



CHNEP Management Committee Meeting

Friday May 13th, 2022, 9:00am – 1:00pm

Hybrid In-Person and Virtual Meeting

Charlotte County Utilities Building, Training Rooms A & B
25550 Harborview Rd., Punta Gorda, FL 33980

AGENDA

Connect Remotely via Zoom

<https://us06web.zoom.us/j/86312087597?pwd=VGVPN2RxRVh3eIB2NzRIQzB0QUlsUT09>

Meeting ID: 863 1208 7597

Passcode: 054469

One tap mobile: +19292056099,,86312087597#,,,,*054469# US (New York)

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1. Call to Order and Introductions — James Evans, Co-Chair
 2. Agenda Additions or Deletions — James Evans, Co-Chair
 3. Public Comment on Agenda Items — James Evans, Co-Chair
 4. Management Committee January 14, 2022 Meeting Minutes — James Evans, Co-Chair
 5. TAC Report — Devon Moore, TAC Co-Chair
 6. CHNEP Update — Jennifer Hecker, CHNEP
 7. Research & Restoration Project Updates— Nicole Iadevaia, CHNEP
 8. Management Committee Co-Chair Elections — James Evans, Co-Chair
 9. Amended FY2022 Work Plan & Budget and Proposed FY2023 Work Plan & Budget — Jennifer Hecker, CHNEP
 10. Algae as an indicator of nutrient pollution in the Tidal Caloosahatchee – Dr. James Douglass, Florida Gulf Coast University
 11. Funding Resources for Combatting Harmful Algae – Ed Smith, Florida Department of Environmental Protection
 12. Blue Green Algae Task Force Recommendations Response – Dr. Michael Parsons, Florida Gulf Coast University
 13. Blue Green Algae (Cyanobacteria) Research Update – Dr. Barry Rosen, Florida Gulf Coast University
 14. Management Committee Member Updates — James Evans, Co-Chair
 15. Public Comment — James Evans, Co-Chair
 16. Future Meeting's Topics and Date — James Evans, Co-Chair
- Next meeting date: September 9th, 2022*
17. Adjourn — James Evans, Co-Chair

1. CALL TO ORDER AND INTRODUCTIONS

The CHNEP Management Committee Co-Chair will call the meeting to order and then members will introduce themselves as well as any members of the public who are participating.

2. AGENDA ADDITIONS OR DELETIONS

If any Management Committee member would like to make an addition or deletion to the agenda, this item is the time to suggest such.

3. PUBLIC COMMENT ON AGENDA ITEMS

Each participating member of the public is afforded up to 3 minutes total to speak on agenda topics only at this point in the meeting.

4. MANAGEMENT COMMITTEE JANUARY 14, 2022 MEETING MINUTES

If any Management Committee member would like changes or additions made to the minutes from the last meeting, this item is the time to suggest such.

Recommendation: Approval of the minutes from January 14, 2022 Management Committee Meeting Minutes.

Attachment: Draft January 14, 2022 Management Committee Minutes

5. TAC REPORT

The TAC Committee held its annual election and Mark Walton from the Southwest Florida Water Management District was elected to be a Co-Chair - along with existing Co-Chair Ernesto Lasso de la Vega who has one year left in present term. The Committee welcomed Mark and thanked presiding Co-Chair Devon Moore for his service this past term.

The TAC meeting held in April included many important technical presentations and discussions including:

- A report from the CHNEP Habitat Conservation Subcommittee on the NOAA RESTORE funded “Place Based Fishery Conservation in Charlotte Harbor” project by Mr. Corey Anderson from FWC. The project builds on the CHNEP’s Habitat Restoration Needs (HRN) Plan to create place-based, topic-focused conservation plans and actions focused on discrete sport fish nursery habitats in Charlotte County. During the initial workshop, state agency and non-profit research experts shared data on sport fish habitat found further upstream of the estuary in areas that are not protected or can be highly altered or developed. During the second workshop, the HCS identified management actions through policy including full preservation, managing density, water quality and quantity, preservation and improvement of water quality and quantity, and novel approaches such as low impact development, removal of legacy nutrients, and community education. During the third workshop, a proposed plan was developed to address potential issues, research needs, policy needs or applications, and recommended actions. This group will be working over the next few months to finalize these research and application plans. TAC members had comments regarding incentives for developers to use LID and the importance of developers understanding the science.
- Mr. Chris Anastasiou updated the TAC on Southwest Florida Water Management District utilized seagrass maps, aerial imagery, water quality data, and hydrodynamic modeling to support the idea that “the hangover effect” (at least in part) led to the greatest loss of seagrass in Charlotte Harbor in over 30 years. Between 2018 and 2020, about 4,400 acres of seagrass were lost in the Charlotte Harbor. Concurrent with seagrass loss was an explosion of drift and attached benthic

macroalgae. This relatively sudden shift from seagrass to macroalgae occurred in the wake of a protracted regional red tide event that lasted approximately 15 months from October 2017 to January 2019. The 2017-2018 Red Tide event occurred soon after the passage of Hurricane Irma, and it was the worst Red Tide event recorded in NOAA's history, causing severe ecological and economic damage as well as large fish die-offs. They hypothesized that seagrass loss and macroalgal proliferation along the east wall was not a direct result of red tide or Hurricane Irma, rather it was a function of its aftermath, a phenomenon we term "the hangover effect." During and after the major red tide event, massive amounts of nutrients from dead and decaying organisms were likely released into the water column. Many of these nutrients may have become bioavailable through remineralization in the water column followed by rapid assimilation by filamentous macroalgae. TAC members inquired about transitions between the compositions of drift algae species and coordination with FDEP Aquatic Preserve and FWC.

- Mr. Roger Copp, Water Science Associates, provided a 2-year update on the progress of the Lower Charlotte Harbor Flatwoods Hydrological Restoration Project. CHNEP is a member of the Charlotte Harbor Flatwoods Initiative (CHFI) comprised of multiple local, state, and federal agencies. This group is focused on efforts to restore natural drainage across the Gator Slough Watershed with water that has been unnaturally impounded on the Babcock-Webb WMA and diverted from the Yucca Pens WMA, Caloosahatchee, and tidal creeks to Charlotte Harbor. Working with members of the CHFI, CHNEP was awarded NRDA RESTORE funds, as well as funding from the Southwest Florida Water Management District to conduct a project that would monitor current conditions in the impacted area and produce an integrated surface-groundwater hydrological model and the Lower Charlotte Harbor Flatwoods 'Strategic Restoration Planning Tool' Report. TAC members had comments regarding how water will be controlled and if improved water levels and hydroperiods can be achieved solely through berm removal and weir construction.
- Dr. Miles Medina, at the Center for Coastal Solutions at the University of Florida, presented findings from a recent study to identify systematic cause-and-effect relationships between red tide (*K. Brevis*) and anthropogenic drivers. Red Tide (*Karenia brevis*) blooms on Florida's Gulf Coast have severely impacted regional ecosystems, coastal economies, and public health, and a scientific and policy debate has emerged as to whether these blooms are primarily natural or anthropogenic. Current hypotheses suggest that natural biological and oceanographic processes explain the initiation of blooms in the Gulf of Mexico and their transport toward Florida's coast, while anthropogenic nutrient inputs from urban and agricultural areas may intensify blooms once they arrive on the coast. However, past correlation studies have not found compelling links between coastal blooms and anthropogenic inputs. Dr. Medina's work transcends the limitations of traditional correlation analyses, using empirical methods based on signal processing and chaos theory to identify systematic cause-and-effect relationships between *K. Brevis* and anthropogenic drivers. His study hypothesized that 1) nutrient-enriched Caloosahatchee River discharges systematically intensify *K. Brevis* blooms near Charlotte Harbor, and 2) this influence reaches upstream to Lake Okeechobee and the Kissimmee basin. TAC members had comments regarding further work to take these results coupled with rainfall and other external factors and develop scenarios to formulate forecast models.
- The Conservation Foundation of the Gulf Coast also shared an outreach video of the recently completed CHNEP/Conservation Foundation project 'Gateway to Myakka Restoration' as well as future planned projects for the area. Many entities are working together to acquire and restore habitats within the Myakka River basin with focus on the marsh areas feeding into Myakka Lake in the State Park. Project work took place over a two year period and involved the removal of invasive species and planting of native vegetation along one mile of riverfront located in the 66-

mile Myakka River corridor, upstream of Myakka Lake. The project is one example of how CHNEP funding has supplemented regional work to restore water, wildlife, and habitats and or complete aspects of a project that cannot be funded easily by other partners.

The TAC heard the CHNEP Program and Technical Project update presentations that are also coming before Management Committee today, as well as shared updates with each other on their respective natural resource related activities and projects. There were no recommendations formed by the TAC pertaining directly to Management Committee agenda items this cycle.

6. CHNEP UPDATE

The following represents program activity highlights since the beginning of the last Management Conference cycle to the beginning of this one.

Program Administration

- Planned and executed the Technical Advisory Committee (12/2), Citizens Advisory Committee (12/15), the Management Committee Meeting (1/14) and the Policy Committee meeting (1/27) Management Conference meetings; including lining up presenters, drafting agenda packets, create PowerPoints, drafting minutes, etc.
- Assisted the City of Punta Gorda with preparation of a grant application and commitment to be a project implementing partners) on the 'Tiki Point Harborwalk Living Shoreline Project' in Punta Gorda, which was awarded \$590,957 in funding over three years from the 2022-23 Statewide Flooding and Sea Level Rise Resilience Plan to complete work.
- Drafted and sent letters to all cities in the CHNEP area that are currently not participating, inviting them to join as a member of CHNEP.
- Sent welcome packets to new members of the CHNEP Management and Policy Committees. These packets included a customized letter, CHNEP CCMP Summary, CHNEP 2022 Calendars, and project factsheets.
- CHNEP submitted the Final Grant Performance Report to the EPA for our 5-year grant agreement (2014-2019). This report was inclusive of projects completed during the grant period (including all those in the No Cost Extension granted to CHNEP), as well as deliverables associated with those projects.
- Drafted together with the Indian River Lagoon National Estuary Program, a letter supporting the Reauthorization of the South Florida Geographic Program, which was submitted to Senator Marco Rubio.
- Drafted a funding letter of support for a study of the interactions between Harmful Algae Blooms and acidification in Tampa and Sarasota Bays, which was send to Mote Marine.

Finance and Grant Management

- Passed City audit of CHNEP EPA grant with no negative findings.
- Placed a 2-year funding agreement with Charlotte County on the City Council agenda for approval in January. The agreement was approved by the County attorney and will have Charlotte County contribute \$25,000 to CHNEP for the next 2 years.
- Placed a funding agreement with Manatee County on the City Council agenda for approval in January. This will see Manatee County have their annual contribution used for outreach events in the CHNEP area.

- Drafted a 5-year funding agreement with Sarasota County. The agreement has been reviewed by Sarasota County staff and is ready to be finalized by both parties. This agreement will see Sarasota County contribute \$25,000 annually to the CHNEP for the next 5 years.
- Processed FY22 partner annual contributions. CHNEP has received all of the planned contributions from its contributing members for FY22.
- Sent customized budget letters and information packets to City & County partners who contribute to the CHNEP, providing an overview of what value & projects CHNEP provides to their areas. This is sent during the spring budgeting cycle so members can plan for FY23 CHNEP annual partner contributions that are approved by the Policy Committee.
- Received \$4,001 in small individual donations have been received from private citizens since last cycle.
- Sent notice of awards for 4 FY22 CHNEP Conservation Grants for a total amount of \$8,095.
- Updated the conservation grant page of the website to include the upcoming FY22 application (deadline of April 1st for spring award notice if the project is selected.)
- Completed, fully executed, and now implementing SWFWMD FY22 Agreement.
- Submitted Charlotte County Marine Advisory Committee Grant Q1 report in January 2022. The amount of \$5,000 was awarded for CHNEP Environmental Watershed Education Outreach.
- Submitted Q1 and Q2 Progress Report to FDEP for salary agreement with CHNEP. The report includes information on staff support time spent on outreach, research, and restoration work.
- Submitted Q1 and Q2 Progress Report to FDEP for NRDA grant for the LCHFI project in January 2022.
- Submitted SWFWMD Q1 report for FY19 agreement, SWFWMD Q1 report for FY20 agreement, SWFWMD Q1 report for FY21 agreement, and SWFWMD Q1 report for FY22 agreement in January 2022.
- Amended FY22 budget was updated and approved by the Policy Committee at the 1/27/2022 meeting, which is being incorporated into the City of Punta Gorda's budget.
- Submitted letters to the SWFWMD to define the TBD projects that are outlined in the FY19 & FY21 agreements. The letters have been approved by SWFWMD staff and TBD project will be changed to the Myakka Headwaters Pilot Project.
- Input Requisitions into the City's procurement for Winter Conservation Grants and for printing and mailing of FY22 CHNEP Harbor Happenings magazines.
- CHNEP has created a draft FY23 work plan and budget, which has been provided to City of Punta Gorda to be entered into the full draft FY23 budget.

Regional and multi-jurisdictional organizational meetings CHNEP staff participated in:

- Hosted CHNEP Winter Management Committee Meetings. (4)
- Hosted Habitat Conservation Subcommittee Workshop: Place-Based Fishery Conservation in Charlotte Harbor, FL
- Hosted the 'Responding to Rising Waters: A Climate Resiliency Webinar'
- ANEP Board Meeting. (4)
- ANEP Executive Committee Meeting
- ANEP External Affairs Committee Meeting (2)
- ANEP External Communications and Legislative Activities Committee Meeting
- EPA San Juan Bay NEP Program Evaluation Meetings

- Bay Area Scientific Information Symposium 7 - Association of National Estuary Programs NEP Conference
- AWRA 31st Annual Southwest Florida Water Resources Conference
- Everglades Coalition Conference
- Southwest Florida Regional Ambient Monitoring Program (RAMP) Meeting
- FDEP Division of Environmental Assessment and Restoration 2022 Strategic Monitoring Program (SMP)
- Fifth National Climate Assessment Southeast Daytime Chapter Public Engagement Workshop
- Central Florida Resiliency Summit
- RECOVER SWFL Module Meeting
- Charlotte Harbor Flatwoods Initiative Meeting
- Charlotte Harbor Flatwoods Hydrological Modeling Meeting Project Meeting (5)
- South Lee County Watershed Initiative Hydrological Modeling Project Meeting
- CHNEP Water Atlas Meeting with USF (4)
- CHNEP Water Atlas/UF Center for Coastal Solutions Data Analysis Meeting (2)
- 13th Annual Climate Leadership Summit
- Optical Model for Charlotte Harbor and Water Clarity Report Card Meeting
- Myakka Headwaters Restoration Project Site Visit
- Science and Environmental Council Meeting
- Southwest Florida Estuarine Restoration Team (SWERT) Steering Committee
- Myakka River Management Coordinating Council Meeting
- SWFL Regional Resiliency Compact Meeting
- Harmful Algae Bloom Research Symposium

CHNEP staff presentations

- CHNEP Climate Change Vulnerability Assessment project to the Southeast Ocean and Coastal Acidification Network Meeting.
- Central Florida Resiliency Summit on ‘Climate Resiliency in the Heartland.’
- CHNEP Economic Valuation Study Bay at Area Scientific Information Symposium 7 - Association of National Estuary Programs.
- Habitat Restoration Needs project poster session at Area Scientific Information Symposium 7 - Association of National Estuary Programs.
- CHNEP staff were panelists and speakers at the March Charlotte County Water Quality Summit.
- Presented to the Cape Coral Friends of Wildlife on current CHNEP projects and how to get involved.
- Presented to the City of Punta Gorda GIS User Group regarding CHNEP’s recent work in GIS to create seagrass maps.
- Presented to the Charlotte Harbor Flatwoods Initiative on the ‘Place-Based Fishery Conservation in Charlotte Harbor’ Project, on behalf of the CHNEP Habitat Conservation Subcommittee.

Publications and Outreach Events

- Successfully hosted the [2022 Southwest Florida Climate Summit](#) a two-day hybrid event, held April 7th & 8th, with over 30 speakers and 200+ attendees. It featured innovative thinkers that exchanged dialogue and ideas on expanding the region's capacity to respond to climate challenges, and towards building increased community resiliency. Videos of the event presentations are available to access and view on the CHNEP [YouTube Channel](#). CHNEP staff coordinated event planning and online registration for in-person and virtual participation.
- Hosted the [Responding to Rising Waters: A Climate Resiliency Webinar](#). The webinar proceedings, speaker biographies, webinar recording, and a [Citizen Climate Change Action Guide](#) of organizations and resources for participants can be found on CHNEP website linked above.
- Partnered with Growing Climate Solutions and Citizen's Advisory Committee (CAC) members to develop a questionnaire for Climate Readiness Interviews which CAC will conduct over the next few months with representatives for their respective counties. County responses will be compiled and discussed at the summer CAC Meeting.
- Created and released a 'Request for Bid' for printing and mailing of 2022 Harbor Happenings magazine, which has now been awarded.
- Printed the 12 page staff-designed '[CHNEP Kid's Activity Book](#)' which will be distributed at CHNEP outreach events and shared with partner organizations upon request.
- Updated project fact sheets, available on the CHNEP [website](#), to reflect recently completed projects.
- Completed the South Lee County Watershed Hydrological Restoration Modeling project in December 2021. This is available along with all technical reports, which serve as appendices, on the CHNEP website: [South Lee County Watershed Initiative \(chnep.org\)](#). CHNEP is currently designing a layperson's brochure to synthesize highlights from the final report. CHNEP will begin coordination with stakeholders to set up a meeting in the spring to discuss the brochure, report recommendations, and questions for future modeling.
- Hosted an [Audubon Christmas Bird Count](#), in coordination with the Peace River Audubon Society, with a group on the ground and in kayaks at Ponce de Leon Park.
- Coordinated with a local Boy Scout troop in Lee County to drill holes in oyster shells for our upcoming Vertical Oyster Garden Workshop. Information at <https://www.chnep.org/monthly-volunteer-events>.
- Hosted a BioBlitz and Trail Blaze Volunteer Event at the Charlotte Harbor Environmental Center (CHEC) at Alligator Creek Preserve with over 20 participants.
- Partnered with Keep Charlotte Beautiful for a Peace River Clean Up which was also funded through a CHNEP Conservation Grant. Participants received supplies, snacks, and a free t-shirt. 296 volunteers cleaned up 5280 lbs. of debris at 9 locations.
- Helped to promote the Charlotte County Water Quality Summit which took place in early March.

Outreach analytics

- 5,880 subscribers for CHNEP educational mailings.
- 1,793 unique visitors and 2,631 page visits to CHNEP website.
- CHNEP Water Atlas avg. of 2,900 page view per month this quarter.
- 60 new Facebook followers. (1,734 followers)

- 52 new Facebook Likes. (1,454 total likes)
- Participated in the #iheartestuaries campaign on social media.

Media/Press

- 4/22 [Study: Florida's Shifting Views on Climate Change - News-Press](#)
- 4/22 [Scientists, Engineers gather at Southwest Florida Climate Summit - WINK TV](#)
- 4/22 [Changing Climate Expected to Bring More Severe Rain - News-Press](#)
- 4/22 [2022 Southwest Florida Climate Summit Preview - WGPU Radio](#)

7. RESEARCH & RESTORATION PROJECT UPDATES

CHNEP Water Atlas is nearing completion on several enhancements that will be beneficial to multiple users; this includes new Habitat Restoration Needs maps, Habitat Resiliency to Climate Change interactive mapper, Numeric Nutrient Criteria Calculator, and Seagrass pages-several of which will be previewed during the discussion so that committee members will be able to dive in and access resources easily.

In addition to the projects featured earlier on the agenda, several other research and/or restoration projects (or phases of projects) in the program area are currently underway with CHNEP FY19-22 funds.

Projects:

- Water Atlas Improvements and Trend Analysis Project
- South Lee County Hydrological Restoration Project
- Lower Charlotte Harbor Flatwoods Hydrological Restoration Project
- Myakka Headwaters Preserve Project
- Pine Island Flatwoods Restoration Project
- Tiki Point Harborwalk Living Shoreline Project

Nicole Iadevaia, CHNEP Research & Outreach Manager, will be presenting updates of progress made on these projects since the last CHNEP Management Conference committee meeting cycle. For more information visit: <https://www.chnep.org/chnep-fact-sheets>.

8. MANAGEMENT COMMITTEE CO-CHAIR ELECTIONS

Management Committee bylaws stipulate that Co-Chairs are elected on an alternating basis annually at each spring meeting for 2 year terms. The staggered two-year terms ensure that a new Co-Chair will be paired with an experienced Co-Chair. Nominations are being sought for one of the Co-Chair positions in advance of the next meeting for staff to compile into a nominations list. Management members can nominate themselves or another Management member whom they have previously conferred with to confirm they are willing to serve. *Nominations are requested to be submitted by COB Wednesday May 11th using the link provided: <https://forms.gle/aHFEgSVGbfKhy3q77>.* The list of nominees will be brought forward for consideration at the meeting.

Management Co-Chairs alternate chairing of Management meetings, as well as alternating attendance of Policy Committee meetings to brief them on Management comments on items before the Committee for discussion. The Management Co-Chair attending the Policy Committee meeting has voting privileges at that meeting as well. CHNEP staff provides email meeting notices of future Management meetings to the Co-Chairs, as well as personal pre-meeting briefings to assist the Management Co-Chairs in their role. Management Co-Chair James Evans will be facilitating this discussion, for the Co-Chair seat he currently occupies but is not seeking to continue to serve in.

9. **AMENDED FY2022 WORK PLAN & BUDGET AND PROPOSED FY 2023 WORK PLAN & BUDGET**

The initial FY 2022 Work Plan and Budget was presented and approved by the Management Conference in the spring 2021 meeting cycle. As is customary, the CHNEP annual Work Plans and Budgets need to be amended as updated information is available and as needed due to funding or project changes.

As a result, the FY 2022 Amended Work Plan is being presented for review with the following amendments since last cycle:

Table 1:

Revenue portion:

- Federal (NEP Competitive Grant Funding) in the amount of \$129,213 has been removed. This is to reflect that the award of the NEP Competitive Funding that is administered by Restore America's Estuaries (RAE) was declined due to project partner municipality deciding not to proceed with the project at this time.
- Federal (Section 320 Allocated Carryover) added to reflect that \$5,104 from FY21 carryover has now been allocated to projects in FY22 budget.
- Federal (Infrastructure Funding for the amount of \$915,000 is adjusted to the updated expected amount of \$909,800). This is the funding to be received from the U.S. EPA from the passage of the Bipartisan Infrastructure Funding bill.
- Total 2022 Revenue for the amount of \$2,089,713 is adjusted to \$1,960,404 due to decreases of funding outlined above.

Expense portion:

- Personnel was revised from \$416,500 to \$451,373 to reflect the addition of a Restoration Specialist position to be hired for the last quarter of FY22, as well as other minor cost adjustments associated with existing staff positions.
- Host Administrative Fee line was increased from \$99,068 to \$99,715 to add \$500 of pre-employment expenses and administrative actual costs over original budgeted.
- Computer/IT line was increased from \$23,925 to \$28,760 to reflect computer actual costs over original budgeted.
- Outreach line has been updated from \$139,400 to \$134,400 due to moving \$5,000 to the related Communications Software & Fees category.
- Communications Software & Fees line has been increased from \$4,600 to \$9,600 to account for the need to add virtual webinar, video editing, and other outreach-related software subscriptions.
- Research & Restoration Contracts line has been changed from \$1,299,796 to the \$1,170,487 due to having to decline NEP Competitive Fund (RAE) grant and the slight decrease in amount of expected Bipartisan Infrastructure Funding.
- Reserves line was renamed Added Reserves for clarification purposes, line total was updated from \$68,500 to \$28,144.
- Total 2022 Expenditures in the amount of \$2,089,713 has been changed to \$1,960,404.

Table 2:

Federal portion:

- NEP Competitive Funding (RAE) in the amount of \$129,213 was removed.
- Section 320 Allocated Carryover in the amount of \$5,104 was added.

- Federal Infrastructure Funding (Bipartisan Infrastructure Funding) was adjusted from \$915,000 to \$909,800
- Total Federal was adjusted from \$1,744,213 to \$1,614,904 due to decreases of funding outlined above.
- Total Cooperative Funding was adjusted from \$2,089,713 to \$1,955,300.

Table 3:

- Updated past travel and anticipated future FY22 travel estimates for remainder of year, with the Total Travel remaining unchanged at \$25,000.

Table 4:

- CHNEP Target Audience Programs was reduced from \$24,900 to \$19,900 to allocate the \$5,000 towards Communications Software & Fees.
- Total was adjusted accordingly from \$139,400 to \$134,400.

Table 5:

- Removed FY20 \$12,000 for TBD projects as well as FY22 \$12,346 for TBD projects, as most of those funds have been folded into Pine Island Flatwoods project (for an added amount of \$17,450 as now represented in the table, with remainder carried over).
- Added Tiki Point (\$709,800) and Charlotte County Climate Change Vulnerability Assessment (CCVA, \$200,000) projects in place of the former Bipartisan Infrastructure Funding TBD projects (which was adjusted from \$915,000 to the current estimated funding total of \$909,800).
- Removed Wild Turkey Strand Project (\$129,213) due to aforementioned reasons of project partner deciding not to proceed with the project at this time.
- Non-EPA and EPA FY22 Total has been adjusted from \$1,299,796 to \$1,170,487.

Table 7:

- CHNEP Communications Software was adjusted from \$4,600 to \$9,600.
- Overhead Administrative Charges was adjusted from \$99,068 to \$99,215.
- Overhead Computer was adjusted from \$23,925 to \$28,760.
- Total was adjusted from \$141,018 to \$151,000.

Changes were also made throughout narrative task descriptions to reflect above.

Additionally, the FY23 Work Plan and Budget are drafted to submit to EPA June 1st with our grant application for next year's funding. The highlights of changes in the FY23 Work Plan and Budget from FY22's are as follows:

- Yr2 EPA Bipartisan Infrastructure Law funding added.
- Personnel costs increases to accommodate new Restoration Specialist for a total of 7 full-time staff positions.
- Overhead administrative costs increases to accommodate increasing rent, computer, and administrative charges in addition to a potential host Purchase Agent II position.
- New FY23 EPA BIL projects including new Climate Change Vulnerability Assessments for other CHNEP counties and new research/restoration projects identified in a call for projects.

- New FY23 EPA 320 Water Atlas Enhancements with the University of Florida, as well as New FY 23 EPA BIL Water Atlas Enhancements with the University of South Florida that will include new Waterbody/Watershed pages, lake assessments, continuous data download tool, trends for water quality and seagrass, and updates to water quality dashboard and numeric nutrient criteria calculator.

Recommendation: Recommend whether Policy should approve the draft FY 2022 Amended Work Plan & Budget, as well as the draft FY 2023 Work Plan & Budget.

Attachment: Draft CHNEP FY2022 Amended Work Plan & Budget
Draft CHNEP FY2023 Work Plan & Budget

10. ALGAE AS AN INDICATOR OF NUTRIENT POLLUTION IN THE TIDAL CALOOSAHATCHEE

Seagrass is vital to water quality and manatees, turtles, and the other aquatic life that eats and depends on it. It also cleans the water, acting as a natural filter. FGCU's Water School teamed up with the Sanibel Captiva Conservation Foundation, to conduct research on what is impacting seagrass in the tidal Caloosahatchee, with funding from the U.S. Environmental Protection Agency. What they have been finding is that excessive algae can be an indicator of nutrient pollution.

The Caloosahatchee River receives large amounts of nutrient pollution from its extensively developed watershed and from Lake Okeechobee. Consequently, it suffers multiple symptoms of eutrophication from excessive nutrients, including phytoplankton and benthic algal blooms. In 2020, the researchers collaborated on an assessment of water quality conditions combined with habitat mapping the bottom of the tidal river and estuary. In addition to documenting the status and distribution of seagrasses and other submerged aquatic vegetation (SAV) from San Carlos Bay to I-75, the team quantified the abundance of macroalgae and microalgal epiphytes, and identified the prevalent species in each area.

The researchers found that macroalgae were ubiquitous in both high and low salinity regions, generally surpassing SAV in abundance. Additionally, epiphytic algae and benthic microalgae were also widespread and sometimes densely accumulated. Samples also showed an abundance of cyanobacteria, which among other algae and microbes are also involved in biogeochemical cycling of organic matter and nutrients. These factors, along with water column light attenuation, are significant in restricting the distribution of seagrasses and other submerged aquatic vegetation (SAV) in the system. This confirms that nutrient pollution is contributing to declining seagrass and an overabundance of algae in this system, which should be considered in continued monitoring and restoration efforts.

Dr. James Douglass, from Florida Gulf Coast University's Marine & Earth Sciences Department, will present on this and be available for questions.

11. FUNDING RESOURCES FOR COMBATting HARMFUL ALGAE

The Florida Department of Environmental Protection (FDEP) offers many resources to help communities protect their waterways, including combatting harmful algae blooms in them. This presentation will be focused on what funding the Governor has made available to the Department in support of our Innovative Technology for Harmful Algal Blooms Grant Program. The presentation will establish our relationship with the Blue-Green Algae Task Force, where the FDEP will take direction on seeking funding opportunities. Finally, it will provide guidance as to what types of projects are eligible and where to apply for funding, and who is eligible to apply.

Mr. Ed Smith, Director of Water Policy and Ecosystems Restoration for the Florida Department of Environmental Protection, will be presenting and answering questions about other funding opportunities as provided by other Department Divisions.

12. BLUE GREEN ALGAE TASK FORCE RECOMMENDATIONS RESPONSE

The Blue-Green Algae Task Force is an advisory body of 5 appointed scientists whose duty is to aid the Department of Environmental Protection in fulfilling its mission to protect, conserve and manage the state's natural resources. The task force, through its discussion and deliberations, provides guidance and specific, science-based recommendations with the goal of expediting improvements and restoration of Florida's water bodies that have been adversely affected by blue-green algae blooms.

In 2020, the Blue-Green Algae Task Force released a set of initial recommendations and over the past year, the state Blue-Green Algae Task Force has continued to meet, focusing on topics such as Innovative Technologies, Updates on the Stormwater Technical Advisory Committee, Data Collection and Predictive Modeling, and most recently on Onsite Sewage Treatment and Disposal Systems. This presentation will cover updates on Blue-Green Algae Task Force activities, as well as on state actions taken in response to its initial recommendations.

Dr. Mike Parsons, Director of the FGCU Water School and appointed member of the state Blue-Green Algae Task Force, will be presenting on this item and be available for questions.

Attachment: [Blue-green Algae Task Force DRAFT Consensus Document #1](#)

13. BLUE-GREEN ALGAE (CYANOBACTERIA) RESEARCH UPDATES

Southwest Florida has experienced algal blooms, including widespread blue-green algae (cyanobacteria) in its canals and rivers in 2018. Exposure to those toxins can be worrisome, either from it getting into drinking water sources or from humans or animals accidentally consuming the water. Florida Gulf Coast University has been undertaking new research, which this presentation will provide updates on. It has also been compiling research to make a cyanobacteria key, so people can identify organisms by photographs, rather than drawings. This key will help to confirm what organisms are present in future outbreaks that could be tied to specific safety criteria, based on what toxins each type creates.

Dr. Barry Rosen of The Water School and the Department of Ecology & Environmental Studies at Florida Gulf Coast University will be presenting and be available for questions.

14. MANAGEMENT MEMBER UPDATES

Each Management Committee member is encouraged to bring and share an update with the rest of the Committee on their respective research, restoration, public education and engagement projects currently being completed to protect and restore the CHNEP program area.

Management Committee Co-Chair James Evans will be leading and facilitating this discussion.

15. PUBLIC COMMENT

Each participating member of the public is afforded up to 3 minutes total to comment.

16. FUTURE MEETING'S TOPICS, LOCATION AND DATE

The next Management Committee meeting will be September 9th, 2022, and information will be available on the Management Committee webpage at <https://www.chnep.org/management-committee>. Please contact Jennifer Hecker if you have topics you would like to suggest for the agenda.

17. ADJOURN