevning of October 16th. Happy Birthday Conrad!

Emma Guertin co-authored a new published article in Water Environment Federation's magazine, WE&T. The article discusses fugitive methane identification campaign that Brown and Caldwell performed at a wastewater treatment plant - the first of its kind in the USA!



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Volunteer Spotlights

Volunteer Spotlights are EWB RTP members that have been nominated by other members to give recognition for their hard work, dedication and commitment to EWB. Whether they successfully led a project to helped coordinate a social event, every activity plays a role in growing EWB RTP and serving our local and international communities. If you have someone you would like to nominate for next month, please submit a nomination here.

This month, members Mark Jolly and Alan Davidovich were nominated for their leadership and dedication to the Swift Creek Bridge Project. Mark Jolly and Alan Davidovich really went above and beyond for our Swift Creek Bridge project and that's why they deserve to be recognized as October Volunteers of the Month. They both went to the site on numerous occasions and had several meetings with TLC to ensure the project was finished on time and without any mishaps. Both were instrumental in the design plans, order and delivery of materials, and of course, the bridge construction. We measured and then we measured again and a third time just to make sure this footbridge was executed to the best of our abilities. I really enjoyed working with both of them and they approached this project with patience, good humor, and dedication. Next time you're in Raleigh, please follow the small trail leading straight from the parking lot and see our wonderful bridge!

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Volunteer Spotlight



Mark Jolly grew up in Lansing NY along the east shore of Cayuga lake. He attended Rochester Institute of Technology and University of California at Davis earning degrees in Mechanical and Aerospace Engineering.

In 1990, Mark and his wife Karen relocated to Raleigh NC where they raised their two sons Noah and Sam. Mark's career has focused on the modeling, design and control of electromechanical systems used in various industries including automotive, industrial, and aerospace. He retired from Lord Corporation in 2019 where he had most recently held positions of Director of Engineering and Chief Engineer.

Mark and his wife now travel about half-time. When not traveling, Mark enjoys woodworking, hiking and volunteering. He joined EWB-RTP in the Spring of this year with ambitions to work on international engineering projects that have a positive impact on communities. He is currently a team member on the Chipozo Guatemala project and just completed working with a team to design and build a 50 foot elevated walkway for the Triangle Land Conservancy at Swift Creek Bluffs NP.

Favorite Movie: The Gods Must Be Crazy

Favorite Activities: Seeing live music. Long hikes in beautiful

places.

Favorite Beer at the Moment: NE IPAs from Burial or New

Anthem

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Volunteer Spotlight



Alan Davidovich grew up in Connecticut. He graduated from the University of Connecticut with a degree in Mechanical Engineering. He has spent 39 years working in aerospace and construction equipment design and manufacturing.

Davidovich raised his family in North Carolina, China, and Illinois. He retired to North Carolina in 2022. He enjoys road biking, traveling, good food of all kind, the beach, birds, earthing, and farmers markets.

Favorite movie: Raising Arizona Favorite snack: See next answer.

Favorite beer at the Moment: The next one.

On the snack topic: Cheetos Puffs or Cheetos Crunchy (original)?

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National News

<u>Annual EWB Conference</u> is coming up on November 9-11 in Reno! Check out the keynote speakers <u>here</u>.

Sunday, October 15 is an important day as it marks Global Handwashing Day. This day is dedicated to raising awareness about the importance of handwashing with soap as an effective and affordable way to prevent diseases and save lives. Handwashing is a simple yet powerful action that can significantly reduce the spread of germs and prevent infections.





Sunday, November 19 is World Toilet Day. This day serves as a reminder of the importance of access to proper sanitation facilities for everyone across the globe. Access to clean and safe toilets is a basic human right, yet millions of people worldwide still lack access to proper sanitation facilities. World Toilet Day aims to raise awareness about the global sanitation crisis and promote action to address the issue.

Contact Resources



ewb.usa.rtp@gmail.com



https://ewb-rtp.org



https://ewb-rtp.org/chaptercalendar/



https://www.meetup.com/ EWB-USA-RTP-Chapter

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Meet the Team

Executive Board



Emma Guertin
Chapter
President



STEPHEN KRIDEL
CHAPTER
VICE PRESIDENT



Vessi Radieva Chapter Secretary



Bruce Binney
Chapter
Treasurer

Committee Chairs



Mark Swallow Fundraising



Alan Zagoria Membership



Lana Bess
Communications



Kent Lioret
Spanish



JOHN LLOYD
WEBSITE

Thank you!

Contact Resources



<u>ewb.usa.rtp@gmail.com</u>



https://ewb-rtp.org



https://ewb-rtp.org/chaptercalendar/



https://www.meetup.com/ <u>EWB-USA-RTP-Chapter</u>

For past newsletters, check out the archive on our website: https://ewb-rtp.org/about-us/

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