



Chapter 7 Environment/ Conservation



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Supporting Documents

- 2045 LRTP Environmental Mitigation Report
- National Estuary Program Comprehensive Conservation and Management Plans – Coastal and Heartland National Estuary Partnership (CHNEP) and Sarasota Bay Estuary Program (SBEP); and
- Tampa Bay Regional Resiliency Coalition (TBRPC) Memorandum of Understanding





7.0 Environment/Conservation

The MPO incorporates public health in project priorities.

The MPO must balance planned growth and environmental protection.

The Sarasota-Manatee region is committed to responsible environmental stewardship, as the region’s livability, economic well-being, and very identity are dependent on the following factors: healthy shorelines, clean water, sustained wildlife communities, and abundant recreation, as reflected in the process, community feedback, and results of the LRTP update process.

Three of the primary documents and partnerships that guide the way that the LRTP addresses the topics of Environment/Conservation include:

- 2045 LRTP Environmental Mitigation Report;
- National Estuary Program Comprehensive Conservation and Management Plans – Coastal and Heartland National Estuary Partnership (CHNEP) and Sarasota Bay Estuary Program (SBEP); and
- Tampa Bay Regional Resiliency Coalition (TBRPC).

7.1 2045 LRTP Environmental Mitigation

Sarasota and Manatee Counties are home to numerous ecological assets and waterbodies. To recognize these assets and expand upon federal planning factors, the MPO articulated its own environment and conservation goals in the LRTP. Environment and conservation are important considerations when managing expansion and redevelopment activities as the region continues to develop through 2045 and beyond.

Impacts to water resources and habitat need to be considered as the region develops. Roadway capacity improvement projects (roadway widening, new construction, etc.) and new land development increase negative environmental impacts such as net losses of

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Objectives

-  **Reduce** vehicle miles traveled
-  **Safeguard** critical habitat, wetlands, and endangered species
-  **Support** green infrastructure, energy conservation, and natural redevelopment
-  **Achieve** climate appropriate tree cover, community-wide
-  **Promote** environmental and public health
-  **Increase** infill development to reduce urban sprawl

Prioritization Factors

Are projects...

- Away** from critical habitat, wetlands, and endangered species?
- Located** within a designated infill development area?

Vision Statements

- Safeguard treasured environmental assets
- Plan for resiliency from storms and flooding
- Balance protection and land use
- Increase density and decrease auto dependency.



floodplain storage, alteration to existing hydrological patterns, and increased concentrations of pollutants that run off into rivers, streams, and the Gulf. Priority waterbodies and impaired watersheds in the Sarasota Manatee region are identified by the Florida Department of Environmental Protection (FDEP) and are depicted in **Figure 7-1**. As noted, transportation projects can significantly impact aspects of the environment including wildlife and their habitats, air quality, wetlands, and groundwater resources. Federal regulations require the LRTP to identify environmental assets and concerns and indicate potential locations for mitigation strategies to address the environmental impacts of transportation projects. **Table 7-1** provides potential mitigation strategies by environment/resource type.

Mobile source greenhouse gas (GHG) emissions are one of the most significant transportation-related environmental concerns. High levels of traffic congestion increase GHG emissions because of the increase in time cars spend idling in traffic, emitting carbon monoxide, as well as other pollutants. As the Sarasota Manatee region grows, GHG emissions can be mitigated by better integrating transportation and land use planning which facilitates multi modal activity as well as implementing roadway strategies that reduce congestion and result in smoother traffic flow. The LRTP and the Congestion Management Process (CMP) look to develop and support policies, programs, and incentives, which address Vehicle Miles Traveled (VMT) reduction, improve multi modal transportation options, and support cleaner transportation practices.

Transportation infrastructure can both impact sensitive environmental areas and be vulnerable to the environment and climate related events such as major weather events, natural disasters, and sea level rise. Currently, there are 21 regionally significant bridges in the MPO's jurisdiction that are rated as Fair condition and therefore, vulnerable to the environmental events described above. The LRTP aligns with federal planning goals to prioritize maintenance of existing infrastructure, like bridges, to uphold the structural integrity and physical longevity of public assets for the Sarasota-Manatee Region. Additionally, considering opportunities to increase the resiliency of the region's transportation infrastructure (e.g. traffic signals, irrigation systems, etc.) through renewable, weather-tolerant energy sources can improve the regions ability to adapt to the compounding effect of sea level rise, increased storm activity, and storm surge. Identifying infrastructure conditions and vulnerability to environmental impacts are considered when prioritizing projects in the LRTP to plan for, and allocate funds to, future transportation needs or rehabilitation projects to improve the longevity and adaptability of the region's transportation system.



Table 7-1: Potential Mitigation Alternatives by Resource Impact Type

Resource Impact Type	Potential Mitigation Alternative
Wetlands and Water Resources	<ul style="list-style-type: none"> • Restore degraded wetlands • Create new wetland habitats • Enhance or preserve existing wetlands • Improve stormwater management • Purchase credits from local federal and/or state approved mitigation banks
Forested and Other Natural Areas	<ul style="list-style-type: none"> • Use selective cutting and clearing • Replace or restore forested areas • Preserve existing vegetation
Habitats	<ul style="list-style-type: none"> • Construct underpasses, such as culverts/critter crossings/wildlife shelves • Other design measures to minimize potential fragmenting of animal habitats
Streams	<ul style="list-style-type: none"> • Stream restoration • Vegetative buffer zones • Strict erosion and sedimentation control measures
Threatened or Endangered Species	<ul style="list-style-type: none"> • Preservation • Enhancement or restoration of degraded habitat • Creation of new habitats • Establish buffers around existing habitat and foraging grounds

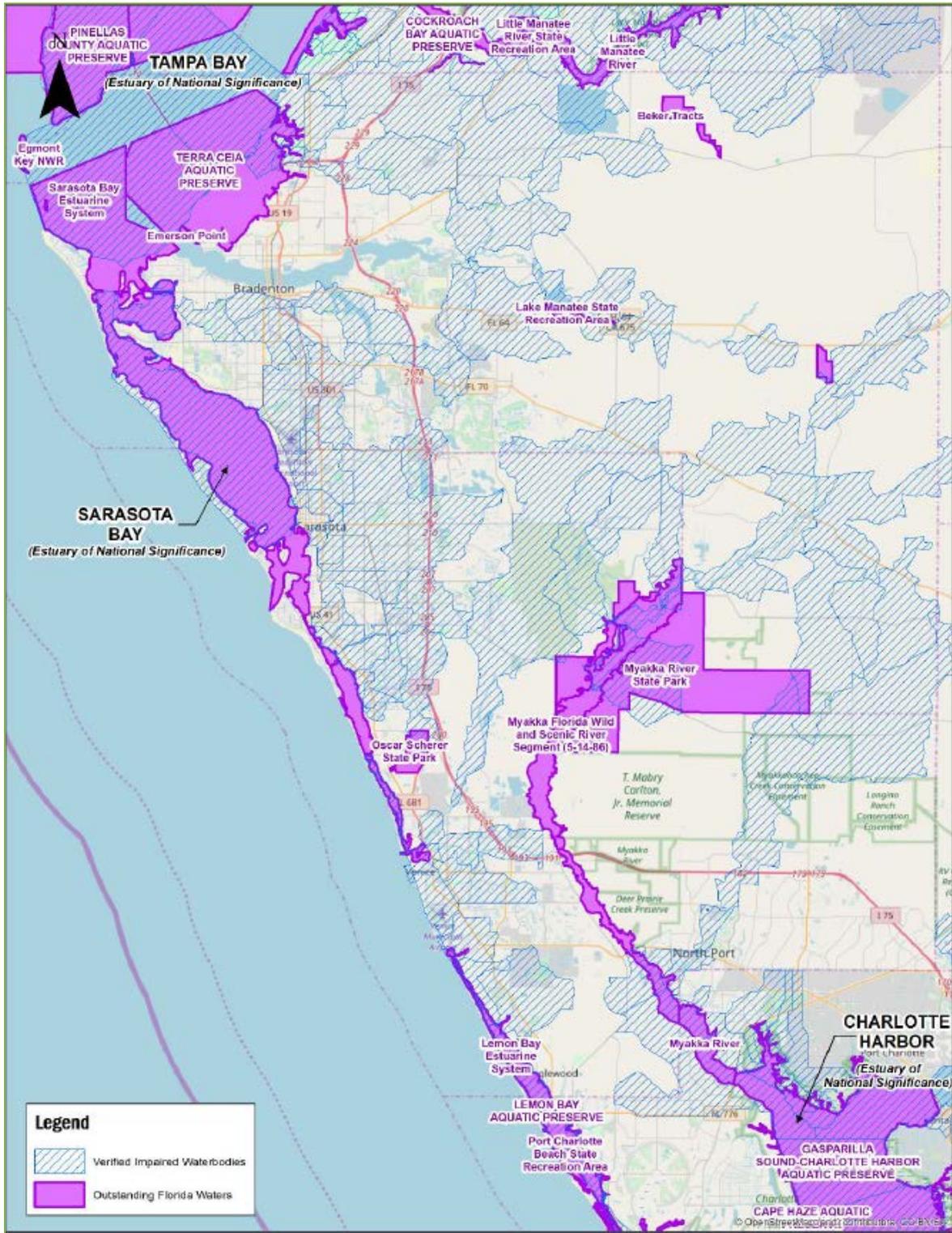


Figure 7-1: Priority Waterbodies and Impaired Waters



7.2 *Tampa Bay Regional Resiliency Coalition (RRC)*

The RRC is coordinated by the Tampa Bay Regional Planning Council (TBRPC) and serves as a regional alliance among local government jurisdictions in the six-county Tampa Bay region, including Manatee County. The focus of the RRC is to amplify the environmental stewardship efforts of coastal municipalities as well as implementing climate change adaptation measures and mitigation strategies at the watershed-scale. The RRC coordinates climate adaptation and mitigation activities across county lines to advance local and regional responses and preparations for economic and social disruption projected to result from sea-level rise. The LRTP should take care to consult the RRC in developing project priorities and policies to address climate risks and to improve transportation system resiliency.



7.3 *National Estuary Program Comprehensive Conservation and Management Plans (CCMP)*

The landscape of Central and Southwest Florida has changed over time with population growth, development, agriculture, and mining activities. The water quality and ecological integrity of two significant marine waterbodies and their associated watersheds in Sarasota and Manatee Counties are monitored by two National Estuary Programs: the Coastal and Heartland National Estuary Partnership (CHNEP) and the Sarasota Bay Estuary Program (SBEP). These National Estuary Programs are managed by a partnership of elected officials from city and county governments, resource managers, as well as commercial and recreational resource users who are working to improve and protect the water and wildlife in the region. Each of the programs develop and implement a CCMP that establish goals, objectives, policies, and actions to guide regional water and wildlife protection and restoration efforts. The MPO uses the policies and action plans from the CCMPs to provide guidance for minimizing the adverse effects on coastal and inland water systems caused by growth. Ensuring that sensitive environments are protected is a key component of balanced planned growth.

The CHNEP service area extends along the Gulf Coast from Donna & Roberts Bays south to Estero Bay and inland to Florida's Heartland including the Peace River and Caloosahatchee River basins. The 2019 CHNEP CCMP announced the addition of 716 square miles to their service area to encompass the freshwater basin of the Caloosahatchee River, depicted by **Figure 7-2**. This expansion was critical to better protect and restore the Caloosahatchee River and the waterways that feed the Charlotte Harbor. The climate risks found to pose the highest threat to the CHNEP service area were overloaded stormwater systems, septic failure, loss of coastal vegetation, and habitat loss or degradation. Addressing these concerns, the CHNEP CCMP's four Action Plans



focused on water quality improvement, hydrological restoration, fish, wildlife, and habitat protection, and public engagement.

The SBEP extends 50 miles along the Gulf Coast from Palma Sola Bay south to Blackburn Bay (Figure 7-2). The SBEP CCMP was adopted in 2014 and is in the process up being updated. The SBEP CCMP contains seven Action Plans, each addressing a different focus area in Bay restoration. The key focus areas of the Action Plans include water quality, habitat restoration, and recreation and stewardship.

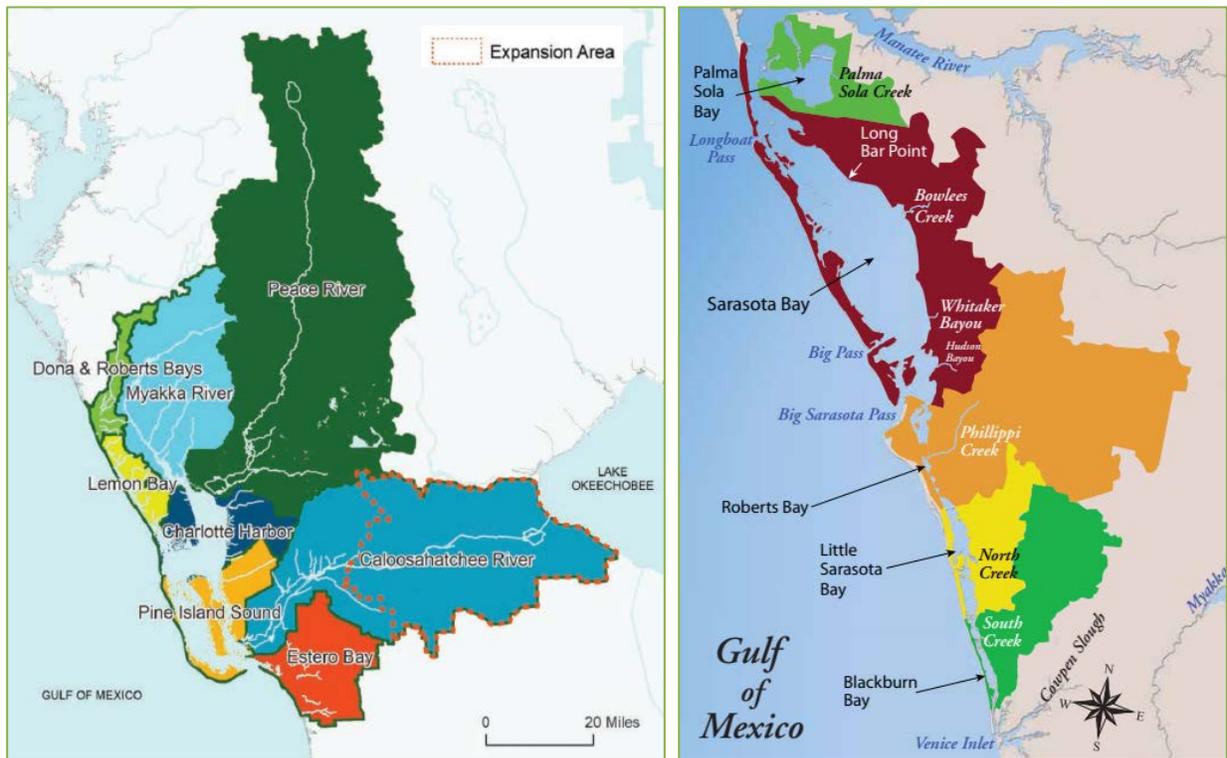


Figure 7-2: CHNEP (Left) and SBEP (Right) Service Areas