One Charlotte, One Water
Proposed Visions and Tasks
2nd Revision (February 2025)

The following is a summary of Visions, Pathways, and Tasks submitted as part of the first draft of the One Charlotte, One Water Plan. Please note the recommendations contained herein are expected to evolve in response to comments, concerns, and recommendations provided by County Commissioners, citizens, and partner agencies. For each list of Vision Tasks provided below, indicate which you believe are the three highest-priority tasks for implementation, and if there are any tasks you strongly disagree with.

Terminology and Iconography Keys

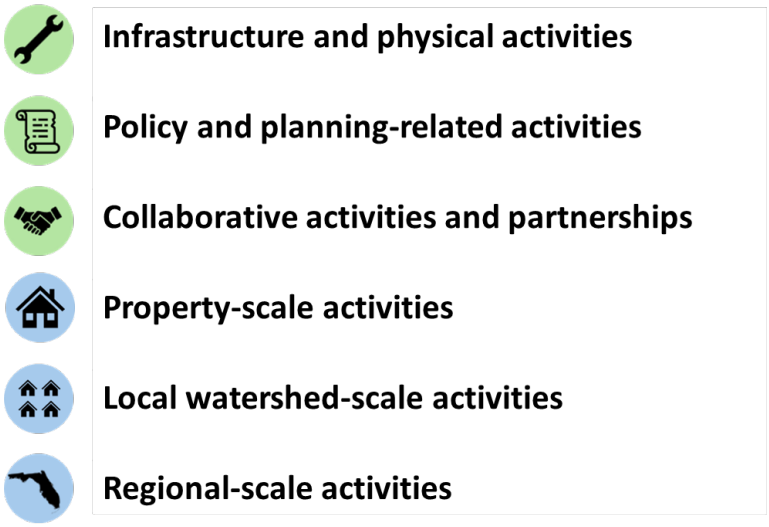
Focus Areas:

Monitoring/ Modeling | Stormwater | Drinking/Wastewater | Planning/Policy

One Water Vision: Focus Area mission statement

Pathways to the Vision: "Steps" towards achieving the One Water Vision

Vision Tasks: Actionable activities to meet the Pathways



--Monitoring, Modeling, and Watershed Improvement Planning--

ONE WATER VISION: Create a comprehensive system for monitoring water quality and quantity trends in Charlotte County, creating meaningful stories to inform those activities that affect our waters now and into the future.

PATHWAYS TO THE VISION

	Establish a comprehensive water flow and pollutant load-based monitoring network, tracking and identifying regions with high rates of loading compared to background conditions and water quality criteria exceedances.
	Develop interactive flow, flood, and pollutant modeling products to inform water management and permitting decisions.
	Develop and implement water quality restoration plans throughout impaired areas of the county.
	Develop Watershed Management Plans to address watersheds where data indicates potential pollutant/flooding concerns, but has not been officially designated as an impaired water.

CURRENT VISION TASKS

Categories	Task
	Install comprehensive water flow and elevation monitoring system to track pollutant loading rates, identify areas of flood and tidal surge risk, and calibrate/validate predictive flow and pollutant loading models.
	Build initial iteration of the *Spatially Integrated Model for Pollutant Loading Estimates* (SIMPLE) pollutant loading model to identify possible sources and drivers of pollutant discharges in the county.
	Coordinate with regional partners to initiate Charlotte Harbor and Lemon Bay water circulation study to determine hydrologic dynamics in areas experiencing chronic annual macroalgae and cyanobacteria blooms.
	Begin developing restoration plans based on prioritization described in this plan. For those impaired waterbodies recommended for TMDL development, confer with relevant partners to request FDEP's prioritization of these areas for modeling and restoration strategy development.
	Participate in and support implementing recommendations emerging from the regional harmful algal bloom working group.
	For waterbodies indicating potential water quality impacts but for which no impairment designation has been established, determine data needs as applicable and implement enhanced monitoring in the area to support assessment by FDEP. In addition, expand current monitoring program to account for impacts from National Pollutant Discharge Elimination System (NPDES) wastewater discharge facilities and other point-sources.
	Implement central data management, review, and storage warehouse for all water quality and quantity monitoring efforts collected or funded by the county.
	Partner with regional monitoring agencies as needed to create complimentary, cooperative monitoring programs. Assist partner agencies in streamlining data review and management processes to maximize the efficiency and accuracy of monitoring activities in our estuary.

--Stormwater Management--

ONE WATER VISION: Further Integration of flood protection and water quality enhancement into a unified system of stormwater management

PATHWAYS TO THE VISION

	Evolve canal management activities toward the need for minimal human intervention, promoting nature-based pollutant attenuation systems and mechanical management where viable.
	Conduct stormwater maintenance optimization process, identifying waterway-specific maintenance needs and upgrading maintenance communications/logistics.
	Address portions of the county that are exempt from current stormwater regulations by implementing stormwater mitigation incentives and features.
	Position the county as an incubator for emerging technologies to address water quality and quantity challenges
	In concert with complementary strategies such as the county's Watershed Master Plan and Vulnerability Assessment, identify opportunities to expand and/or enhance current stormwater management infrastructure.
	Commit to advancing the county's Municipal Separate Storm Sewer System (MS4) stormwater system to provide the same treatment benefits mandated for new stormwater construction activities in the new stormwater rule.
	Increase outreach efforts among residents along county canal systems through stewardship and education programs.

CURRENT VISION TASKS

Categories	Task
	Initiate the first phases of the stormwater maintenance optimization process, identifying waterway-specific maintenance needs and upgrading maintenance communications/logistics.
	Review and revise the county Stormwater Master Plan, including addressing areas of the county MS4 not included in the current iteration of the Plan.
	Install water elevation monitoring networks to track flow rates, flood risk, and tidal influence on water drainage in the region.
	Based on output from the county Vulnerability Assessment and Watershed Master Plan, develop predictive tools as needed for stormwater runoff and drainage rates to assist in: -prioritizing enhanced water management in areas of higher flood risk.

	-developing predictive flood risk tools to assist in evaluating impacts of changing land use in an area.
	Use modeling efforts described in this Plan to prioritize opportunities for acquiring land and installing neighborhood-scale water quality improvement/retention basins, where such need has been identified through said modeling/assessment efforts.
	Implement pilot nature-based or chemical-free water improvement projects (e.g. eelgrass seeding in canals) in select waterways to evaluate water quality improvement efficacy and considerations related to flood control.
	Pilot the installation of canal barrier systems to sequester and minimize the spread of nuisance floating vegetation throughout canals, in order to reduce the frequency/need for treatment.
	Use modeling efforts described in this Plan to prioritize opportunities for pilot installations of stormwater filter/infiltration systems at junctions of swale and transmission canals.
	Develop pond monitoring and stewardship program to assist residents in identifying opportunities for enhancing private residential ponds. Evaluate options for including cost-share program to implement remediation solutions such as plantings and aeration structures.

--Drinking Water and Wastewater Management--

ONE WATER VISION: Maintain efficient, resilient, and fiscally sound water supply and treatment services to Charlotte County while protecting our aquatic resources.

PATHWAYS TO THE VISION

	Using guidance provided through Utilities Department's planning processes, develop, support, and align Department monitoring initiatives with existing county monitoring and assessment projects and initiatives to track water quality/quantity impacts from Department activities.
	Expand surface water monitoring program to target water quality trends for surface waters served by non-county wastewater management systems.
	Identify and prioritize opportunities for reducing new septic installations within areas with potential surface and ground water quality impacts.
	Identify and prioritize opportunities for addressing areas at higher risk of saltwater intrusion.
	Prioritize implementation of infrastructure resiliency enhancements, especially in areas with highest risk of flooding and tidal surge impacts, and higher failure rates during storm events..

CURRENT VISION TASKS*

Categories	Task
	Conduct a needs and cost analysis of expanding sewer and potable water service to portions of west Port Charlotte.
	Based on data and guidance from SWFWMD, increase groundwater elevation and salinity monitoring network to track saltwater intrusion trends in the region, especially in areas with higher densities of groundwater withdrawal wells.
	In cooperation with other relevant departments (such as Community Development), organize and implement enhanced education and enforcement process to reduce construction-related breaks in water supply and wastewater transmission pipes.
	Initiate reclaimed water user irrigation education campaign, providing guidance on water content and application to reduce fertilizer use and inappropriate irrigation application.

**** NOTE:** The Utilities Department has developed multiple plans with recommendations related to addressing water supply and treatment processes while addressing water quality and quantity considerations. The measures in those plans should be considered components of the county's One Water Program, with the recommendations in this document intended to be complimentary to those efforts.*

--Policy, Programmatic, And Organizational Activities--

ONE WATER VISION: Achieve and build upon the water protection goals in the Comprehensive Plan, lay the groundwork for sustained input of resources to support the One Water plan, and establish formal mechanisms for regular public input into One Water visioning and the water quality program.

PATHWAYS TO THE VISION

	Through research and public feedback, identify and evaluate the feasibility of aspirational water-related goals and policies in the Comprehensive Plan and put them on the pathway to becoming actionable.
	Support sustainable, perpetually funded habitat conservation and land acquisition programs such as Conservation Charlotte.
	Establish a permanent public-private and public-public partnership consortium integrating tourism, economic development, community development, and the private sector to identify opportunities for joint water protection activities.
	Promote and expand ecotourism programs to drive attention to the county's unique natural resources and help drive management priorities for ecosystem preservation.
	Build organizational capacity to efficiently implement the many facets of this plan.

	Consolidate and organize department resilience-related activities to create cohesive climate change risk/adaptation hub
	Establish formal mechanisms for regular public and interagency input into One Water visioning and the water quality program.
	Establish comprehensive citizen science initiatives to facilitate stewardship, education, and information exchange between the county and our residents. Build these initiatives in support of primary education initiatives.
	Create formal communication pathways between county stakeholders and the water quality program
	Where applicable, align county water management activities with regional water protection initiatives, supporting other agencies and local governments' activities which result in reduced pollution impacts to the Peace, Myakka, Caloosahatchee River basins, and Charlotte Harbor and Lemon Bay.
	Further regional climate resiliency communication and coordination.

CURRENT VISION TASKS

Categories	Task
	As a component of the proposed citizen science program, Initiate comprehensive stewardship marketing campaign to better inform the public of the part they play in maintaining a healthy water system from house to harbor.
	Establish Environmental Analyst, Environmental Technician, and Environmental Programs Coordinator positions to assist with reporting, prioritization, analysis, and recommendations associated with the county water quality program.
	Prioritize green stormwater infrastructure (GSI) implementation at county properties, to serve as demonstration measures for private and residential development, and be held as a benchmark in the county for integration of comprehensive water management/ treatment processes.
	Evaluate the need, feasibility, cost/benefit, and authority to alter the current fertilizer ordinance based on recent research regarding timing and duration of fertilizer bans.
	Establish water program advisory and collaboration board comprised of residents, representatives from local government entities, and water-related commercial interests.
	Support and participate in the development of a statewide One Water coalition
	Create central online water resource education hub to provide information to the public on water management considerations in the region as well as address frequently asked questions/concerns posed to county departments