

A Community Assessment for Land-Use, Infrastructure, and Resilience

Developed for

The Coastal and Heartland National Estuary Partnership

by



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Introduction

The Coastal and Heartland National Estuary Partnership (CHNEP) through their county-level Citizen's Advisory Council (CAC) seeks a baseline assessment tool to evaluate climate change challenges and the state of climate change resilience in our region. Growing Climate Solutions, through our partnership with CHNEP, has developed the assessment protocol to help identify strengths and weaknesses that affect community sustainability and resiliency regarding natural and built infrastructure, technical capacity, and needs and resiliency goals of the counties within the CHNEP project area. It was also designed to help evaluate levels of local community engagement. This assessment seeks input from local government officials and other community leaders and is being conducted for internal use by CHNEP. It is intended to provide a brief snapshot of each community, and it is not considered to be all-inclusive. Findings are not prioritized or ranked in any way.

Many communities in Florida's Coastal and Heartland Region have reached a pivotal point in development. Given the appropriate resources, these counties have an opportunity to take a more pro-active role in shaping a sustainable and resilient future that preserves natural resources and utilizes sustainable local infrastructure systems. Science-based decisions on investments in energy, water, transportation, and waste management can protect natural resources, minimize risks, save money, and increase resilience. Resource mapping, technical expertise and careful planning can help to preserve quality of life and important natural resources. By identifying climate-related needs and goals of Coastal and Heartland communities, we can guide future work plans and identify useful funding opportunities. This provides a mechanism to address pressing environmental challenges including water quality and climate change, which have emerged as powerful incentives for building sustainable and resilient communities.

I. Background

The CHNEP was formed in 1995, when the Governor of Florida asked Congress to designate Southwest Florida's estuaries and their watersheds — from Dona Bay in Sarasota to Estero Bay in Lee County — as "estuaries of national significance." The CHNEP is 1 of 28 entities in the National Estuary Program and receives local, state and federal funding for the protection and restoration of water resources and fish and wildlife habitat. As a non-regulatory, science and consensus-based partnership, the CHNEP brings local, state and federal governmental entities together with the private sector and the public to advance common environmental initiatives.

Growing Climate Solutions: Path to Positive Southwest Florida is a regional climate initiative aimed at developing a network of local organizations, leaders and citizens who will work to build climate awareness, protect our natural assets, and empower Southwest Florida residents, businesses, and civic institutions to support and engage on climate solutions that advance a healthy, prosperous, and resilient community.

Growing Climate Solutions represents Glades County as part of the CHNEP CAC, and this assessment tool was created to support outreach and information gathering by other CAC members. It is one product of Growing Climate Solutions' multi-year effort to increase public awareness of climate change and support actions and solutions to address its associated challenges.

II. Goals and Methodology

The purpose of this assessment was to understand the status of natural and built infrastructure, the level of community knowledge and engagement within the Coastal and Heartland Region regarding climate and environmental challenges and to identify goals, needs, and interest in having CHNEP assist in obtaining funding opportunities to advance local objectives. Questions focus on identifying resilience and infrastructure-related issues and ideas, current levels of local community involvement, and potential opportunities for future work. Advancing climate resiliency is a multi-step process that begins with asset identification and mapping, risk quantification, vulnerability assessment, followed by judiciously selected and planned investments in protecting, restoring, strengthening, and insuring assets – all the while considering input from stakeholders to identify salient issues and to create realistic solutions.

Please note that the list below is specific to climate-related topics including groundwater, stormwater, county comprehensive plans, related studies, septic to sewer plans, capital improvement plans, local mitigation strategies, floodplain maps, flood insurance coverage, etc.

Goals:

- Identify existing community information including demographic and economic data, development planning and environmental studies, capital improvement plans, emergency response plans, post-disaster mitigation plans etc.
- Identify community contacts and assess the level of local community involvement in planning for community resilience
- Identify key community challenges and needs
- Assess interest in pursuing baseline studies, improvement measures, community education and outreach that could be addressed through technical assistance and funding
- Identify programs, policies and strategies that successfully address climate resilience that could be replicated in other CHNEP communities.

Methodology:

Growing Climate Solutions staff developed this assessment, incorporating suggestions made by the CHNEP staff. Growing Climate Solutions interviewed representatives from Glades County, FL and presented findings to the CAC. CAC members representing other CHNEP counties will reach out to their associated county contacts. The Assessment may also be completed by planners, engineers, floodplain managers or administrators using existing sources of information from their community.

Contact Information:

Your feedback is important for us to better understand your community and identify opportunities in which we may provide technical or financial support. Please take a moment to answer the following questions.

1. How would you characterize your affiliation?

- Government (please circle) State County Local Tribal Regional Agency
- Elected Official (please circle) Municipal County State Tribal Nation

Other_____

Contact information:

PRIMARY CONTACT

First Name _____ Last Name_____

Professional Title of Position _____

Organizational Affiliation:_____

EMAIL: _____ PHONE_____

SEONDARY CONTACT

First Name _____ Last Name_____

Professional Title of Position _____

Organizational Affiliation:_____

EMAIL: _____ PHONE_____

Others Individuals Assisting in Completing the Survey

First Name _____ Last Name_____

Professional Title of Position _____

Asset Assessments

2. Has your jurisdiction identified a list or created a map of critical public assets and infrastructure required for community operations and quality of life? Assets that need to be included in a vulnerability assessment (Schools/emergency shelters, Hospitals, Fire/Police Stations, Evacuation Routes, Rail Infrastructure, Power Plant, Water Waste Treatment, Marinas, Landfills)

- Yes – a comprehensive tally
- Yes – a partial tally
- No
- I don't know

If yes, who/where is that list/map kept? _____

Is that information updated periodically _____ Last updated 20____

3. Has your jurisdiction identified a list or created a map of natural resources that need to be protected, restored and included in a vulnerability assessment (waterbodies, waterways, wetlands, public parks, critical habitat areas, flora/fauna,)

- Yes – a comprehensive tally
- Yes – a partial tally
- No
- I don't know

If yes, who/where is that list/map kept? _____

Is that information updated periodically _____ Last updated _____

4. Has your jurisdiction identified social, capital, and economic assets that need to be included in a vulnerability assessment related to a changing climate?

- Yes – a comprehensive tally
- Yes – a partial tally
- No
- I don't know

If yes, who/where is that list/map kept? ____ - _____

Is that information updated periodically _____ Last updated 20____

Stormwater and Flooding

5. Presently, my jurisdiction's Stormwater System functions effectively to prevent flooding:

- 5-Strongly agree
- 4-Agree
- 3-Neutral
- 2-Disagree
- 1-Strongly disagree

6. Presently, my jurisdiction's Stormwater Management effectively addresses water quality and pollution control.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

7. Are there locations in the Stormwater System service area that do not support a minimum level of service and flood?

No

Yes If yes, please specify

8. Our jurisdictions has conducted an assessment of the Storm water system and outfalls Yes. No. I don't know

9. Climate change in SWFL is intensifying heatwaves, droughts, and extreme rain events. In the next 10 to 15 years, my jurisdiction's storm water management system can handle these fluctuations in weather.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

Please explain why you made this choice.

10. Property owners in our jurisdiction are aware of their Flood Zone and flood risk as mapped by the National Flood Insurance Program.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

11. The vast majority of property owners in our community have Flood Insurance policies in place.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

12. The coastal structures, coastal infrastructure and seawalls in our jurisdictions have been assessed and provide adequate level of service and protection in the 20 year time horizon.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

Ground Water and Potable water Supply

13. My jurisdiction has mapped surface water resources and documented conditions.

- No Yes – Please specify the year. _____

14. My jurisdiction has mapped its groundwater levels in the community:

- No Yes – Please specify the year. _____

15. My jurisdiction has up-to-date information on well-water supply and water quality?

- No Yes – Please specify the year. _____

16. Water Supply resources are adequately protected and buffered to preserve drinking water quality?

- 5-Strongly agree
- 4-Agree
- 3-Neutral
- 2-Disagree
- 1-Strongly disagree

17. My jurisdiction has data or studies to assess changes in the water table and salinity due to climate change?

- Yes
- No
- I don't know

Please specify studies and dates completed.

18. My jurisdictions has an effective and reliable water treatment facility.

- 5-Strongly agree
- 4-Agree
- 3-Neutral
- 2-Disagree
- 1-Strongly disagree

Septic and Sewer

19. Our Jurisdiction has _____ municipal sewer connections and _____ homes using sanitary septic systems.

20. My jurisdictions has a reliable and modern wastewater treatment plant.

- 5-Strongly agree
- 4-Agree
- 3-Neutral
- 2-Disagree
- 1-Strongly disagree

21. Our jurisdiction has a plan in place to extend the central sewer system to unserved areas. Yes. No. I don't know

If yes, please describe time frame and number of properties included:

22. Our jurisdiction has adequate funding in place to implement a septic to sewer conversion program. Yes. No. I don't know

Planning Efforts

23. Our jurisdiction's Comprehensive Plan addresses anticipated climate change:

- 5-Strongly agree
- 4-Agree
- 3-Neutral – I don't know
- 2-Disagree
- 1-Strongly disagree

Please explain why did you make this choice?

24. Our Capital Improvement Plan and budgeting process incorporate projects to protect and restore natural resources such as water quality, water supply, trees, natural habitat or air quality.

- 5-Strongly agree
- 4-Agree
- 3-Neutral
- 2-Disagree
- 1-Strongly disagree

25. Our jurisdictions has or participates in a Local Mitigation Strategy Working Group in accordance with 27p-22 of the Florida Administrative Code.

- Yes. No. I don't know

26. Our jurisdictions has a Local Mitigation Strategy (LMS) document identifying projects to be funded through the Hazard Mitigation Grant Program.

- Yes. No. I don't know

27. Our jurisdictions' LMS strategy includes threats and needed projects resulting from changes to our climate.

- Yes. No. I don't know

28. Our jurisdiction's Disaster Response Plan includes threats resulting from climate impacts such as

- Heatwaves Yes. No. I don't know
- Wildfire Yes. No. I don't know
- Storm Flooding Yes. No. I don't know
- Tidal Flooding. Yes. No. I don't know
- Vector-borne diseases (Zika, Denge) Yes. No. I don't know

Public Awareness and Education

29. Stakeholders in our Jurisdiction understand the impact of land development on the natural environment.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

30. Stakeholders in our jurisdiction value conservation and restoration of natural resources and ecosystem.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

31. Stakeholders in our jurisdiction understand the impacts of a changing climate on water resources and management issues.

- 5-Strongly agree
- 4-Agree
- 3 - I Don't know
- 2-Disagree
- 1-Strongly disagree

32. Stakeholders in our jurisdiction are concerned about the impacts of a changing climate on the quality of life in the community.

- 5-Strongly agree
- 4-Agree
- 3-I don't know
- 2-Disagree
- 1-Strongly disagree

33. Please rank issues below from 1-10 (1=issue of greatest concern)

Rank	Issue
	Threats to Potable Water Quality/Quantity or Distribution
	Aging Wastewater Systems
	Storm Flooding Impacts on Property and Infrastructure
	Agricultural Production Challenges
	Economic and Education Opportunities or Disparities
	Natural Resource Protection
	Public Health Metrics
	Land Development Policies
	Transportation Infrastructure
	Lack of Community Engagement/Support

34. Please list specific studies, staff trainings or financial assistance that your jurisdictions would benefit from.

35. Would you be open to financial and/or technical support to complete a revised ground water or storm water study? Septic to sewer study? Please specify.

36. May we contact you about resources that CHNEP could provide to support community-wide sustainability and resilience efforts? Please rate interest level in learning more.

- 5-Highly interested
- 4-A lot
- 3-Some
- 2-A little
- 1-Not at all

We welcome additional comments or suggestions.

Please return this survey to bridgetw@growingclimatesolutions.org

Thank You!