

E. COASTAL MANAGEMENT

The intent of the coastal management element is to provide policies to guide the City of Clearwater's coastal water programs with respect to such areas as the coastal zone environment, wildlife and marine life, utilization and preservation of all living and nonliving coastal zone resources, avoidance of loss of coastal zone resources, ecological planning principles for permitting development, and the protection of human life against the effects of natural disasters.

Coastal disaster management is a coordinated regional effort in accordance with state and federal regulations that primarily involves the minimization of the vulnerability to and preparedness for hurricanes affecting certain areas of coastal communities.

Recreational surface water use policies address public access to the water, and protection of working waterfronts, recreation and economic demands.

Coastal Management Needs Summary

The following summarizes the Coastal Management Element:

- Clearwater's coastal storm area is any area that includes the Coastal High Hazard Area (CHHA), all areas connected to the mainland of Clearwater by bridges or causeways, those areas at relatively higher elevations that are surrounded by the CHHA or by the CHHA and a body of water and all areas located within the Velocity Zone as designated by the Federal Emergency Management Agency (FEMA). This area includes the barrier islands and land adjacent to Clearwater Harbor and Tampa Bay. The diversity of natural systems and development patterns are a complex environment with a wide range of issues to be addressed.
- Land use patterns are generally compact. Water-dependent uses, which occupy a relatively small part of the overall shoreline, are defined to be marinas, beach access, boat launch areas and docks, wastewater plants, and beach concessions. Water-related uses are marine sales, marine product distribution, motels and related tourist facilities, and public parking; these occupy much of the land on Clearwater Beach and Sand Key but are not as significant in other parts of the coastal storm area. Water-dependent and water-related uses need to be given an emphasis in planning and permitting shoreline development.
- The economic base of the coastal storm area is largely tourism, which plays an important role for the County as a whole. Commercial uses, including tourism businesses, need revitalization, and the *Beach by Design: A Preliminary Design for Clearwater Beach and Design Guidelines* program addresses the needs of Clearwater Beach.
- The most significant areas for environmental preservation are the north end of Clearwater Beach, the sea grass beds in Clearwater Harbor, and Cooper's Point, with secondary significance determined for the Clearwater Harbor spoil islands, Sand Key Park, the south shore of Alligator Lake and Stevenson's Creek, both the shoreline and creek basin.
- Seasonal sea turtle nests are protected in partnership with Pinellas County and the Clearwater Marine Aquarium.

- There are not a significant number of historic structures in the coastal storm area.
- Evacuation of tourist facilities in the coastal storm area should be a priority.
- The City will continue to participate in the Pinellas County Local Mitigation Strategy and other hazard mitigation initiatives to reduce the vulnerability to disasters.
- In recent years the City has experienced a loss of working waterfront uses such as dock slips, marinas and high and dry storage.

GOALS, OBJECTIVES AND POLICIES

E.1 GOAL - MANAGEMENT OF CLEARWATER'S COASTAL STORM AREA SHALL PROVIDE FOR THE LONG-TERM ACCESSIBILITY, SAFETY, ECONOMIC VIABILITY, NEIGHBORHOOD STABILITY, AND ENVIRONMENTAL INTEGRITY OF THESE UNIQUE RESOURCES.

E.1.1 Objective - Clearwater shall continue to protect beaches and dunes by use of the State Coastal Construction Control Line as the building and land alteration setback line for purposes of administering the Community Development Code. The Florida Building Code, Federal Emergency Management Agency (FEMA) regulations, and City coastal construction regulations will continue to govern the structural integrity of new buildings.

Policies

E.1.1.1 Development densities shall not be assigned seaward of the Coastal Construction Control Line.

E.1.2 Objective - The coastal storm area shall be the area delineated in Maps E-1A and E-1B of the Coastal Management Element, which encompasses all of the following:

- (1) **the Coastal High Hazard Area (CHHA), which shall be defined by the *Sea, Lake and Overland Surges from Hurricanes (SLOSH)* model to be inundated from a category one hurricane, as reflected in the most recent *Regional Evacuation Study, Storm Tide Atlas*,**
- (2) **all land connected to the mainland of Clearwater by bridges or causeways**
- (3) **those isolated areas that are defined by the *SLOSH* model to be inundated by a category two hurricane or above and that are surrounded by the CHHA or by the CHHA and a body of water, and**
- (4) **all land located within the Velocity Zone as designated by the Federal Emergency Management Agency.**

The City shall direct permanent population concentrations away from the coastal storm area consistent with the goals, objectives and policies of the *Clearwater Comprehensive Plan*.

Policies

E.1.2.1 If 20% or more of a parcel of land is located within the coastal storm area, then the entire parcel shall be considered within the coastal storm area, with the exception of specific parcels located on the bluffs of Clearwater Harbor that the City has identified in Map E-1A of the Comprehensive Plan. However, if either a parcel of land or a group of parcels that are part of a master development plan is equal to or greater than 5 acres and less than 50% of the parcel or group of parcels is within the coastal storm area, the property owner may elect to provide a survey of the parcel or parcels to determine the exact location of the coastal storm area.

E.1.2.2 The City shall prohibit the location of new hospitals, nursing homes and assisted living facilities in the Coastal Storm Area and the area inundated by a category 2 hurricane as depicted by the *SLOSH* model, as reflected in the most recent *Regional Evacuation Study, Storm Tide Atlas*.

E.1.3 Objective - Public access to the beach shall be maintained or improved through parking and multimodal transportation enhancements.

Policies

E.1.3.1 Public access to the beach is currently provided in all segments of the coastal storm area. Public access shall be enhanced through purchase, development of recreational lands, acquisition, and easement whenever feasible. Beaches renourished with public funds shall have both traverse access from the road to the beach, and parking, bus, or bicycle accessibility on or adjacent to the public street.

E.1.3.2 The Coastal Management Element recognizes all existing public access ways, street ends, waterfront parks, and parking areas as easements to permit beach access. No current or future access ways shall be vacated in a manner adverse to the public interest. This policy shall enforce public access requirements of the Coastal Zone Protection Act of 1985.

E.1.3.3 The City supports continuing the Pinellas County Suncoast Transit Authority's (PSTA) Suncoast Beach TrolleySM service between Clearwater Beach, Sand Key and the Pinellas County barrier islands located south of Sand Key.

E.1.3.4 As downtown redevelopment occurs, the City will encourage private trolley service from the mainland to Clearwater Beach.

E.1.3.5 The City supports continuing the PSTA bus service between Clearwater Beach and the mainland.

E.1.3.6 The City shall continue to encourage private ferry service from Clearwater Beach to the mainland.

E.1.3.7 The City shall retain all existing public access areas.

E.1.3.8 The City encourages the consolidation of public surface parking facilities into structure parking facilities open to the public on Clearwater Beach.

E.1.3.9 City projects as well as public/private partnerships will continue to be pursued to provide additional new parking on Clearwater Beach and to replace the public parking lot removed to accommodate the construction of Beach Walk.

E.1.4 Objective - The City shall protect historical and archaeological resources in the coastal storm area.

Policies

E.1.4.1 The City will continue to promote the preservation of historic and archaeological resources by providing information to the public and encouraging private groups to nominate sites to preserve.

E.1.4.2 The City will consider amendments to the Community Development Code that will establish performance standards for development and sensitive reuse of historic resources.

E.1.5 Objective - Level of service standards as defined in the functional elements of the Comprehensive Plan (public utilities, recreation and open space), are established and are recognized as applicable to the coastal storm area.

Policies

E.1.5.1 Public facilities, infrastructure, and utilities in the Coastal Storm Area should be maintained and improved as necessary consistent with the Level of Service demands in the functional elements. Future projects are addressed in the Capital Improvement Element.

E.2 Goal – NEW DEVELOPMENT, REDEVELOPMENT, AND INVESTMENT IN PUBLIC FACILITIES, UTILITIES, AND INFRASTRUCTURE SHALL BE MANAGED AND REGULATED TO REDUCE FLOOD RISK IN THE COASTAL AREAS RESULTING FROM HIGH-TIDE EVENTS, STORM SURGE, FLASH FLOODS, STORMWATER RUNOFF, AND THE RELATED IMPACTS OF SEA LEVEL RISE AND TO REDUCE LOSSES DUE TO FLOODING AND CLAIMS MADE UNDER FLOOD INSURANCE POLICIES ISSUED IN THIS STATE.

E.2.1 Objective – Development and redevelopment in the City shall be planned and managed to reduce risk and losses due to flooding resulting from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea level rise.

Policies

E.2.1.1 Development and redevelopment plans and proposals in the coastal storm area shall be reviewed for compliance with the goals, objectives and policies of the Comprehensive Plan and other appropriate plans and references, including *Beach by Design: A Preliminary Design for Clearwater Beach and Design Guidelines*, the City's National Flood Insurance Policy (NFIP) Community Rating System (CRS) Program, and Floodplain Management Plan.

E.2.1.2 The flood-resistant construction requirements in the Florida Building Code and applicable floodplain management regulations set forth in 44 C.F.R. part

60, or more stringent controls, shall continue to be applied to development and redevelopment in the coastal storm area.

E.2.1.3 By 2020, the City shall explore the feasibility of requiring rather than encouraging the use of Low Impact Development site design methods for new development, redevelopment, additions and retrofits, and modifications to properties in the coastal storm area.

E.2.1.4 Low Impact Development design standards shall provide for site design, engineering, and stormwater management designs and retrofits that reduce run-off, mitigate flood impacts, and provide for the on-site absorption, capture, and reuse of rain water. The standards shall encourage or require the increased use of “green” stormwater management treatments, native/Florida-friendly landscape material, porous paving materials, and the preservation and restoration of natural drainage characteristics.

E.2.1.5 The City shall grant building permits in compliance with the rules of FEMA.

E.2.2 Objective – Hazard mitigation efforts will be implemented to reduce flood risk resulting from high-tide events, storm surge, flash flood, stormwater runoff, and the related impacts of sea level rise.

Policies

E.2.2.1 The City shall encourage and support hazard mitigation efforts through continuation of the following activities:

- Participation in the National Flood Insurance Program’s Community Rating System;
- Participation in the Pinellas County’s Local Mitigation Strategy;
- Administration of building regulations consistent with City and FEMA regulations;
- Review and implementation of appropriate policies and strategies developed by partner agencies or through interagency hazard assessment and mitigation initiatives;
- Prohibitions of beach sand dune alterations; and
- Restriction of development in floodways.

E.2.2.2 The City will continue to monitor and coordinate with the Pinellas County Local Mitigation Strategy Work Group and evaluate the feasibility of incorporating recommendations from the initiative and other intergovernmental hazard planning initiatives into the Clearwater Comprehensive Plan and Land Development Code.

E.2.2.3 The City will continue to apply building code and land development code requirements to ensure noncompliant structures are brought into conformance with FEMA flood elevations standards or will be flood proofed consistent with FEMA standards.

E.2.3 Objective – Continue to educate the public on flood risks, as well as mitigation strategies and available programs to reduce flood hazards and improve the

City's Community Rating System (CRS) score, which will allow for decreased flood insurance premiums.

Policies

E.2.3.1 Continue to prepare and disseminate communications and conduct NFIP community workshops to provide information regarding the benefits of acquiring flood insurance.

E.2.3.2 Continue to update, maintain, and make available for public review flood risk maps and related information indicating risks associated with high tide events, storm surge, flash flood, stormwater runoff, and related impacts of sea level rise.

E.2.3.3 Flood elevation certificates shall continue to be made available for public review.

E.2.4 Objective – The practice of adapting the built environment to address impacts of sea level rise shall be an integral part of the City's planning process and in its coordinating with partner agencies.

Policies

E.2.4.1 The anticipated impacts of storm surge and sea level rise shall be a consideration in the implementation and administration of the City's Comprehensive Plan, building and life-safety codes, capital improvement plans, emergency management plans, land development codes, water resource and stormwater management plans, coastal management plans, and economic development programs.

E.2.4.2 The City shall work with local, state, and federal entities in the continued assessment of vulnerabilities and the development of mitigation and adaptation strategies to address the impacts of sea level rise.

E.2.5 Objective – By 2020, the City shall designate Adaptation Action Area(s) identifying locations vulnerable to the impacts of sea level rise, include Adaptation Action Area mapping in the Future Land Use Plan map series, and define policies and strategies applicable to development, redevelopment, and investment in public facilities, infrastructure, and utilities addressing long term impacts.

Policies

E.2.5.1 Map Adaptation Action Areas to identify areas vulnerable to the impacts of sea level rise.

E.2.5.2 Identify and implement adaptation policies to increase community awareness and evaluate the impacts of requiring elevated finished floors, additional freeboard, and wet/dry flood proofing in areas outside designated flood plains but within the designated Adaptation Action Area.

- E.2.5.3 Work with local, state and regional partners to identify funding sources to support adaptation projects located within Adaptation Action Areas.
- E.2.5.4 Evaluate the costs and benefits of adaptation alternatives in the location and design of new infrastructure and the fortification or retrofitting of existing infrastructure.
- E.2.5.5 After the mapping of Adaptation Action Areas, follow a regular program of assessment and reevaluation to ensure policies and strategies address known and anticipated risks associated with sea level rise. Activities shall include acquisition of necessary modeling data and programs to update the Adaptation Action Area map(s) in the City's Future Land Use Plan map series.

E.2.6 Objective – When constructing or reconstructing utilities or infrastructure, evaluations shall be completed to assess vulnerability and resilience to sea level rise and identify cost-effective strategies to ensure resilience.

Policies

- E.2.6.1 The City shall continue to evaluate opportunities to protect public facilities, infrastructure, and utilities from the impacts of sea level rise.
- E.2.7 Objective – Evaluate and identify which public investments and infrastructure should be built or rebuilt, modified or relocated to maximize the effective life span.**

Policies

- E.2.7.1 By 2020, identify public facilities and infrastructure at risk from sea level rise and plan for updates to the assessment every five years. The City shall analyze vulnerability to public facilities and infrastructure, including but not limited to: public buildings and facilities, including police and fire stations; water and water reclamation facilities, transmission lines and pumping stations; stormwater systems; roads and bridges; and other transportation and transit infrastructure.
- E.2.7.2 Based on the sea level rise vulnerability assessment, the City will determine appropriate strategies related to the modification in place [e.g. elevation, hardening, relocation, etc.] or strategic retreat from areas at risk.
- E.2.7.3 Evaluate elevating roads and bridges above the base flood elevation to maintain dry access. In situations where flood waters tend to wash roads out, construction, reconstruction, or repair can include not only attention to drainage, but also stabilization or armoring of vulnerable shoulders or embankments.
- E.2.7.4 By 2020, expand upon existing emergency management communication efforts and initiate a program to coordinate resilience and adaptation initiatives with the owners of private utilities, hospitals and clinics, nursing homes and assisted living facilities, and other privately-operated facilities in locations identified as vulnerable to impact from sea level rise.

**E.3 GOAL - MANAGEMENT OF CLEARWATER'S COASTAL RESOURCES
SHALL PROHIBIT ACTIVITIES THAT WOULD DAMAGE OR DESTROY
THE NATURAL OR BUILT ENVIRONMENT, OR THREATEN HUMAN LIFE
DUE TO HURRICANE HAZARDS, AND SHALL PROMOTE ACTIVITIES
THAT ENHANCE THE NATURAL AND BUILT ENVIRONMENT.**

E.3.1 Objective - The City shall continue to protect coastal wetlands, estuaries and wildlife habitats to maintain or increase the acreage for threatened and endangered species populations.

Policies

E.3.1.1 Restoration and enhancement of disturbed or degraded estuaries identified by the Surface Water Improvement and Management (SWIM) program shall be accomplished by strict regulation of proposed impacts to wetlands and by controls on the operation and installation of marinas and other water-dependent uses.

E.3.1.2 Development applications shall be reviewed to ensure that proposed new development or redevelopment will not encroach on or remove wetlands or beaches. New development and redevelopment shall be guided away from environmentally sensitive areas and into those most able to withstand impacts.

E.3.1.3 Marina siting criteria shall restrict marinas and related activities from areas of environmental significance, which include but are not limited to the north end of Clearwater Beach, grass beds in Clearwater Harbor, Cooper's Point, and Clearwater Harbor Spoil Islands 25, Sand Key Park, and the southern edge of Alligator Lake. Marinas shall only be allowed in these areas with appropriate and approved mitigation.

E.3.1.4 The City shall work toward reducing the existing quantity and improving the quality of stormwater runoff to estuarine and surface water bodies by ensuring that development and redevelopment adheres to the treatment standards set forth in State Water Policy, and complies with the retention and treatment requirements of Chapter 62-25 F.A.C., the Environmental Resource Permitting Rules 40D-4, 40D-40, 40D-400, F.A.C. of the Southwest Florida Water Management District (SWFWMD) and with any more stringent local regulations.

E.3.1.5 The City shall proactively pursue and facilitate coordination and participation in the implementation of the *Tampa Bay Estuary Comprehensive Conservation and Management Plan* (CCMP), and related plans, as a means of achieving mutual local and regional resource management and restoration goals for Tampa Bay.

E.3.1.6 The City shall permit passive recreation uses in appropriate coastal areas as identified in the Future Land Use Element of the Comprehensive Plan.

- E.3.1.7 The City shall coordinate with Pinellas County and other local governments for water quality monitoring and related program planning.
- E.3.1.8 Future land uses which are incompatible with the protection and conservation of wetlands and wetland functions shall be directed away from wetlands.
- E.3.1.9 The type, intensity or density, extent, distribution and location of allowable land uses and the types, values, functions, sizes, conditions and locations of wetlands are land use factors, which shall be considered when directing incompatible land use away from wetlands.
- E.3.1.10 Land uses shall be distributed in a manner that minimizes the effect and impact on wetlands. The protection and conservation of wetlands by the direction of incompatible land uses away from wetlands shall occur in combination with other goals, objectives and policies in the comprehensive plan. Where incompatible land uses are allowed to occur, mitigation shall be considered as one means to compensate for loss of wetlands functions.
- E.3.1.11 Vehicle traffic, except for emergency and maintenance vehicles, shall not be permitted on public beaches except as designated for the beach north of the Clearwater Sailing Center, and within designated areas on the Courtney Campbell Causeway and the Memorial Causeway.
- E.3.1.12 The City will continue to protect estuaries located entirely within the City limits and estuaries located within the City and another jurisdiction. The City will continue to coordinate and cooperate with other jurisdictions through such methods as interlocal agreements to ensure adequate sites for water-dependent uses, prevent estuarine pollution, control surface water runoff, protect living marine resources, reduce exposure to natural hazards, and ensure public access.

E.3.2 Objective - Clearwater's barrier islands include natural resources which shall be preserved from encroachment and development.

Policies

- E.3.2.1 Restoration and enhancement of disturbed or degraded dune and beach areas shall be implemented with the appropriate methods and quality of material necessary to enable successful reestablishment.
- E.3.2.2 The specific and cumulative impacts of development and redevelopment upon wetlands, water quality, water quantity, wildlife habitat, and beach and dune systems shall be limited by: strict maintenance of existing setback requirements, adherence to storm water detention requirements, retaining all publicly owned natural habitats in their undeveloped state and transfer of development rights.
- E.3.2.3 Maintain existing Recreation/Open Space Future Land Use categories within the coastal storm area.

E.3.2.4 The City shall minimize the disturbance of natural shorelines which provide stabilization and protect landward areas from storm impacts, where feasible.

E.3.2.5 To preserve the functionality of natural sea level rise barriers, the City shall:

- Examine the appropriate use of sediment-trapping vegetation, sediment mound, etc., for coastal hazards; and
- Implement dune restoration, planting (i.e. sea oats), and use of natural material, where feasible.

E.3.2.6 The City will maintain shoreline protection and erosion control by:

- Continuing the appropriate use of beach nourishment and pursuit of sand bypassing;
- Facilitating the installation and maintenance of native beach dune vegetation along appropriate areas of beach; and
- Considering hard structures, such as seawalls, only when alternative options are unavailable.

E.3.3 Objective - Clearwater Harbor and Tampa Bay are designated Outstanding Florida Waters and are under a non-degradation rule. Clearwater will continue to manage stormwater runoff and control erosion during construction to reduce waterborne sediments. As additional initiatives are approved under the SWIM program, they will be considered for inclusion in the Community Development Code.

Policies

E.3.3.1 Restoration and enhancement of disturbed or degraded drainage systems shall be implemented by upstream detention of stormwater, maintenance of existing drainage channels, widening of bridges, culverts and other stormwater conveyance structures.

E.3.4 Objective - Clearwater shall seek funding and approval to renourish eroded beaches on Sand Key and Clearwater Beach when necessary. Restored beach areas shall be considered public resources seaward of construction setback lines and shall not be counted as plan density or buildable lot area.

Policies

E.3.4.1 The City shall seek State funding and approval to enable beach renourishment when necessary.

E.3.4.2 The City shall renourish the beach with the appropriate quality of sand and obtain all necessary review and permits.

E.4 GOAL - MANAGEMENT OF CLEARWATER'S COASTAL STORM AREA SHALL LIMIT PUBLIC EXPENDITURES TO THOSE NECESSARY TO SERVE EXISTING AND PLANNED DEVELOPMENT OR REDEVELOPMENT AND RESTORATION OR ENHANCEMENT OF NATURAL RESOURCES.

E.4.1 Objective - Clearwater shall administer land development regulations to protect public and private property and human life from the effects of hurricane winds and flooding.

Policies

E.4.1.1 Limit public expenditures that subsidize development permitted in coastal storm area, except for the restoration or enhancement of natural resources.

E.4.1.2 Ensure that construction of necessary infrastructure improvements in the coastal storm area are phased to coincide with the demands generated by development or redevelopment in support the proposed densities permitted by the City's adopted Future Land Use Map.

E.4.1.3 The City's public expenditures in the coastal storm area, when available, will include program improvements that will restore and enhance natural resources.

E.4.1.4 Encourage more efficient and climate resilient construction practices locally by:

- Evaluating base finish floor elevation standards with respect to projected sea level rise scenarios and flooding potential; and
- Evaluating extending the City's cumulative substantial improvement and substantial damage regulation from one-year to a multi-year time period; and
- Evaluating extending the City's substantial improvement and substantial damage regulatory threshold to less than 50%.

E.4.1.5 Evaluate designing a "natural runoff" or "net-zero discharge" policy for stormwater in subdivision and site design.

E.4.2 Objective - Overall density shall be retained in Clearwater's coastal storm area, except as otherwise permitted in the Future Land Use Element of the Comprehensive Plan. Transfer of development rights between beach parcels is allowed per the Community Development Code and by *Beach by Design: A Preliminary Design for Clearwater Beach and Design Guidelines*.

Policies

E.4.2.1 Continue to allow flexibility in regard to the dimensional requirements of the land development code in order to allow redevelopment consistent with allowable densities.

E.4.2.2 The City shall develop operating policies that address post-disaster redevelopment needs to facilitate permissible reconstruction in a timely manner, which includes participating in the Pinellas County Local Mitigation Strategy.

E.4.2.3 No development shall be permitted on barrier islands if there is evidence that the development will impede evacuation, hamper the geological function, alter dunes, or alter the environmental character. The adopted *Tampa Bay Region Hurricane Evacuation Study* will be used to determine if proposed development

or redevelopment will cause roadways to fall below acceptable level-of-service standards for hurricane evacuation.

E.4.3 Objective - The City shall cooperate with state, regional and county agencies to maintain or reduce hurricane evacuation times; and work with Pinellas County to find additional suitable hurricane shelter space.

Policies

- E.4.3.1 The City shall encourage transportation alternatives for persons evacuating to a public shelter including the Pinellas County Emergency Management Department's pre-registration program for evacuation assistance.
- E.4.3.2 The City shall cooperate with the County to evaluate critical links and major evacuation routes to determine where operational improvements, such as allowing for one-way direction of traffic, rerouting of traffic or preempting signals, can be made to reduce delays during clearance.
- E.4.3.3 The City shall continue to prioritize roadway maintenance and construction projects on identified critical links and on major evacuation routes.
- E.4.3.4 The City shall work with Pinellas County local governments and other appropriate agencies to address the public shelter deficit.
- E.4.3.5 The City shall cooperate with Pinellas County Emergency Management toward reducing the out-of-county hurricane evacuation clearance time of 55 hours in 2006, as determined in the *Tampa Bay Region Hurricane Evacuation Study 2006*, for a category 5 storm event as measured on the Saffir-Simpson scale.
- E.4.3.6 The adopted level of service standard for out-of-county hurricane evacuation clearance time for a category 5-storm event as measured on the Saffir-Simpson scale shall be 16 hours.
- E.4.3.7 Notify the Pinellas County Emergency Management Department of the availability of any facilities within the City that may be used as a public shelter.
- E.4.3.8 Require disaster plans for all hospitals, nursing homes, and assisted living facilities, as required by law, to be kept on file with the Emergency Management Coordinator.
- E.4.3.9 The City shall not amend the Future Land Use Plan map or Zoning Atlas to permit any mobile home parks to be located within the coastal storm area.
- E.4.3.10 The City shall require new or redeveloped overnight accommodations uses located within the City's coastal storm area to have a hurricane evacuation plan, approved by the City, for all guests. This plan shall require the use to close when a hurricane watch is posted for the City.

E.5 GOAL - THE CITY SHALL ACCOMPLISH POST-DISASTER REDEVELOPMENT IN A MANNER THAT SHALL MINIMIZE PUBLIC AND PRIVATE VULNERABILITY TO FUTURE DISASTERS.

E.5.1 Objective - Post-disaster redevelopment shall be governed by all applicable codes and standards as well as complying with applicable state and county construction regulations.

Policies

- E.5.1.1 Structures on the barrier islands located in FEMA-designated high hazard flood zones (AE and V) which have experienced over fifty percent (50%) damage, based on value of the structure prior to damage, may be redeveloped consistent with either the density established in the adopted Comprehensive Plan or with the existing as-built densities at the time of storm damage, if lawful when constructed in accordance with the applicable provisions of the Community Development Code.
- E.4.1.2 To the maximum extent feasible, sanitary sewer facilities and lift stations shall be built to resist the infiltration by floodwaters. The hazard mitigation annex, which covers the wastewater treatment system, shall be followed in the event of a storm; and hazard mitigation plans shall be updated as necessary.
- E.5.1.3 Immediate repair and clean-up actions after a storm shall be limited to removal of debris, and repair of existing primary structures to allow re-occupancy (repairs to allow re-occupancy shall be considered when damage is limited to less than fifty percent (50%) of the value of the structure prior to damage). Long-term repair and redevelopment shall consist of upgrading structures and accessory facilities to expand habitable space or repair of greater than fifty percent (50%) of the value of the structure prior to damage. Post-disaster redevelopment and long-term repair can only be permitted consistent with the requirements of FEMA and the Florida Statutes.
- E.5.1.4 Damaged infrastructure shall continue to be repaired or rebuilt to minimize the potential for future damage. Unless the facility is necessary to serve the population of the coastal storm area, consideration shall be given to relocating public facilities outside the coastal storm area.
- E.5.1.5 Temporary-building moratoriums may continue to be declared in the coastal storm area when 50% or more of the homes have been destroyed in order to assess impacts and feasibility of redevelopment.
- E.5.1.6 Repair and rebuilding of critical facilities such as water facilities, sewage treatment plants and lift stations, and other utilities damaged in future storms shall be reconstructed to minimize hurricane and flooding vulnerability.
- E.5.1.7 Coastal infrastructure shall be maintained and replaced as necessary to insure adequate Levels of Service to the existing population and to projected

population increases at the planned density consistent with the Future Land Use Element.

E.5.1.8 The City will maintain or expand agreements with other jurisdictions and private building plans reviewers and inspectors to aid with reconstruction after a disaster.

E.5.2 Objective - Post-disaster redevelopment plans shall include provisions for repair and cleanup, assessment of infrastructure and limiting redevelopment of repeated damage properties.

Policies

E.5.2.1 Post-disaster redevelopment plans shall include policies that distinguish between immediate repair and cleanup actions needed by the City to protect public health and safety and long-term repair and redevelopment activities.

E.5.2.2 Post-disaster redevelopment plans shall include policies that address the removal, relocation, or structural modification of damaged infrastructure and be consistent with federal funding provisions and unsafe structures.

E.5.2.3 Post-disaster redevelopment plans shall establish criteria for limiting development in areas of repeated damage.

E.5.2.4 The City shall continue to review inventories of repetitive loss properties provided by FEMA and continue working with state officials to improve the process of reducing vulnerability and loss for listed properties.

E.5.2.5 As part of post-disaster planning and management, the City shall prepare inventories of properties for acquisition and removal, including repetitive loss properties, and establish clear priorities for the use of acquisition resources.

E.5.2.6 As part of the process of defining and establishing policies for development and redevelopment in the Adaptation Action Areas, the City shall assess existing regulations and standards for post-disaster redevelopment, and such standards shall address the replacement, removal, relocation or structural modification of damaged and unsafe structures and infrastructure and distinguish between the recovery phase and long-term redevelopment.

E.5.3 Objective - The reestablishment of businesses after a disaster is critical to the redevelopment of the coastal storm area.

Policies

E.5.3.1 The City will cooperate with local businesses and organizations to aid in disaster planning and recovery for businesses located within the coastal storm area.

E.5.3.2 The City will cooperate with the Chambers of Commerce in developing an informational program about hurricane preparedness for local businesses.

E.5.4 Objective - Water-dependent uses such as marinas, boat launch or dock facilities shall be given a higher priority over other uses.

Policies

E.5.4.1 The City will encourage the preservation of recreational and commercial working waterfronts and marinas and other water-dependent facilities.

E.5.4.2 The City discourages the rezoning of recreational and commercial waterfronts.

E.5.4.3 The City will support accessory transient marina docks or slips through the Community Development Code and special area plans.

E.5.4.4 Priorities for shoreline uses in priority order shall be water-dependent uses, water-enhanced uses and non-water dependent uses. All priorities shall be encouraged in redevelopment programming, land use planning, zoning, and infrastructure development.

E.5.4.5 To ensure land use compatibility, commercial marinas operated as a primary use shall not be located adjacent to residential land uses unless screening or adequate landscaped buffering is provided. Accessory use marina facilities may be located adjacent to residential land uses in accordance with the Community Development Code.

E.5.4.6 Upland support services, including adequate parking, loading, and clean up and maintenance areas, shall be provided on site for new or expanded marinas. If located adjacent to residential land uses, hours of operation may be reasonably limited. Permitting for new marinas shall consider distance from grass beds, protection of water quality, need for construction and maintenance dredging, spoil disposal, protective status, and ownership of bottomlands.

E.5.4.7 Marina siting and planning shall consider marinas in general to be a beneficial use, which augments the tourist and leisure facilities in Clearwater.

E.5.4.8 Adequate sites and access for water-dependent uses shall be coordinated and permitted through Pinellas County, Florida Department of Environmental Protection (FDEP), the Southwest Florida Water Management District (SWFWMD) and/or the Army Corps of Engineers.

E.5.4.9 Marina permitting shall consider areas of essential manatee habitat in the City's permitting criteria if any areas are identified.

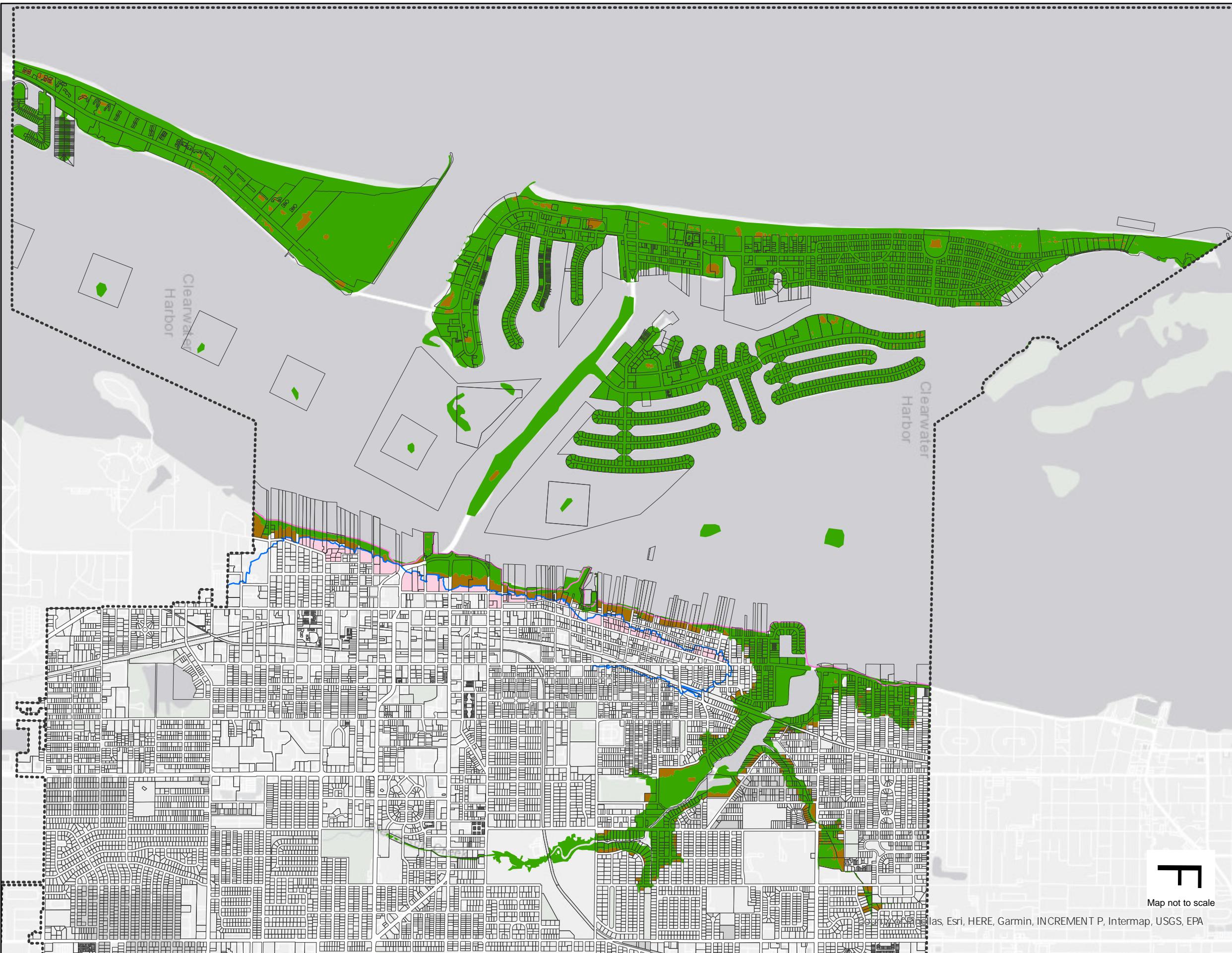
E.5.4.10 Adopt, prior to August 2010, minimum standard uses within the Tourist District to encourage the development of water-dependent uses.

E.5.5 Objective - Water-enhanced uses such as tourist facilities and public parking shall be given higher priority than non-water dependent uses.

Policies

- E.5.5.1 The City will review and modify the Tourist District standards within the Community Development Code and modify *Beach by Design: A Preliminary Design for Clearwater Beach and Design Guidelines* where necessary to provide incentives for water-dependent and water-enhanced uses.
- E.5.5.2 Consider incentives for developments that provide public docks and/or public parking.

City of Clearwater Comprehensive Plan 2021



Coastal Storm Area

Map #: E-1A

Date: 10/26/2021

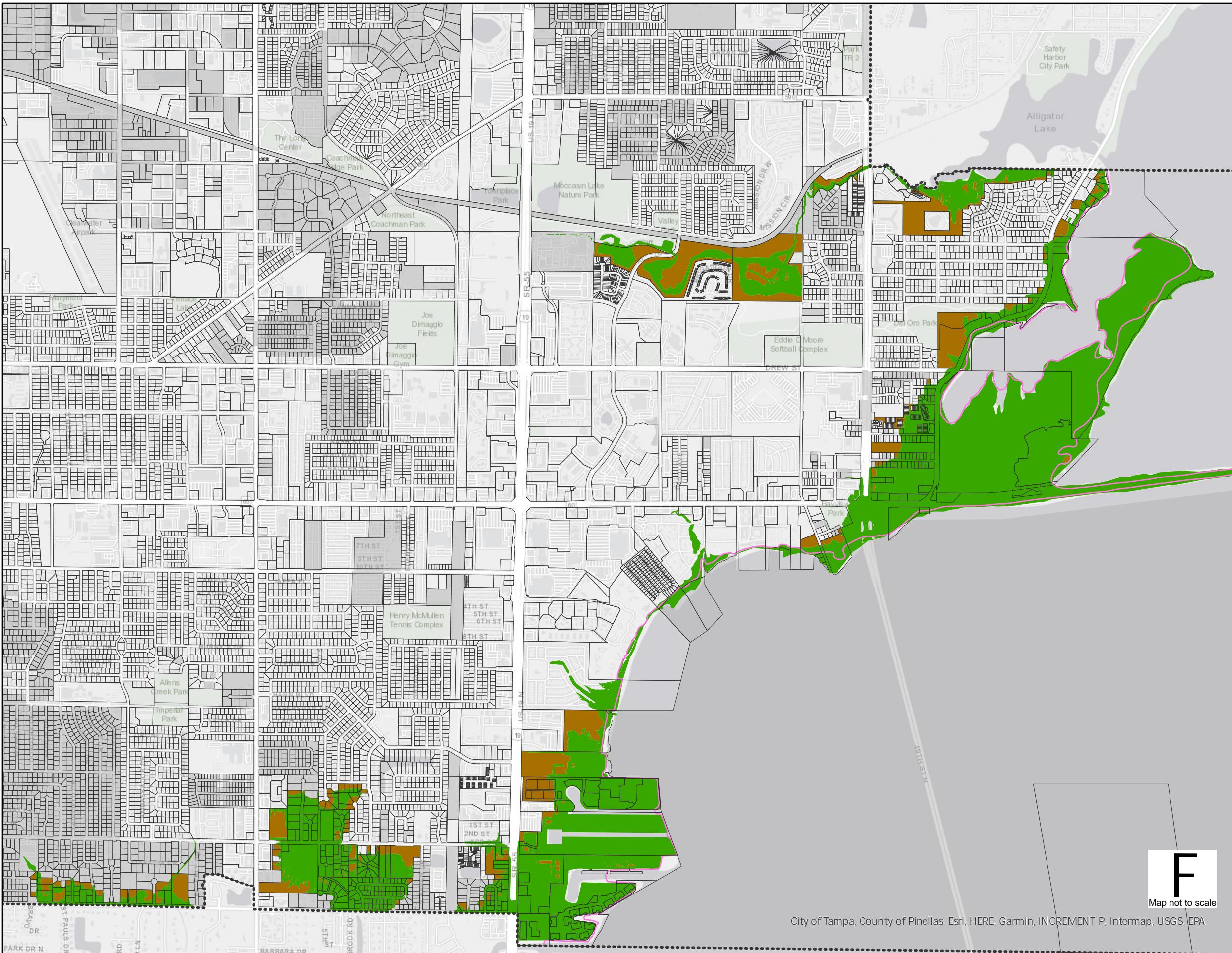
Source: Forward Pinellas, NOAA, 10/21

Legend

- Included in the Coastal Storm Area*
- Flood Zone VE (FEMA Velocity Zone)
 - Cat. 1 Storm Surge (Coastal High Hazard Area - CHHA)
 - Parcels where Cat. 1 Storm Surge 20% of the parcel, or those portions of an island not inundated by a Cat. 1 Storm Surge
 - Areas of FEMA Velocity Zone not included in Evacuation Level A. Includes the entire parcel where VE Zone 20% of the parcel
- Excluded from the Coastal Storm Area*
- Locations atop the Clearwater Bay Bluffs
 - Surge Category 5 Boundary used to determine Bluff Area
 - Clearwater Planning Area
 - Outside Service Area

Prepared by:
Planning & Development Department
Long Range Division
100 S. Myrtle Ave. Clearwater FL, 33756
www.myclearwater.com

City of Clearwater Comprehensive Plan 2021



Coastal Storm Area

Map #: E-1B

Date: 10/26/2021

Source: Forward Pinellas, NOAA, 10/21

Legend

- Included in the Coastal Storm Area*
- Flood Zone VE (FEMA Velocity Zone) (Pink line)
 - Cat. 1 Storm Surge (Coastal High Hazard Area - CHHA) (Green)
 - Parcels where Cat. 1 Storm Surge 20% of the parcel, or those portions of an island not inundated by a Cat. 1 Storm Surge (Brown)
 - Areas of FEMA Velocity Zone not included in Evacuation Level A. Includes the entire parcel where VE Zone 20% of the parcel (Yellow)
- Evacuation Level A**

- Excluded from the Coastal Storm Area*
- Locations atop the Clearwater Bay Bluffs (Pink)
 - Surge Category 5 Boundary used to determine Bluff Area (Blue wavy line)
 - Clearwater Planning Area (Red dotted line)
 - Outside Service Area (Gray)

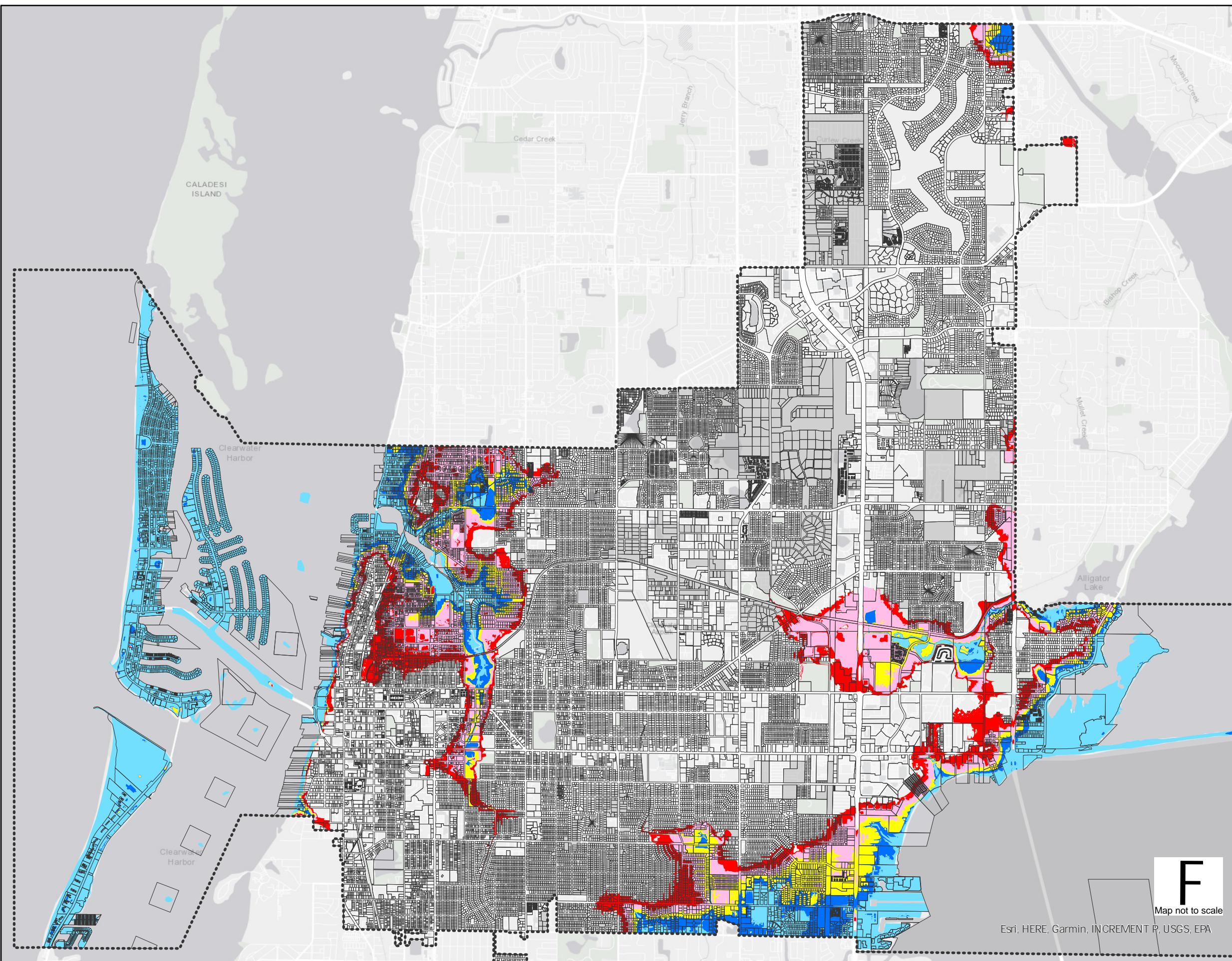
Note: Please contact the Planning and Development Department for a larger, more detailed map.



Prepared by:
Planning & Development Department
Long Range Division
100 S. Myrtle Ave. Clearwater FL, 33756
www.myclearwater.com

Disclaimer:
Public information data is furnished by the City of Clearwater Engineering Department, and must be accepted and used by the recipient with the understanding that the data received was collected for the purpose of developing a graphic infrastructure inventory. As such, the City of Clearwater makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data for any other particular use. Furthermore, the City of Clearwater assumes no liability whatsoever associated with the use or misuse of such data.

City of Clearwater Comprehensive Plan 2021



Hurricane Storm Surge Areas

Map #: E-2

Date: 10/26/2021

Source: Forward Pinellas, NOAA, 2021

Legend

Category

1

2

3

4

5

□ Clearwater Planning Area

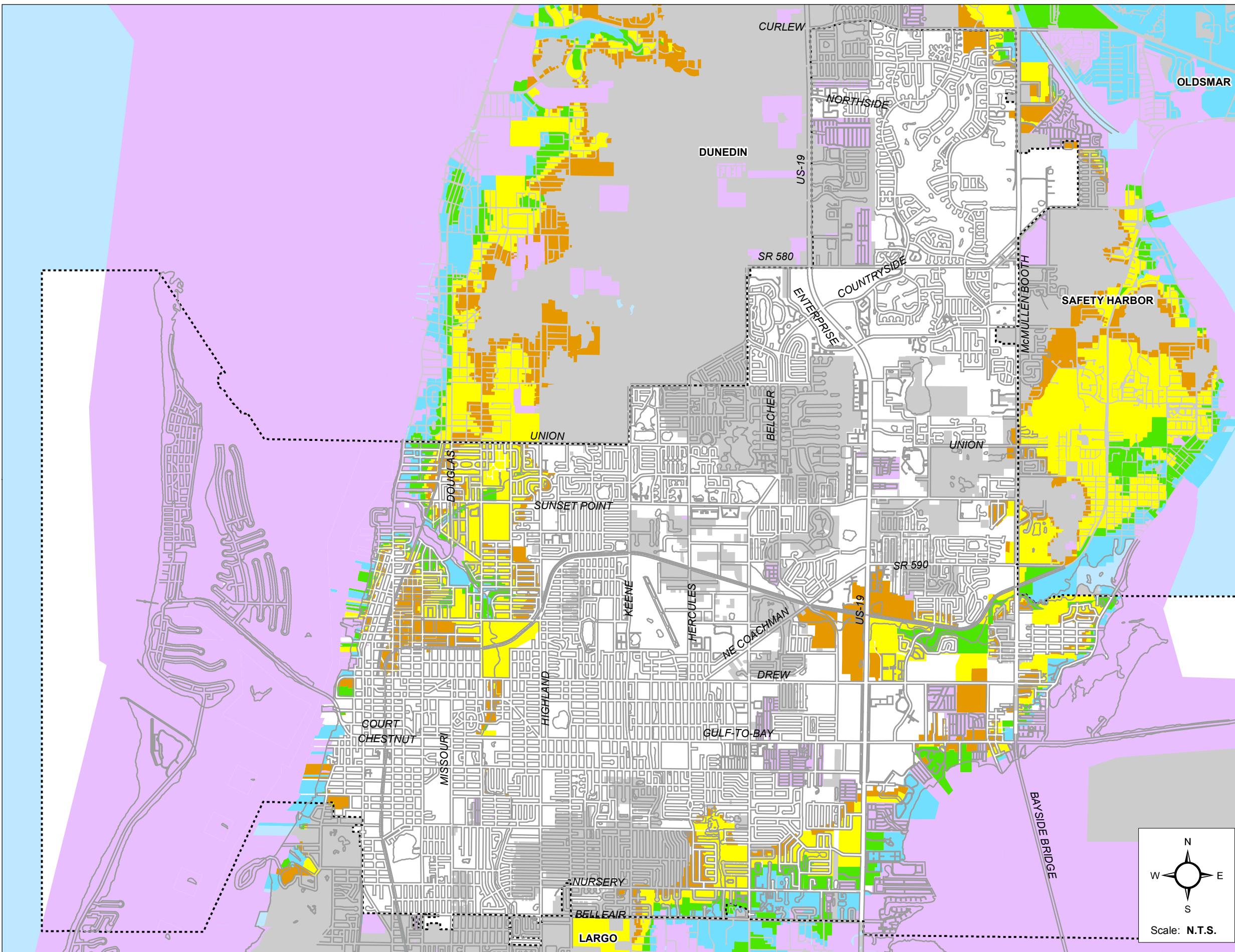
■ Outside Service Area



Prepared by:
Planning & Development Department
Long Range Division
100 S. Myrtle Ave. Clearwater FL, 33756
www.myclearwater.com

Disclaimer:
Public information data is furnished by the City of Clearwater Engineering Department, and must be accepted and used by the recipient with the understanding that the data received was collected for the purpose of developing a graphic infrastructure inventory. As such, the City of Clearwater makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data for any other particular use. Furthermore, the City of Clearwater assumes no liability whatsoever associated with the use or misuse of such data.

City of Clearwater Comprehensive Plan 2017



Hurricane Evacuation Zones

Map #: E-3

Date : 6/2/2017

Source: Tampa Bay Regional Planning Council
5/17

Legend

Evacuation Zone

- A
- B
- C
- D
- E

Clearwater Planning Area

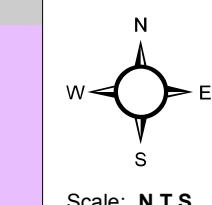
Outside Service Area



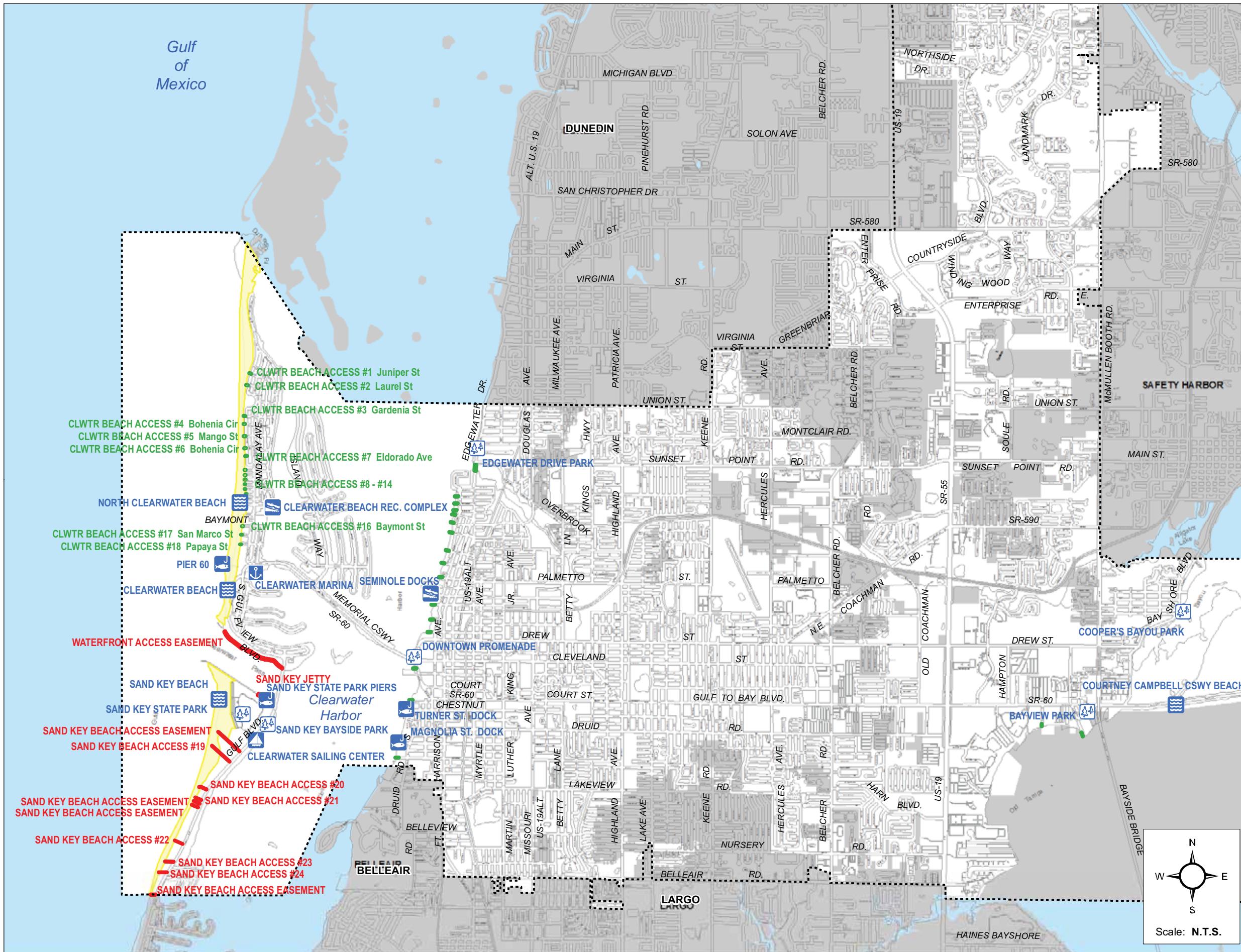
Prepared by:
Planning & Development Department
Long Range Division
100 S. Myrtle Ave, Clearwater, FL 33756
www.MyClearwater.com

Disclaimer

Public information data is furnished by the City of Clearwater Engineering Department, and must be accepted and used by the recipient with the understanding that the data received was collected for the purpose of developing a graphic infrastructure inventory. As such, the City of Clearwater makes no warranties, express or implied, concerning the accuracy, completeness, reliability, or suitability of this data for any other particular use. Furthermore, the City of Clearwater assumes no liability whatsoever associated with the use or misuse of such data.



City of Clearwater Comprehensive Plan 2008



Public Coastal Access Points

Map #: E-4

Date: 7/21/2008

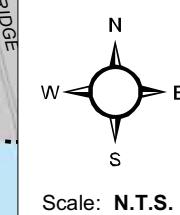
Source: Clearwater Parks and Recreation Dept
Clearwater Engineering Dept / Jul 2008

Legend

- Coastal Recreation Sites
 - BEACHES
 - BOAT RAMPS
 - DOCKS AND PIERS
 - MARINA
 - SAILING
 - WATERFRONT PARK
- Public Access via Rights-of-Way (Including Termination Points)
- Public Access Easements to Beach and Shore
- Beach Areas
- Clearwater Planning Area
- Outside Clearwater City Limits

Prepared by:
Engineering Department
Geographic Technology Division
100 S. Myrtle Ave, Clearwater, FL 33756
Ph: (727)562-4750, Fax: (727)526-4755
www.MyClearwater.com

Disclaimer:
Public information data is furnished by the City of Clearwater Engineering Department, and must be accepted and used by the recipient with the understanding that the data received was collected for the purpose of developing a graphic infrastructure inventory. As such, the City of Clearwater makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data for any other particular use. Furthermore, the City of Clearwater assumes no liability whatsoever associated with the use or misuse of such data.



Scale: N.T.S.