



CHNEP Management Committee Meeting

Friday September 8th, 2023, 9:00 am – 1:00 pm

Charlotte County Centennial Park

Large Multipurpose Room

1120 Centennial Blvd., Port Charlotte, FL 33953

Management Committee Meeting Draft Minutes

Members Present:

Rachel Hart	U.S. Environmental Protection Agency
Steve Rabney	U.S. Army Corps of Engineers
Melynda Brown	Florida Department of Environmental Protection
Curtis Knowles (alternate)	Central Florida Regional Planning Council
Margaret Wuerstle	Southwest Florida Regional Planning Council
Kim Fikoski	South Florida Water Management District
Vivianna Bendixson	Southwest Florida Water Management District
Dave Hutchinson	Sarasota-Manatee Metropolitan Planning Organization
Carrie Schuman	Sanibel-Captiva Conservation Foundation (alternate)
Claire Jubb	Charlotte County
Lesli Haynes (alternate)	Lee County
Alissa Powers (alternate)	Manatee County
Gaye Sharpe	Polk County
Paul Semenac (alternate)	Sarasota County
James Ink	City of Fort Myers
Elizabeth Wong	City of North Port
Ryan Ruscitti (alternate)	City of North Port
Holly Milbrandt	City of Sanibel
Christina Rimes	City of Venice
Harry Phillips	City of Cape Coral (CHNEP CAC Co-Chair)
Mark Walton	Southwest Florida Water Management District (CHNEP TAC Co-Chair)
Kali Spurgeon (alternate)	Florida Fish & Wildlife Conservation Commission

Others Present:

Jennifer Hecker	Coastal & Heartland Natural Estuary Partnership
Nicole Iadevaia	Coastal & Heartland Natural Estuary Partnership
Sarina Weiss	Coastal & Heartland Natural Estuary Partnership
Megan Sosbe	Coastal & Heartland Natural Estuary Partnership
Keara Abel	Coastal & Heartland Natural Estuary Partnership
Rick Durbrow	U.S. Environmental Protection Agency
Drew Parker	U.S. Environmental Protection Agency
Kevin H. Miller	U.S. Department of the Interior
Emily Lang	Florida Department of Environmental Protection
Liz Seigert	Florida Department of Environmental Protection
Stephen M. Suau P.E.	Progressive Water Resources

Agenda Item #1 – Call to Order and Introductions — Claire Jubb, Co-Chair

Co-Chair Claire Jubb called the meeting to order at 9:03 AM.

Agenda Item #2 Additions or Deletions — Claire Jubb, Co-Chair

PAUL SEMENEC MOVED, SECONDED BY HOLLY MILBRANDT TO APPROVE THE CONSENT AGENDA ITEMS AS PRESENTED. THE MOTION WAS CARRIED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

Agenda Item #3 – Innovative Nutrient Reduction Projects for Improving Water Quality — Stephen M. Suau, P.E.

Stephen M. Suau presented about nutrients, stating some areas of Florida that are naturally high in phosphorus. Nitrogen can exist as a gas, liquid or solid. Like the water hydrologic cycle, there is a natural nitrogen cycle. With 78% in the air you breathe, nitrogen is the most common element in the atmosphere. The nitrogen atoms are hard to break up but there are nitrogen-fixing bacteria that is naturally occurring that can convert ammonia nitrogen to nitrate. Nitrogen consists of organic nitrogen, nitrite, nitrate, and ammonia nitrogen (in nature with most of it being organic nitrogen). In general, waste products, septic tank effluent, reclaimed water, etc. can be almost 75% nitrate. This means that this water is like a liquid fertilizer.

Around 1940, 2 inventors – Haber and Bosch, discovered how to extract nitrogen out of the atmosphere and that led to the Green Revolution. In the agriculture industry in Florida, people are going back to building soil because the herbicides and pesticides are so expensive that farmers have been paying more per acre for input than for output. As a result, compost piles/operations are becoming more popular due to market demand. There are 2 current metrics used – one is the amount of dollars per pound that nitrogen reduced and the other is the total annual amount of nitrogen removed. The Florida Department of Health did some of the best research that this presenter has ever seen. Over the course of 4 to 5 years, the question they were trying to answer was if there was anything that they could do in the design of septic systems that would remove nitrate. What they found was that if they put some kind of carbon layer in an anaerobic environment (such as wood chips or sawdust which are carbon sources that act as a host) it would facilitate the conversion of nitrate to dinitrogen.

In 2016, the State of Florida passed the Springs and Aquifer Protection Act which set in motion that if a septic system was installed, it was required to have one of these carbon layers. One of the examples of this passive nutrient reduction system is Palmer Ranch (Sarasota County). It includes 2 gabion baskets filled with wood chips and an internal perforated PVC pipe system. Low flow rated pumps are included to cycle the pond water through each of the systems which together are estimated to be recycling the pond volume in 29 days (approximately 1 month). Another example is Lakewood Ranch. Braden River Utilities (BRU) is the exclusive non-potable water provider for the growing 50-square mile Lakewood Ranch service area. Irrigation water sources include groundwater, surface water, City of Sarasota AWT reclaimed water, City of Bradenton AWT reclaimed water, and Manatee County non-AWT reclaimed water. BRU, with cooperative funding assistance from SWFWMD, implemented a passive nutrient reduction system with the objective of reducing nitrogen and phosphorus concentrations in up to 1 mgd (million gallons per day) of Manatee County's reclaimed water to meet AWT standards using various organic carbon medias. In the Charlotte Harbor Watershed, at the Pioneer Mitigation Bank, there are about 3 miles of passive nutrient reduction systems which edge along the riverine corridors of

Troublesome Creek and Hickory Creek. Many of these projects are funded by the private sector which is a good sign that these techniques are cost-effective.

The technology can go as far as the imagination can reach. Wherever there are nitrate problems (which is common) in agriculture, in urban wastewater – there are many ways to implement this. There are opportunities all around. Once it is understood what this will do for water/the environment, contractors (e.g., irrigation, media) usually get right on board. Biochar is another passive nutrient reduction media. It is produced by heating organic material with limited or no oxygen. The resulting media is stable carbon/charcoal that can be used as a soil amendment and may be effective in absorbing phosphorus.

One member asked if you could use this technology in saltwater environments and/or canal systems. Mr. Suau said that it is possible by putting these trenches in and that is a real cost-effective way to apply the technology. Another member was wondering that since all new septic systems must have a denitrification layer if there was an app to install this in existing systems. Mr. Suau said that it is cheaper to install a new system then trying to retrofit an old one. One member asked if Mr. Suau could come to North Port to assess the functionality of its canals and Mr. Suau said that would a great place for them to save North Port some money. Mr. Suau was asked about the effectiveness of biochar, and he said that he has not had much success other than in phosphorus. A member asked if the compost industry is working towards supplying good compost to big box stores. Mr. Suau said that there are compost companies that are doing it the right way, but the demand is exceeding the supply.

Agenda Item #4 – Public Comment on Agenda Items — Claire Jubb, Co-Chair

There was no public comment.

Agenda Item #5 – Management Committee May 12, 2023 Meeting Minutes — Claire Jubb, Co-Chair

HOLLY MILBRANDT MOVED, SECONDED BY ALISSA POWERS TO APPROVE MAY 12, 2023 MEETING MINUTES. THE MOTION WAS CARRIED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

Agenda Item #6 – TAC Report -- Mark Walton, TAC Co-Chair

Mark Walton, the Technical Advisory Committee (TAC) Co-Chair, provided a report from the August 10th, 2023 meeting. At that meeting, Bill Christie with the USDA Forest Service gave a presentation on using Google Earth Engine to study changes in vegetation - including mangroves - following Hurricane Ian. His discussion was focused on the capability to map emergent and submerged vegetation, as well as the effect of time series by using the interface.

Another presentation was given by Dr. Joshua Daskin from the Archbold Biological Station. He reported on the major findings from the recent Florida Wildlife Corridor Water Benefits Report including that the Florida Wildlife Corridor protects not only the wildlife corridor but also water resources including estuaries and wetlands. There is, however, work that still needs to be done in the spring recharge areas. The Committee discussed the differences between the two state programs conserving lands in the Florida Wildlife Corridor- the FDEP Florida Forever Program and the FDACS Rural and Family Lands Protection Program.

The Committee was then briefed by Dr. Yonas Ghile with the Southwest Florida Water Management District. He presented on the Draft Minimum Flows for Horse Creek and Charlie Creek

the reviews for which are to be completed October 9th, and after that, the district will present the minimum flows to the District Governing Board and begin the rule-making process. There was then discussion on the peer review process as well as the reasoning behind the different sub-blocks for Block 3. Discussion also included the potential reduction in sediment transport, as well as the in-stream fish assessment that informed the Draft Minimum Rule.

Stephen Suau also gave a presentation to the group. It was on the addendum to the Community Playbook for Healthy Waterways, and he discussed how water quality and quantity data can provide useful management metrics. The discussion focused on identified sources, in this case trailer park infrastructure and how it contributes to the watershed nutrient load. The Committee also discussed the use of reclaimed water at golf courses, the need for a regional “Reclaimed Water Fertilizer Calculator” tool, and different strategies to communicate it to the public.

Dave Blewett with the Florida Fish and Wildlife Conservation Commission presented on the work that FWC-FWRI staff conducted as part of a RESTORE funded grant – titled “Investigation of Sport Fish Nurseries and Forage Fish Abundance in Association with Restoration Efforts in Charlotte County.” The discussion was focused on the conditions and the salinity of the ponds inhabited by juvenile fish. Committee members also discussed how juvenile fish make their way out of the ponds and into the estuary.

Finally, the TAC engaged in discussions on the types of algae blooms being seen in different parts of the CHNEP area. Discussion was focused on the recent proliferation of cyanobacterial and dapis in various places throughout the CHNEP area and the need to explore mechanical removal techniques. All these TAC presentations as well as any others may be found at <https://chnep.org/technical-advisory-committee> or the CHNEP YouTube channel.

Agenda Item #7– CAC Report — Harry Phillips, CAC Co-Chair

Harry Phillips, Citizens Advisory Committee (CAC) Co-Chair provided a verbal report from the August 23rd, 2023 meeting. This virtual meeting was chaired by Debi Osbourne and the expectation is that moving forward, CAC meetings will be in-person. Among topics that were discussed, the CHNEP team updated CAC members about their recent public outreach events, the numerous partnership meetings that CHNEP staff attend, and about the upcoming 2024 calendar of which over 26,000 will be printed. Committee members were asked to “Save the Date” for the upcoming 2024 Climate Summit which will take place February 28th and 29th. All members were encouraged to seek out presenters with relevant topics who might be interested in presenting at the Summit.

There were three new grant applications received. CAC members reviewed requested amounts and CHNEP staff recommendations and provided additional feedback. The three applications were: (1) A grant application to engage the public in the planting of trees and littoral species at the Estero Community Park Shoreline, (2) A grant application to conduct ecological assessments and water quality monitoring at Lemon Bay – Cedar Point Environmental Parks with area high school students, and (3) A grant application engaging the public in workshops about bat-houses and bird nest-boxes and implementing the installation of both in the urban areas of Polk County.

Additionally, some recently completed CHNEP Conservation Grants were presented. Two were large multi-event waterway clean-up initiatives to remove marine debris scattered because of Hurricane Ian: The Healthy Org. underwater clean-ups to remove over 4,000 pounds of debris in Lee County and Suncoast Reef Rovers underwater clean-ups which removed more than 7,700 pounds of trash from the

coastal waters in Sarasota County. (Mr. Phillips requested that videos of the underwater clean-up presentations be uploaded to the CHNEP website so that everyone can appreciate the amount of work that these organizations did.) As for the Southwest Florida Fish and Wildlife Conservation area update, the Committee was told that the USFWS completed the public scoping meetings regarding the proposed establishment of this new conservation area (<https://www.fws.gov/project/proposed-southwest-florida-fish-and-wildlife-conservation-area>).

Jim Beever (retired, formerly of SWFLRPC) presented on the “Persistence of Vision” – explaining how habitat preservation and restoration projects are usually multi-year endeavors. Finally, CHNEP staff gave a presentation about how interactive adult/young adult games can engage the public and students in conservation issues. CHNEP has its own Watershed Game to loan to any members who may be interested (training available <https://seagrant.umn.edu/watershed-game>).

Agenda Item #8 – CHNEP Update — Jennifer Hecker, CHNEP

CHNEP’s Executive Director, Jennifer Hecker, presented on programmatic activity occurring since the last Management Committee meeting. CHNEP planned and executed CHNEP TAC and CAC meetings in August as well as Management and Policy Committee meetings in May (that included a *One Water: Theory v. Practice* presentation which is available for viewing at the CHNEP YouTube channel). The amended FY23 EPA 320 Work Plan and Budget and the amended FY22-24 BIL Work Plan and Budget received approval at the May Policy Committee meeting. The FY24 EPA 320 Work Plan and Budget, the FY24 EPA Novated 320 Work Plan and Budget, and the FY24-23 EPA BIL Work Plan and Budget were approved and submitted to the EPA with respected grant applications on June 1st. The CHNEP “Equity Strategy” received EPA approval (which waives the matching requirement for BIL funding); all Management Conference Committee meetings for 2024 have been scheduled and are posted on CHNEP.org; and budget reminder letters to CHNEP contributing members for FY24 have been sent out.

In regards to Finance and Grants, the completed FY20-22 grant closeout reports and documents were submitted to the EPA with an application to novate (transfer) the remaining funds to the new fiscal host – Charlotte County – in the form of a new grant; mid-year and 3rd quarter grant reports were submitted; CHNEP Conservation Grant responses to the spring awardees were sent out; CHNEP reviewed/revised the budget for FY24 and FY25 with the county fiscal team, as well as completed FY24 and FY25 budget adjustments and 4th quarter FY23 budget projections; and all final FY23 quarterly invoices for the 2nd quarter as well as additional invoices for ongoing deliverable-based technical and outreach projects were processed. The CHNEP team has attended numerous partnership meetings.

As part of these community partnerships, CHNEP gave several presentations this past cycle including:

- Presented at the Manasota Beach Club on *The Impact of Hurricane Ian on the Charlotte Harbor and Other Estuaries in Southwest Florida*
- Participated as a key stakeholder in the South Florida: Clean Coastal Waters Act Listening Sessions – hosted by the NOAA in partnership with the EPA, for the Interagency Working Group on the Harmful Algal Bloom and Hypoxia Research and Control Act (IWG-HABHRCA)
- Served as a panelist at the Resilient Lee Recovery Task Force Critical Infrastructure Workshop on Natural Resources (these workshops are held to help shape and inform the Recovery and Resilience Plan for Lee County)

- Served as a panelist at FWC Landscape Conservation Summit Panel Discussion: *Leaders in Conservation – A Vision for Florida’s Future*
- Gave a poster presentation on *Habitat Restoration Needs Planning* as well as an oral presentation on the collaboration to restore Charlotte Harbor Flatwoods
- Was the sponsor of the FWC Summit and helped the event host to plan a field trip to view projects in Charlotte Harbor and along the Peace River – contacting presenters and holding coordination meetings throughout May
- Presented at the Greater Everglades Ecosystem Restoration (GEER) conferences on *Moving Water to Restore Rivers, Wetlands, and Estuaries* in the Caloosahatchee Basin

Other outreach events include: CHNEP planned and hosted the 2023 Watershed Summit which included approximately 300 registrants who gathered to discuss research, restoration, and environmental issues in Central and Southwest Florida; hosted a booth at the “Wild About Nature” Festival which was held by the Conservation Foundation of the Gulf Coast at which CHNEP distributed educational materials to over 100 guests; hosted a booth at the Conservation Carnival which was organized by the Ding Darling Wildlife Society; partnered with the Conservation Foundation of the Gulf Coast to host a volunteer and outreach event at the Myakka Headwaters Preserve in Manatee County; partnered with Keep Charlotte Beautiful to host a post-Hurricane Ian Waterway Cleanup on the West Wall of Charlotte Harbor (during which 57 volunteers collected 2,013 pounds of debris from the mangroves, banks and waterways); CHNEP drafted scopes and now have the purchase orders for contractors to produce both the FY24 CHNEP small publications and the 2024 calendar (with the photos selected from contest submissions CHNEP drafted HH inset on climate and hurricane connection – the 2024 calendar is in design and going to print shortly); CHNEP drafted and sent out a call for abstracts for the 2024 Southwest Florida Climate Summit (February 28th and 29th, 2024 <https://www.chnep.org/2024-climate-summit>); created a Lower Charlotte Harbor Flatwoods and South Lee County Watershed Initiative brochures (printed copies are available at member’s request).

Public outreach metrics are continuing to trend upwards including 1,902 Facebook followers with 36 new Facebook likes – 1,603 total likes, 6,041 subscribers for CHNEP educational mailings, 3,733 unique visitors and 15,334 page visits to the website, 7,023 YouTube views and 52 subscribers, and 26 new Instagram followers with 528 total followers. Ms. Hecker said that the CHNEP is a “small but mighty team” and thanked all the team members are responsible for the work that CHNEP does. She also encouraged Committee members to reach out if there is anything that they would like to see at a future Committee meeting. One committee member commended CHNEP on the cleanup, noting how much Styrofoam it would take to reach that many pounds.

Agenda Item #9- Amended FY2024 EPA Work Plan & Budget — Jennifer Hecker, CHNEP

Ms. Hecker went over changes to the cover, table of contents and the Policy Committee page including adding “Amended September 21st, 2023”. Task 3 subtasks were reordered so that Lee Comprehensive Vulnerability Assessment becomes 3.4 after Charlotte and the following counties were renumbered accordingly to follow funding year; Yucca Pens Hydrological Restoration Project Phase I has been added as Task 4.5 and renumbered; Restoration/Research TBD Project was moved to 4.6 accordingly; and DeSoto representative Steve Hickox and Southwest Florida Water Management District representative John Hall have been updated.

With regards to changes made to the funding tables, in Table 1, Public Outreach was changed from \$105,612 to \$115,068 to reflect the rising printing and shipping costs related to the annual CHNEP calendar and Research and Restoration was changed from \$1,030,747 to \$1,021,291 to partially cover the increase to the public outreach budget. In Table 4, some changes were to details on projected travel costs, but overall, the travel budget remains the same at \$25,000. In Table 5, the Public Outreach table was revised to change the CHNEP calendar from \$35,651 to \$45,107 and the total was changed from \$105,612 to \$115,068. In Table 6, 2022 EPA BIL FY22 Restoration Project TBD was changed to Yucca Pens Hydrological Restoration Project Phase 1 (\$76,350); 2023 projected completed/deferred projects were removed including 2023 EPA 320 Water Atlas Enhancement; 2023 EPA BIL CHNEP Water Atlas Maintenance and Improvements added in the amount of \$130,588 as is now going to continue as a No-Cost Extension Project into FY24; 2023 EPA BIL FY23 Restoration Project TBD was changed to Yucca Pens Hydrological Restoration Project Phase 1 (\$346,170); 2024 EPA 320 TBD Research/Restoration was adjusted from \$23,947 to \$14,491 (if novated grant is awarded, it would release \$333,876 which will be added to this category); a portion of 2024 EPA FY24 Restoration Project TBD was changed to Yucca Pens Hydrological Restoration Project Phase I (in the amount of \$327,480) – the remaining amount TBD is now \$77,320; the FY24 Total Research and Restoration Project Budget was changed from \$1,030,747 to \$1,021,291. These changes were then carried through all the following corresponding task narratives.

One committee member asked whether there might be a future reduction in the number of calendars produced or if it may be time to stop producing altogether. Ms. Hecker said CHNEP had reduced number by nearly a third already but due to bulk discounts, that had yielded a more limited cost savings benefit. Also, EPA funds and supports the continued production of the calendar, and it is a metric in the CHNEP CCMP which is tied to EPA funding - so potentially eliminating it would likely have to be discussed and decided during the upcoming CCMP updating process. Other committee members expressed support for continued production, noting the educational value of the publication to their communities.

KIM FIKOSKI MOVED, SECONDED BY MARGARET WUERSTLE TO RECOMMEND MANAGEMENT COMMITTEE APPROVAL OF AMENDED FY2024 EPA 320 WORK PLAN AND BUDGET. THE MOTION WAS CARRIED UNANIMOUSLY WITH NO FURTHER DISCUSSION.

Agenda Item #10 – State Funding Opportunities for Green Stormwater Infrastructure — Emily Lang, Florida Department of Environmental Protection

Emily Lang, from the Division of Water Restoration Assistance within the FDEP, began her presentation by defining what green stormwater infrastructure is. Green stormwater infrastructure (GSI) can be used to supplement or replace traditional gray stormwater infrastructure for managing the impacts of rain in urban areas. GSI reduces pollution and treats stormwater by retaining rainfall near its source instead of directing it to a centralized pond or treatment system. FDEP makes a distinction between GSI and LID (low impact development) in that LID seeks to prevent stormwater runoff while GSI seeks to mitigate it (by using plants and impervious surfaces where the water may be combined with bioactive materials – BAM – the most popular being the “Bold & Gold” that was produced at UCF). Most of these GSI systems take place underground. If there are plants, there should be “Florida-Friendly Landscaping” (FFL). The nine principles of FFL are: 1) Right Plant, Right Place; 2) Water Efficiently; 3) Fertilize Appropriately; 4) Mulch; 5) Attract Wildlife; 6) Manage Yard Pests Responsibly; 7) Recycle Yard Waste;

8) Reduce Stormwater Runoff; and 9) Protect the Waterfront. The FFL goal is to have beautiful landscapes reducing nutrient pollution, managing stormwater, providing for wildlife, and conserving and protecting Florida's water. All the information presented may be found at <https://gsi.floridadep.gov/resources/technical-resources>. This website includes technical resources such as general GSI tool and resources; GSI code audit tool; modeling tools; and maintenance manuals and training. There are also regional manuals with a list of region-specific GSI/LID manuals as well as community engagement resources such as an introduction to GSI, GSI education resources, webinar series, and nonpoint publication tools. The goal of these initiatives is to promote GSI success stories which include project goals, design, funding, maintenance, community engagement, and outcomes/results. If members know of any GSI projects, they can submit them at <https://gsi.floridadep.gov/resources/technical-resources>.

A successful example is the Minutemen Corridor Stormwater LID Improvements. The FDEP's main grant is the EPA 319 Nonpoint Source Grant and while this grant can fund many different projects, the main goal is to have it fund GSI projects. This grant includes overseeing the construction and education of the project; there is a 40% match requirement for which state grants/loans may be used; there is a monitoring requirement; planning and design may be eligible for matching; and the only downside is that it may take 18 months to 2 years to receive the grant award. Other projects that are eligible for this grant award are water quality improvement, groundwater protection, water quality restoration, stormwater treatment best management practices, nonpoint source education, and septic to sewer.

Another grant available is the State Water Quality Assistance Grant (SWAG). This is a state grant for projects that reduce stormwater pollutant loadings in impaired waterbodies. It is for shovel-ready construction projects; there is no match required; there is no water quality monitoring; and there is a fast application-to-grant award date. This grant is may also be used for water quality improvement, groundwater protection, water quality restoration, best management practices, and reuse water. There are 2 formal proposal submission times each year – typically Spring and Fall (with no set date). However, nonpoint proposals may be submitted year-round and if there is funding available, grant awards may be awarded out of cycle. The procedure is to contact Connie Becker Grant Coordinator - (Connie.L.Becker@floridadep.gov) for a copy of the latest grant proposal form. In addition to the Nonpoint and SWAG grants, there is centralized funding resource at the Protecting Florida Together website where you can learn about many other different available grants (<https://protectingfloridatogether.gov/state-action/grants-submission>).

A committee member asked whether there are federal requirements for these grants such as Davis Bacon or Buy America. Ms. Lang said that Davis Bacon is not required but that Buy America is. Another member asked about the culvert in the Minutemen Corridor project and whether it would overflow. Ms. Lang commented that it may just be an optical illusion with the way that the photo was taken. One member mentioned the concern for flooding in her area, so she asked if there are any GSI examples on barrier islands. Ms. Lang said that she doesn't have any examples currently, but she does believe that there are pending grant proposals. So, Ms. Lang encouraged this member to reach out and the member said she would for some ideas.

Agenda Item #11 – Continued Recovery and Federal Funding Opportunities — Rick Durbrow & Drew Parker, U.S. Environmental Protection Agency & Interagency Recovery Coordination Team

Drew Parker began by explaining that the FEMA’s Interagency Recovery Coordination (IRC) is a coalition of various federal agencies that work together after a disaster occurs. These agencies coordinate so that relief can be expediated with the different areas having their direct needs met. The National Disaster Recovery Framework identifies 6 Recovery Support Functions (RSFs) as the coordinating structure for key areas of recovery assistance. The EPA served as the Sustainability Advisor to the RSFs whose task include identify recovery challenges; contribute resources and solutions; facilitate local stakeholder participation; promote intergovernmental and public-private partnerships; promote sustainable and resilient rebuilding of communities, economies, and natural ecosystems; and promote natural and nature-based solutions as viable mitigation and resiliency strategies.

One area that experienced IRC support was Mexico Beach, Florida which suffered destruction after Hurricane Michael. This was considered a Recover and Resiliency Partnership Project (R2P2- which is a strategy that is a community-focused technical assistance initiative which creates a holistic planning framework aimed at enhancing community resiliency to future storm impacts and strengthening local economies with connections to existing natural assets) which included EPA Region 4, IRC, and the coordination of field operations. The effort was to support coastal recovery after the hurricane and improve the city’s future resilience to stormwater impact. The stormwater from neighborhoods east of 15th Street currently moves toward the 8th Street Canal and discharges to the Gulf of Mexico. The proposed system directs stormwater to wetland detention areas (when needed) to balance the flow through the large box culvert into Panther Swamp. Reversing the flow of stormwater north to Panther Swamp presents the opportunity to safely close the 8th Street Canal and create beach access under Highway 98 for pedestrians, bicyclists, golf carts, and paddlers. Vacant wetland properties located along the stormwater network can be enhanced to hold excess stormwater during rain events. The wetlands also provide recreation opportunities for wildlife watching, walking, or biking along the street edges and boardwalk paths. (The concept plans were prepared with assistance from the National Park Service – River, Trails & Conservation Assistance Program.) In extending the existing walking path, it would provide safe, off-street connections for pedestrians and bicyclists between neighborhoods east and west of the park. Greenspaces along the path accommodate amenities such as pollinator gardens, native plantings, outdoor art, and fitness stations.

The Watershed Resiliency Project (WRP - large scale stormwater management and water quality improvements projects) is a proposed strategy to utilize the EPA National Estuaries Program (NEP) framework to foster partnerships between regional, state, and federal agencies to create a long-term recovery vision aimed at improving water quality and stormwater management to enhance regional resiliency to extreme weather events. The goal is to identify local and regional scale green infrastructure, living shoreline, and nature-based solution projects that provide the greatest impact on reducing flood risk and improving water quality across the entire watershed. It is also to develop design concepts, conduct community outreach, and assist with a framework for implementing strategies. The Sustainability Advisor Engagements included: Mission Assignment completion date – September 2024, the completion of R2P2 concept designs and implementation roadmap and potential WRP designs and implementation roadmap; and the Interagency Reimbursable Work Agreement (IRWA – with further discussions needed to support this opportunity) – 2 to 4 years with the NEP Community Technical Assistance Specialists – 10 prioritized project list for vulnerable communities and grant writing and project management support.

The Community Technical Assistant Specialist is an identified long-term assistance need (with duties to include needs assessment, grant writing, and project management). This would be a staff position(s) that would work directly with CHNEP and IRNEP staff, reporting to the CHNEP and IRNEP Executive Directors. This additional technical support would greatly enhance the ability of each NEP to serve the needs of its vulnerable and disadvantaged communities that have already been identified in 5-year strategic plans required by the USEPA for the allocation of available Infrastructure Investment and Jobs Act (IIJA) funding to underrepresented communities.

One committee member said that this was a good approach for integrating with existing programs and projects. She asked if this is a reactive or proactive program and Mr. Parker answered that it is reactive in a declared disaster area framework. He also said that as yet, there is no such framework after Hurricane Idalia but that may happen down the road. Another member stated that having the Community Technical Assistance Specialist work through CHNEP is a good way to get all partners coordinated because of the importance of the interdependency of projects. Jennifer Hecker offered that this is a multi-year effort that may happen between January and September 2024 with the person being stationed at CHNEP's office. An additional member inquired as to whether this new position would be funded from CHNEP's budget and Ms. Hecker stated that it would be federally funded without input from CHNEP.

Agenda Item #12 - CHNEP Technical Projects Updates and New Tools — Nicole Iadevaia, CHNEP

Nicole Iadevaia, CHNEP's Director of Research and Restoration began by presenting an update on the Coastal Charlotte Harbor Monitoring Network (CCHMN). The CCHMN is a regional partnership of agencies that collects monthly surface water quality data in the estuaries using consistent, technically sound techniques. The participants collect, analyze and upload water sample results to a state assessment database (FDEP WIN). CHNEP's role is to directly fund these sampling efforts, to fill data gaps, to host annual CCHMN partner meetings, to house and update the network's SOPs, to conduct field sampling audits, to attend RAMP meetings, to upload data into the CHNEP Water Atlas, and to fund maintenance and trend analysis features on CHNEP Water Atlas pages on behalf of its partners. The FY23 CCHMN field audits are now complete. CCHMN quality assurance activities include annual field audits conducted with each sampling partner; field and laboratory partner participation in the SWFL RAMP quarterly meetings and split sample analysis; and CHNEP Management Conference review of data and statistical methods during regular water quality status and trends reporting. It is anticipated that further quality assurance measures will be implemented in the future as needed. Each participating agency will continue to ensure techniques are standardized and meet FDEP requirements.

As for the CHNEP Water Atlas, a big overhaul of the site is underway. CHNEP has been actively working with the contractor to redo the whole website to make it more complete, accurate, and user-friendly. Data will be grouped by waterbody, basin, and watershed pages with their associated WBIDs and impairment status. There will be new dials to see how the most recent data measures against regulatory thresholds. Interactive mappers for water quality, hydrology, wildlife/habitat, and climate change will be displayed to give a comprehensive overview of conditions. For the CHNEP Water Atlas Seagrass pages, the new features will include the updated acreage graphs through 2022 with updated transect graphs through 2021, algae and epiphyte graphs for all basins through 2021, and an interactive mapper will have seagrass and macroalgae maps, monitoring station and transect data and graphs, and an FDEP prop scar map layer. The CHNEP Water Atlas now features a custom "Winter Haven Lake

Assessments” on the waterbody pages for those lakes within the City of Winter Haven. A new landing page for the Place-Based Recreational Fishery Project is coming soon.

Then she gave an update on the Myakka Headwaters Preserve Project on 363 acres of conserved land within Flatford Swamp, the Myakka River’s largest forested wetland in Manatee County. There will be treatment of exotic species in a 20-acre floodplain forest and a 4-acre basin forest in April (treatment of Old-World Climbing Fern will be conducted within the 2 designated parcels totaling 24 acres). Funding agencies conducted a site visit in May. Treatments were successful in meeting treatment success criteria with the agreement. CFGC continues to have volunteer workdays on the property to supplement contract work (<http://www.conservationfoundation.com/events/>).

Upcoming events for members to share are the 2024 Southwest Florida Climate Summit, February 28th and 29th in Punta Gorda with abstracts being accepted until September 15th, 2023 so please direct people to <https://www.chnep.org/2024-climate-summit> for more information; and GOMCON 2024, February 19th through the 22nd in Tampa with abstracts being accepted until October 15th, 2023 with information being found at <https://gulfofmexicoalliance.org>.

One member asked for an update on the vulnerability assessments and Ms. Hecker answered that CHNEP has already started scoping with Charlotte County and is in procurement which is being refined and readied for proposals to go out. CHNEP has also started having conversations with Lee County identifying where we can add resources there as well. Another member offered positive feedback for the Water Atlas.

Agenda Item #13 - Management Committee Member Updates — Claire Jubb, Co-Chair

Lesli Haynes, Lee County

Lee County will be doing lots of beach projects for the next 3 years. We are currently trucking sand to combat erosion. We are working also on channel markers, inlet pass buoys, etc. which are all up except the Gulf buoy line which will have to wait for now. Of the 1,700 that were up prior to Ian, about 56% were damaged or missing afterwards.

Carrie Schuman, Sanibel-Captiva Conservation Foundation

SCCF is continuing to focus strongly on water quality, as well as nature-based solutions for the bay side of Captiva.

Melynda Brown, Florida Department of Environmental Protection

DEM marine debris removal continues. There is still some debris on the bird rookeries, but removal was delayed due to nesting season. Along with FWC we will be going in to continue the removal. There has also been talk with the partners about mangrove restoration possibly on the rookeries. The Florida Geographic Information Office did bathymetry mapping before Ian and then after and hopefully those findings will be available soon.

Harry Phillips, City of Cape Coral (CHNEP CAC Co-Chair)

The cleanup and removal of debris from the canals continues in Cape Coral.

Vivianna Bendixson, Southwest Florida Water Management District

SWFWMD’s imagery acquisition (seagrass) will be kicking off soon. It will take about a year from the beginning till the information is available. CFI applications are due October 6th, 2023. The rainfall from Hurricane Idalia was more significant in the southern part of our district (Sarasota area) which was unexpected.

Elizabeth Wong, City of North Port

Idalia did not really impact North Port. We are still trying to get through the permitting process after Ian. We have extended our fertilizer blackout restricted period from June to earlier in April. We have also kicked off our vulnerability assessment plan (VAP) study. The data gathering is underway. We are also working on our NPDS audit in Sarasota County.

Alissa Powers, Manatee County

The Environmental Lands Program is up and running. There is a candidate property dashboard and I encourage everyone to visit the county site. We are permitting a gopher tortoise recipient site at Dewitt Preserve. There will be a 50-mile radius around that area. The scrub jay preserve is doing well, and the population is rebounding. There was flooding due to Idalia.

Holly Milbrandt, City of Sanibel

Nearly a year out, the City of Sanibel is still focused on Hurricane Ian recovery. Just about all the debris crews have moved out so we are inching closer. Jennifer, I also appreciate your comments regarding human capital. There are numerous funding opportunities available but there is a challenge with the human capacity to secure those. The beach renourishment island-wide project will begin once turtle season ends. In terms of Idalia, there was some storm surge but overall, we fared well.

Gaye Sharpe, Polk County

At Lake Hancock's living shoreline, we planted about 500,000 plants. The vegetation project is just about finished but we may be putting in eelgrass in that area. While there is funding out there, the challenge is to find those who are willing to work on the various projects.

Paul Semenac, Sarasota County

Due to Hurricane Idalia, the expedition of Alligator Creek has shifted to next week. As to the Dona Bay Restoration Project, which is comprised of 6 phases with the goal of bringing waterflow to the Bay (and improve seagrass coverage and the oyster population), Phase I was completed several years ago (which saw an 18,000-pound reduction of nitrogen loading), and Phase II is currently ongoing with about 90% done. For Phase III, which we are 1 year into a 2-year cycle and Phase IV is expected to be completed by October 2023. Hurricane Idalia saw a lot of coastal flooding. With 3.5 feet of storm surge, Manasota Beach Road and North Casey Key Road were washed out.

Kali Spurgeon, Florida Fish & Wildlife Conservation Commission

Hurricane Idalia did prompt the Governor to declare a fishery disaster. Jamie is working on the Freshwater Lake Restoration in Cape Coral as well as some oyster restoration projects.

Claire Jubb, Charlotte County

Charlotte County has begun work on its vulnerability assessment with CHNEP, who is funding it. We are also in the middle of our "One Charlotte, One Water" plan. In January 2024, we will be holding a town hall meeting to discuss some of the ideas and options that came out of that plan. Septic-to-Sewer program is a big project that we are working on in Charlotte County. We did incur some storm surge during Hurricane Idalia with about 100 structures that suffered damage.

Margaret Wuerstle, Southwest Florida Regional Planning Council

SWFRPC is helping with recovery grants from Ian. We have submitted 3 grants for the shrimp industry. We were awarded one grant from DEO. We were awarded another grant for the Marco Island vulnerability assessment.

Curtis Knowles, Central Florida Regional Planning Council

CFRPC is looking forward to working with you all for the vulnerability assessments for Polk, Hardee, and DeSoto Counties. In terms of Idalia, there is still some flooding in DeSoto County along the Peace River and Horse Creek.

Steve Rabney, U.S. Army Corps of Engineers

The US ACOE is in midst of huge hiring process out of the Jacksonville District to staff up, which will hopefully this will speed up the permitting process.

Agenda Item #14 - Public Comment — Claire Jubb, Co-Chair

There was no public comment.

Agenda Item #15 - Future Meeting Dates and Topics — Claire Jubb, Co-Chair

Upcoming Management Committee meetings for 2024 are January 12th, May 10th, and September 6th. Members were asked to block the dates on their calendars and plan to attend in person.

Agenda Item #16 - Adjourn — Claire Jubb, Co-Chair

Meeting was adjourned at 12:37 PM.