



PLANNING FOR RESILIENCE

R2112: TASK 2 DELIVERABLES PROPOSED COMPREHENSIVE PLAN



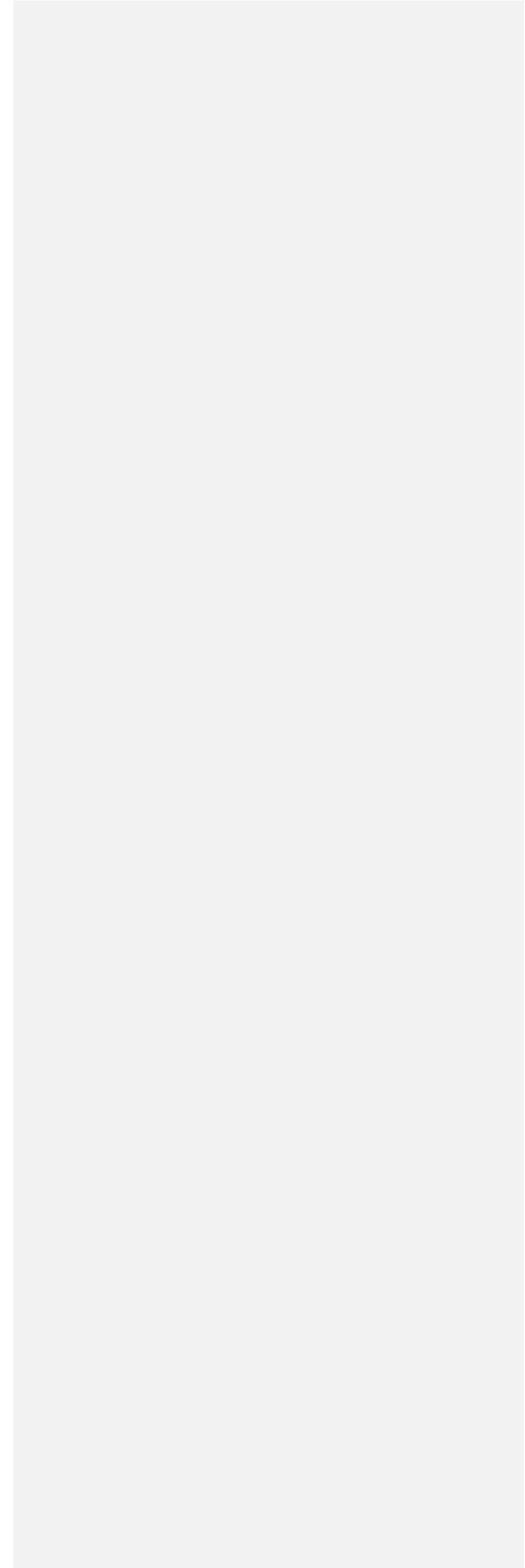
This report was prepared for the Brevard County, FL by the East Central Florida Regional Planning Council under Florida Department of Environmental Protection grant agreement number: R2112 , titled: Planning for Resilience, published April 2021

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Provided within is the Coastal Management Element with proposed policy revisions denoted as **additions**, **deletions**, and RECOMMENDATIONS FOR FURTHER CONSIDERATION THAT MAY ADD TO OVERALL RESILIENCE, BUT IS NOT A REQUIREMENT TO MEET PERIL OF FLOOD REQUIREMENTS. Please note the text provided includes revisions made through the Objections, Recommendations, and Comments review not directly related to addressing Peril of Flood requirements. Revisions provided through previous reviews are in ~~strike through for deletions~~ and underline for additions as well as highlighted in yellow. Goals, Objectives, and Policies determined to meet the Peril of Flood requirements are highlighted in green.

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CHAPTER X
COASTAL MANAGEMENT ELEMENT



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31 **GOAL, OBJECTIVES AND POLICIES**

32 **GOAL**

34 ESTABLISH GROWTH MANAGEMENT STRATEGIES THAT WILL ALLOW GROWTH TO
35 CONTINUE WITHIN THE COASTAL ZONE WHICH DOES NOT DAMAGE OR DESTROY THE
36 FUNCTION OF COASTAL RESOURCES, PROTECTS HUMAN LIFE AND LIMITS PUBLIC
37 EXPENDITURES IN AREAS SUBJECT TO DESTRUCTION BY NATURAL DISASTERS Consistent
38 With The Regional Resiliency Action Plan.

39
40 Planning for climate resiliency and sea level rise

41 Objective X

42 Ensure planning and development activities within the unincorporated areas of Brevard
43 County are conducted with respect to the changing dynamics of flooding, sea level
44 rise, and storm surge over the short, mid, and long-term planning horizon.

45
46
47 Policy X.1

48 The County shall use the East Central Florida Regional Resilience Action Plan to
49 integrate the regional approach to sea level rise planning recommendation within its
50 plans, procedures and policies. The County will consider a range of sea level rise based
51 upon the vulnerability, allowable risk, and project service life and the forecast project
52 "in service" date of a facility or development.

53
54 Policy X.2

55 Based on the 2021 Resilient Brevard Vulnerability Assessment and engagement
56 feedback, the County shall undertake efforts to determine if the designation of
57 adaptation action areas (AAAs), as allowed by Florida Statute, is an appropriate
58 mechanism for the County to prioritize resilient planning and infrastructure investments
59 and strategies to address impacts to current and future flood impacts and to serve as
60 eligible sending areas for the County Transfer of Development Rights program.

61
62 Policy X.3

63 The County shall evaluate creating Code of Ordinances that provide criteria for the
64 enactment of development moratoria following a declared emergency coinciding with
65 a stormwater flooding event and in consultation with the Post Disaster Redevelopment
66 Plan.

67
68 Policy X.4

69 Collaborate with stakeholders at least every 7 years or earlier to analyze the best
70 available data, to maintain or updated relevant and current coastal hazard
71 vulnerability projections and maintain the County's efforts to identify and understand
72 the risks, vulnerabilities and opportunities for strategies within the 25 to 100 year
73 planning horizons.

76 **Policy X.5**
77 **The County shall determine how to identify the circumstances, timeframe or other**
78 **indicators in which the County will only maintain infrastructure within areas vulnerable to**
79 **impacts from sea level rise and extensive flooding and storm surge and will not utilize**
80 **public funds to improve or enhance infrastructure.**

81
82 **Policy X.6**
83 **Develop a methodology for prioritizing infrastructure project expenditures based on a**
84 **cost-benefit analysis, feasibility, determination of applicability to County policies and**
85 **short- versus long-term benefits associated with projects located within areas**
86 **vulnerable to current and future flood conditions.**

87
88 **Policy X.7**
89 **The County shall determine a procedure to review vulnerable critical facilities and**
90 **assets and rank them relative to importance, level of vulnerability, and life expectancy.**

91
92 **Policy X.8**
93 **The County shall pursue private and public funding sources for the implementation of**
94 **adaptation strategies in vulnerable areas to move forward adaptation projects and**
95 **strategies identified by the County and its stakeholders.**

96
97 **Policy X.9**
98 **Work with floodplain managers and stakeholders to identify areas which may benefit**
99 **from inclusion in Nature-Based Infrastructure, Floodplain Management, and / or Low**
100 **Impact Design projects; identify initiatives within the Brevard County Local Mitigation**
101 **Strategy that focus on solutions for flood impacts; and educate property owners about**
102 **mitigation strategies they can implement to protect their property.**

103
104 **Policy X.10**
105 **The County shall adopt a mechanism to evaluate and recommend new design and**
106 **development standards for infrastructure projects proposed for implementation that**
107 **take into account future climate conditions and integrate into all relevant plans,**
108 **policies and procedures. From 20XX onward, all public infrastructure projects shall be**
109 **required to meet the Federal Flood Risk Management Standard.**

110
111 **Policy X.11**
112 **Sea level rise, based upon current planning horizon and inundation ranges, and the**
113 **Federal Flood Risk Management Standard shall be included in all infrastructure projects**
114 **and considered among design strategies for all storm water management projects.**

115
116 **Policy X.12**
117 **The Code of Ordinances shall require that all new and redevelopment in the CHHA, the**
118 **100-year flood plain, and areas found to be vulnerable to sea level rise through 2100**
119 **shall incorporate low impact development techniques to capture stormwater run-off on**
120 **site. Such strategies include pervious pavement, rain gardens, green roofs, stormwater**
121 **parks, vegetated swales and others.**

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Policy X.13

The County shall work with relevant departments and the building officials to re-assess base flood elevations to account for future conditions and determine potential new freeboard elevations for new and redevelopment as well as tailwater elevations for stormwater infrastructure.

Policy X.14

The County shall develop a strategic plan to address recurring flooding issues within identified vulnerable areas which takes into account an anticipated increase in flooding from excess rainfall, storm surge, and sea level rise.

Policy X.15

The County shall utilize, but not be limited to, the following adaptation tools for use within the 100-year flood plain and areas vulnerable to inundation, storm surge, or sea level rise by the year 2100: Public infrastructure planning, green / nature-based infrastructure planning, low-impact design, siting, construction, replacement, operation and maintenance; Stormwater Management; Green Streets; Rain Gardens/Bioswales; Vernacular Streetscapes and Plant Placement (Water-Dependent Species); Grass Pavers (Driveways, Main Streets, Ponding Areas); Ecological Asset Preservation (Dunes, Natural Areas, Mangroves, Plants, Animals); New Building Code Standards/Form-Based Codes; Land Development Regulations; Comprehensive Planning.

Policy X.16

The County shall require that all new and redevelopment in areas within the 100-year floodplain, CHHA, and areas vulnerable to sea level rise by 2100 utilize low Impact Development and nature-based design standards to 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 stormwater. The standards shall encourage or require the increased use of “green” / nature-based stormwater management treatments, native/Florida-friendly landscape material, porous paving materials, and the preservation and restoration of natural drainage characteristics.

Policy X.17

The County shall re-evaluate buffer zones and related elevation datum based on new environmental conditions as new data becomes available or at least every 7 years to determine changes in functionality of buffers and current policy in relation to changing environmental conditions.

Policy X.18

Update Stormwater Master Plan to integrate a hybrid approach to stormwater planning to include both grey and green infrastructure. Green infrastructure shall be prioritized as a first line of capture for stormwater solutions.

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Policy X.19

The County shall ensure the protection of natural coastal ecosystems, including wetlands and their potential to migrate or alter in light of future climate conditions by prioritizing activities with avoidance and minimization of impacts. (Reference Conservation Element Objective 5 and subsequent policies).

Policy X.20

The County shall consider the use of compensatory storage to mitigate the impacts to areas vulnerable to natural hazards such as flooding, storm surge, and sea level rise.

Policy 1.1

The Brevard County Natural Resources Management ~~Department~~Office shall coordinate with the Florida Department of Environmental Protection to develop and implement Basin Management Action Plans to comply with National Pollutant Discharge Elimination System Permits and meet the Total Maximum Daily Loads established for local surface waters.

Policy 1.2

~~By 2010,~~ Brevard County shall ~~maintain~~~~adopt~~ within the land development code regulations that implement standards consistent with National Pollutant Discharge Elimination System Permits and Total Maximum Daily Loads.

Policy 1.3

Brevard County shall continue to cooperate with other agencies and municipalities that perform fisheries studies and submerged aquatic vegetation mapping and use this data to assist in establishing priority areas for surface water **and nature-based infrastructure** improvement efforts. In addition, Brevard County shall coordinate the manatee protection plan with municipalities and appropriate agencies.

Policy 1.4

The Brevard County Natural Resources Management ~~Department~~Office shall review and comment, as necessary, on dredge-and-fill applications and/or Environmental Resource Permits from the Florida Department of Environmental Protection, ~~St. Johns River Water Management District (SJRWMD)~~, the U.S. Army Corps of Engineers, or other appropriate agencies.

Policy 1.5

Brevard County shall continue to consider recommendations of Marine Resources Council and other appropriate groups in the development of estuarine studies.

Policy 1.6

Brevard County shall coordinate surface water management and protection efforts with the Indian River National Estuary Program (IRNEP), FDEP, SJRWMD and other appropriate agencies.

215 **Policy 1.7**

216 Brevard County supports coordinated regional fisheries management plans
217 developed by the Atlantic States Marine Fisheries Commission.

218
219
220 **Adopt Conservation Element Floodplain Area management policies into Coastal**
221 **Element and renumber.**

222
223 **Flood Plain Areas**

224
225 **Objective 4 (Conservation Element, Adopt and Renumber)**

226 Reduce loss of flood storage capacity and reduce risk to life and property by
227 continuing to apply regulations which minimize the impact of development within flood
228 hazard areas.

229
230 **CONSIDER ADOPTING FLOODPLAIN MANAGEMENT PLAN INTO COASTAL & CONSERVATION ELEMENT.**

231
232 **POLICY 4.1 (Conservation Element, Adopt and Renumber)**

233 **Any development in the floodplain requires a building permit according to Chapter 22**
234 **of the Brevard County Code of Ordinances.**

235
236 **Policy 4.1 (Conservation Element, Adopt and Renumber)**

Any development in the floodplain requires a building permit according to Chapter 22 of the
Brevard County Code of Ordinances.

237 **Policy 4.2 (Conservation Element, Adopt and Renumber)**

Brevard County Code of Ordinances requires that if the cost of any reconstruction,
rehabilitation, addition or other improvements to a building equals or exceeds 50% of the
building's market value, such work is considered a substantial improvement under Chapter
62. The existing building is then required to meet the same standards as a new building. For
residential structures, these requirements typically mean raising the living area of the building
a minimum of one foot above the base flood elevation.

i. Substantial improvement shall mean any repair from damage or destruction, reconstruction,
improvement, or additions of a structure, the cost of which equals or exceeds 50% of the
assessed market value of the structure as is listed by the Brevard County Property Appraiser's
Office or by a certified appraisal. The assessed value of the structure shall be determined
before the improvement is started, or if the structure has been damaged and is being
restored, before the damage or destruction occurred.

238
239 **Policy 4.3 (Conservation Element, Adopt and Renumber)**

240 **For structures that cannot be located outside of the floodplain, initial design**
construction and retrofitting shall include modification to prevent or minimize flooding of
habitable space, including:

- 241
- **Elevation of the structure above flood protection levels.**
 - **Construction of barriers (floodwalls, berms, etc.).**
- 242

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- 245
- **Dry floodproofing (water tight floor and wall systems).**
 - **Wet floodproofing (permits entry and passage of flood waters).**
 - **Backflow prevention on sewer lines**

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247

248 **Water Quality/Seagrasses**

249 **Objective 2**

250

251 Improve existing water quality to enhance seagrass and other submerged aquatic

252 vegetation quantity, health, diversity, and distribution within the Indian River Lagoon.

253

254 **Policy 2.1**

255 Brevard County shall support the St. Johns River Water Management District's

256 (SJRWMD) mapping of submerged aquatic vegetation within the Indian River Lagoon

257 system. Evaluation results shall be made available to municipalities and other agencies

258 or programs. Areas that show decline should be targeted for increased watershed

259 management, including non-point source pollution, and restoration, **consistent with**

260 **green infrastructure improvement planning efforts.** Management strategies shall be

261 coordinated with the municipalities and other agencies.

262

263 **Policy 2.2**

264 Brevard County shall continue to participate in the Indian River Lagoon Advisory

265 Committee and its associated advisory groups.

266

267 **Policy 2.3**

268 Brevard County shall continue to protect Submerged Aquatic Vegetation (SAV)

269 from the impacts of local land development by implementing the Surface Water

270 Protection Ordinance. At a minimum, the following criteria shall be addressed:

271

- 271 **Criteria:**
- 272 A. Maintain upland vegetation within required setbacks **and buffers** to
- 273 reduce runoff, **improve water quality and provide stormwater capture**
- 274 **areas.**
- 275
- 276 B. Require proper use of turbidity screens during construction activities.
- 277
- 278 C. Control discharge rates to promote on-site settlement of sediment loads
- 279 and meet minimum retention requirements for runoff from storm events.
- 280
- 281 D. Coordinate with FDEP Aquatic Preserve staff when development is within
- 282 or adjacent to an aquatic preserve.
- 283

284 **Policy 2.4**

285 Brevard County shall address modification of existing development which does

286 not meet stormwater management standards **consistent with Stormwater Management**

287 **Plan and Green / Nature-Based Infrastructure planning.**

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289 **Policy 2.5**

290 Brevard County supports the goals of the National Estuary Program's
291 Comprehensive Conservation and Management Plan (CCMP) for recovery of the
292 Lagoon prepared by the National Estuary Program. This support is reflected in the
293 strategies identified in the County's Action Plan Implementation Status Report for the
294 CCMP.

295 **Policy 2.6**

296 Where possible, local stormwater, as well as state and federal surface water
297 programs should reduce or eliminate freshwater inputs to the Indian River Lagoon via
298 interbasin diversions.

300 **Fisheries**

301 **Objective 3**

302 Maintain fisheries in and adjacent to Brevard County through habitat production,
303 maintenance and restoration.

304 **Policy 3.1**

305 Brevard County shall encourage habitat evaluation and fisheries studies. These
306 studies should be coordinated with federal and state programs and funded through a
307 combination of the proceeds from a saltwater fishing license and county, state and
308 federal grants.

309 **Policy 3.2**

310 Mosquito impoundments should be reconnected to the Indian River Lagoon
311 where benefits can be demonstrated to increase habitat value of the impoundments
312 and benefits to the Lagoon.

313 **Beaches and Dunes**

314 ~~The four key points of reference found within this section are:~~

- 315 ~~• the 1981 Florida Department of Environmental Protection (FDEP) Coastal Construction Control Line (referred to as the 1981 FDEP CCCL in this document);~~
- 316 ~~• the 1986 Florida Department of Environmental Protection (FDEP) Coastal Construction Control Line (referred to as the FDEP CCCL in this document);~~
- 317 ~~• the Brevard County Coastal Construction Line (referred to as the CCL in this document); and,~~
- 318 ~~• the Brevard County Coastal Setback Line (referred to as the CSL in this document).~~

319 ~~For clarification, the 1981 FDEP CCCL coincides with the Brevard County CCL, as adopted by Brevard County in Ordinance 85-17. The Brevard County CSL is described as a line which is twenty five (25) feet west by perpendicular measurement from the~~

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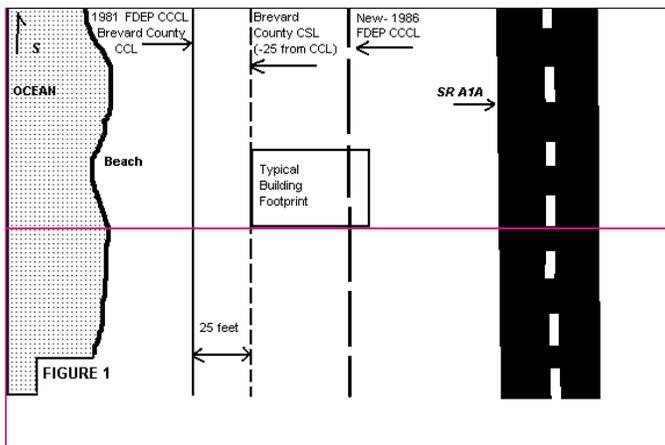
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334 **Brevard County CCL.** In 1986, the Florida Department of Environmental Protection
 335 established a new CCCL upland from the 1981 FDEP CCCL. Any construction or clearing
 336 activities seaward of this new CCCL requires FDEP approval. Figure 1 schematically
 337 depicts the spatial relationship of these four reference lines. Figure 1 is for illustrative
 338 purposes only; actual conditions may vary with regard to the location of SR A1A.

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Figure 1

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345 **Note: Figure 1 is intended for illustrative purposes only. Actual conditions may vary with**
346 **regard to the location of State Road A1A.**

347 Beaches and Dunes

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Objective 4

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352 Brevard County shall implement and improve as necessary a comprehensive beach
353 and dune management program which protects, enhances and restores a naturally
354 functioning beach system as funding is available.

355

356

Policy 4.1

357 The Land Development Regulations shall maintain regulations governing the
358 location, construction and maintenance of development adjacent to the Atlantic
359 shoreline. Development seaward of the Florida Department of Environmental
360 Protection (FDEP) 1981 Coastal Construction Control Line (CCCL), which coincides with
361 the Brevard County Coastal Construction Line (CCL), shall be governed by the following
362 conditions, at a minimum:

Criteria:

- 363
- 364 A. Oceanfront development shall be required to maintain at least 50% of the
365 native dune vegetation on site. Native dune vegetation seaward of the
366 FDEP 1981 Coastal Construction Control Line (CCCL) shall not be removed
367 unless necessary for approved emergency vehicle access or coastal
368 protection needs.
- 369
- 370 B. In order to maintain the freshwater lens of the surficial aquifer and reduce
371 saltwater intrusion, post-development groundwater recharge volume and
372 rate shall equal pre-development recharge volume and rate.
- 373
- 374 C. No new shoreline hardening structures shall be permitted in
375 unincorporated Brevard County south of Patrick Air Force Base (PAFB)
376 property or within the Archie Carr National Wildlife Refuge, with exception of
377 emergency provisions as provided for in Florida Statutes Chapter
378 163.3187(1)(a) "Amendment of Adopted Comprehensive Plan".
- 379
- 380 D. North of the PAFB, no new shoreline hardening structures should be
381 permitted.
- 382
- 383 E. Pursuant to Criteria C and D of this policy, if a shoreline hardening
384 structure is deemed necessary, the following criteria shall apply:
- 385 1. Vertical wood or concrete structures and rock revetments shall
386 only be approved when less structural alternatives, such as
387 beach renourishment, dune restoration and sandbag systems
388 have been determined not to be feasible.

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- 389 2. All shoreline protection measures shall be designed to minimize
390 adverse impacts to the naturally functioning beach and dune
391 system and adjacent properties.
392
- 393 3. The County may require dune restoration and revegetation as a
394 component of the shoreline hardening approval both landward
395 and seaward of the proposed structure.
396
- 397 4. All shoreline protection shall be designed and constructed so as
398 to not impede public access to or along the shore.
- 399 F. Setbacks or other non-structural methods of shoreline protection shall be
400 given the highest priority. Reducing setbacks from A1A will be considered
401 where it is necessary to maintain and maximize setback requirements from
402 the ocean.
403
- 404 G. Reconstruction of existing hard erosion control structures which are more
405 than fifty (50) percent destroyed should be considered new construction
406 and should be regulated as such, except for the maintenance of existing
407 public navigational projects, such as Port Canaveral and Sebastian Inlet.
408
- 409 H. Underground storage tanks or the storage of hazardous materials are not
410 permitted.
411
- 412 I. Septic tank or septic tank drainfields shall not be permitted seaward of the
413 Brevard County Coastal Setback Line (CSL). Septic tanks shall be located
414 landward of the most seaward portion of the habitable structure.
415
- 416 J. All activities seaward of the 1986 FDEP Coastal Construction Control Line
417 (CCCL) shall be subject to FDEP permitting requirements.
418

419 **Policy 4.2**

420 Brevard County shall enforce development restrictions associated with the
421 Brevard Coastal Setback Line (CSL), and the Brevard County Coastal Construction Line
422 (CCL) and re-evaluate the effectiveness of these lines from time to time as coastline
423 changes dictate. The County shall provide FDEP with their findings and request a review
424 of the FDEP Coastal Construction Control Line, if deemed appropriate.
425

426 **Policy 4.3**

427 Brevard County shall continue to adopt and enforce standards for maintenance
428 or re-establishment of dune areas. These standards shall include, at a minimum, the
429 following provisions:

430 **Criteria:**

- 431 A. Native dune vegetation shall be maintained on site unless removal or
432 alteration is permitted by both Brevard County and the Florida
433 Department of Environmental Protection, or other appropriate regulatory
434 agency.

COASTAL MANAGEMENT ELEMENT

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- B. Public and private beach access shall be allowed only at designated cross-over structures or historical access sites.
 - C. Erosion control strategies will be utilized at unimproved public access_sites until these can be improved or alternate access provided.
 - D. Dune cross-overs, boardwalks, walkways and other permissible structures seaward of the Brevard County Coastal Setback Line shall be elevated above dune vegetation and shall be designed to allow adequate light penetration.
 - E. Shore-parallel boardwalks shall be prohibited seaward of the Coastal Setback Line, except as required for handicap access.
 - F. Publicly owned dunes, especially those identified for beach access sites, which have been denuded or damaged by vehicular or pedestrian traffic shall be prioritized for dune renourishment and revegetation. Improvements or erosion controls shall be implemented at the time of renourishment to prevent further site degradation.
 - G. Private **PR**operty owners should be encouraged to re-establish dune vegetation which has been destroyed by non-designated access activities or storm damage.
 - H. Structures and impacts that are necessary for public safety or meet the best public interest shall be permitted if approved by the Board of County Commissioners.

464 **Policy 4.4**

465 Brevard County's beach and dune restoration program shall include an analysis
466 of environmental, financial and social criteria.

467 **Criteria:**

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- A. The first priority for beach renourishment shall be given to the protection of life and property.
 - B. Priority shall also be given to environmental considerations.
 - C. Public areas which are heavily utilized for recreation, including surfing, fishing or swimming, shall be considered for beach or dune renourishment or restoration, as applicable. Long-term management of these areas shall be included with all site improvements.
 - D. A feasibility or benefit/costs analysis should be performed for any renourishment project. Such analyses shall include, as appropriate,

480 present and future benefits for property protection, recreation and tourism
481 over the life of the project.

482 **Policy 4.5**

483 The County shall continue to utilize the information and materials available from
484 the State regarding dune maintenance and revegetation and supplement these
485 materials, as necessary.

486 **Policy 4.6**

487 Brevard County shall maintain an ongoing program to initiate and monitor data
488 collection projects related to beach dynamics, sand transport and coastal processes.
489 This program should include data generated by the Florida Department of
490 Environmental Protection, the U.S. Army Corps of Engineers, the Florida Sea Grant
491 College, universities and other appropriate agencies.

492 **Policy 4.7**

493 Brevard County shall develop an inter-local agreement with adjacent
494 municipalities and the State of Florida for funding of beach maintenance and
495 restoration programs.

496 **Policy 4.8**

497 Brevard County shall prohibit motorized vehicles on the dune and beach system
498 except for governmental vehicles (police and sheriff), fire trucks, ambulances or
499 vehicles necessary to repair utilities, or vehicles utilized during approved renourishment
500 programs or approved scientific investigations. Pedestrian traffic within the vegetated
501 dune areas shall be limited to emergency operations, scientific research, maintenance,
502 cleaning or improvements as authorized by the Natural Resources Management
503 Department Office and consistent with FDEP regulations.

504 **Policy 4.9**

505 Brevard County shall continue to collect and make available to the public
506 information related to sea level changes.

507 **Policy 4.10**

508 Outer Continental Shelf (OCS) activities such as oil and gas exploration or mining
509 adjacent to Brevard County are discouraged for several reasons. The County's
510 beaches are the most heavily nested beaches by sea turtles in the western Atlantic.
511 Impacts to water quality, beach quality and fisheries could negatively impact the
512 threatened and endangered species that nest here. Brevard County should review
513 and comment on all Outer Continental Shelf (OCS) and off shore drilling leases
514 proposed for waters adjacent to the county. This policy does not discourage OCS sand
515 and gravel mining conducted as part of Brevard County's shore protection and
516 restoration strategy.

517 **Water-Dependent Land Uses**

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527 **Objective 5**
528 By 2010, Brevard County shall develop and adopt guidelines which direct the location
529 and management of water-dependent, water-related and water-enhanced facilities,
530 giving highest priority to water-dependent uses along the Indian River Lagoon System in
531 order to provide for the increased demand for these facilities.

532
533 **Policy 5.1**
534 Brevard County shall continue to implement performance standards for marinas
535 and marine-related facilities within the coastal zone which include at a minimum:
536 setbacks, height limitations, parcel size, architectural guidelines, seagrass protection,
537 **land use compatibility, availability of upland support services, existing protective status**
538 **or ownership, hurricane contingency planning, vulnerability assessment and strategies,**
539 **environmental disruptions and mitigation actions, economic need and feasibility,**
540 **availability for public use,** and the protection of water quality including the
541 maintenance and containment of stormwater runoff and wash-down water for dry
542 storage areas. Marina performance standards shall include the following minimum
543 criteria:

- 544 **Criteria:**
- 545 A. Existing marina facilities should be allowed to continue their operation
546 provided these facilities meet the County's adopted operational
547 standards.
 - 548
549 B. While the expansion of existing facilities is preferred over construction of
550 new facilities, the development of new marinas must remain a viable
551 alternative as many existing marinas will not be capable of meeting
552 adopted operational and **environmental standards.**
 - 553
554 C. Policies and incentives should encourage new and expanded marina
555 facilities to utilize dry storage to the fullest extent possible.
 - 556
557 D. New marina facilities shall retain all work area runoff in a separate
558 **retention area.** In addition, the first inch of stormwater runoff from a 10-
559 year 24-hour storm shall be retained on site.
 - 560
561 E. Prior to operation of any new marina fueling facility, a fuel
562 management/spill contingency plan will be developed and provided to
563 the **Office of** Natural Resources Management **Department** for review. The
564 plan shall describe methods to be used in dispensing fuel and all the
565 procedures, methods, and materials to be used in the event of a fuel spill
566 and shall meet Brevard County Fire Prevention Codes and Rules of the
567 State Fire Marshall's office.
 - 568

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569 **Policy 5.2**
570 Brevard County should continue to develop and implement regulations governing live-
571 aboards within the coastal zone. The regulations shall include the following criteria at a
572 minimum:

573 **Criteria:**

- 574 A. Floating structures shall be considered within live-aboard regulations.
575 Floating structures shall be defined as: A vessel with no means of
576 operative propulsion which is inhabited for thirty (30) consecutive days or
577 more.
578
579 B. Motorized live-aboard vessels shall be defined as vessels which are
580 occupied for more than seven (7) consecutive days within Brevard
581 County. These shall not include floating structures (as defined in Criterion
582 A).
583
584 C. The County shall investigate designating certain areas of the Indian River
585 Lagoon for mooring of motorized live-aboard vessels which are not
586 docked within marinas. Live-aboard vessels moored outside of marinas
587 shall be required to utilize pump-out facilities or a municipal sewer facility if
588 they are moored for over three (3) days.
589
590 D. The County shall coordinate with the Marine Patrol to eliminate live-
591 aboards permanently anchored outside of a marina or area specially
592 designated for live-aboards.
593
594 E. Floating structures shall be required to moor within marinas or to privately
595 owned riparian property, and shall be connected to pump-out facilities or
596 a municipal sewer facility.
597
598 F. Live-aboards shall be considered as part of the community and will be
599 considered as residential units when assessing impacts of such
600 development on community facilities and services.

601 **Policy 5.3**

602 Retrofitting or modification of existing marina facilities within the coastal zone
603 shall be required to meet the following minimum criteria:

604 **Criteria:**

- 605 A. **Stormwater retention/detention requirements** established in the
606 Stormwater Management Criteria Ordinance as adopted on August 23,
607 1993.
608
609 B. Substantially expanded marina facilities shall retain all work area runoff.
610 For those projects with combined **detention areas** of five (5) acres or
611 greater, the work area runoff shall be retained in a separate retention
612 area. In addition, the first inch of stormwater runoff from a 10-year, 24
613 hour storm event shall be retained on site or shall meet the water quality
614

- 615 standards as required by the state, whichever is more restrictive. For
616 projects with a combined detention area of less than five (5) acres,
617 stormwater and work area runoff may be retained in a single
618 retention/detention area.
- 619
- 620 C. When ten (10) slips or ten (10) percent or more of the total number of slips,
621 whichever is greater, are added, pumpout facilities shall be required, as
622 recommended by the Marine Sanitation Study (1990), sufficient to
623 accommodate the pump-out requirements concurrent with the total
624 number of slips.
- 625
- 626 D. Prior to operation of any new marina fueling facility or expansion due to
627 an existing facility, a fuel management/spill contingency plan will be
628 developed and provided to the Office of Natural Resources
629 Management Department for review. The plan shall describe methods to
630 be used in dispensing fuel and all the procedures, methods, and materials
631 to be used in the event of a fuel spill.

632 **Policy 5.4**

633 Brevard County shall ~~continue to implement~~ ~~develop and adopt~~ standards for
634 marina siting within the coastal zone which shall address the following criteria at a
635 minimum:
636

637 **Criteria:**

- 638 A. All proposed marina siting projects in unincorporated areas of Brevard
639 County shall come before the Board of County Commissioners for their
640 review. Marina development may be considered within any appropriate
641 zoning classification, if it is consistent with the performance standards
642 developed by the County. Uplands at the marina site shall be greater
643 than or equal to one acre. Residential marinas shall be allowed as a
644 permitted use, subject to the boat facility siting criteria established in
645 section B below and in the policies under Objectives 3 and 9 of the
646 Conservation Element, in all of the current conditional use zoning
647 classifications for residential/recreational marinas, except Recreational
648 Vehicle Park (RVP) and Government Managed Lands (GML).
- 649
- 650 B. At the beginning of the zoning process, all marina development proposals
651 must submit a conceptual plan to be reviewed by the Natural Resources
652 Management Department Office for compliance with the following boat
653 facility siting criteria:

654 **PRELIMINARY ASSESSMENT CRITERIA**

655 The following listed criteria are recommended as the preliminary test of
656 suitability for boat facility siting.

- 657
- 658 1. Water Depth
- 659 a. Water depth at the proposed mooring area of the site shall be at least
660 four (4) feet mean low water.

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- 661 b. Water depth at the site must be adequate for the proposed vessel use
662 such that there be a minimum of one foot clearance between the
663 deepest draft of the vessel (including the engine) and the bottom at
664 mean low water.
- 665 c. Proposed boat facilities in areas that contain seagrass shall not be
666 approved unless water depth at the site's turning basin, access
667 channel, and other such areas will accommodate the proposed vessel
668 use to insure that a minimum of one (1) foot clearance is provided
669 between the deepest draft of the vessel (including the engine) and
670 the top of the resources at mean low water.
- 671 2. Seagrass
- 672 a. Marinas shall not be located in areas containing 10% or more seagrass.
- 673 b. Designated boat docking areas shall not be located over seagrasses.
- 674 c. Covered boat slips, covered walkways, or covered terminal platforms
675 shall not be permitted in areas containing seagrass.
- 676 d. Boat docks using open mesh grating and pilings made from recycled
677 materials (plastic/wood composites for example) are preferred to
678 pressure treated wood. Any materials or permitted construction
679 techniques proven to allow a minimum of 75% light transmittance may
680 be exempt from design criteria e and f below in this subsection.
- 681 e. For Residential Marinas, main access docks and connecting or
682 crosswalks shall not exceed six (6) feet in width.
- 683 f. Access piers should be located and designed to minimize their
684 shadowing impact on seagrass.
- 685 g. Reasonable alteration to these criteria may be authorized to
686 accommodate persons with disabilities.
- 687 3. Manatee Related Best Management Practices
- 688 a. Dock designs shall not entrap manatees or otherwise prevent them
689 from accessing forage areas.
- 690 b. Docks with exposed reinforcement structures on floating docks shall be
691 prohibited due to their potential to entrap or entangle manatees in
692 the structure itself or in the marine debris that commonly occurs in
693 these areas.
- 694 4. Water Quality
- 695 a. New seawalls or bulkheads should be prohibited along the Indian River
696 Lagoon except as provided in Brevard County Code Section 62-3666
697 or when the project would improve the water quality by acting as a
698 swale and reducing the amount of pollutants which would enter the
699 Indian River Lagoon, where the placement of a seawall does not
700 disturb existing native vegetation, prohibit the reestablishment of
701 native vegetation, or where the reestablishment of native vegetation is
702 not viable.
- 703 b. All facilities shall adhere to the provisions for surface water protection
704 per the guidelines set forth in Brevard County Code Section 62-3666.
705 The provisions for a shoreline protection buffer established in the Code
706 and Conservation Element (CE) policies include the following:

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- Class I waters - 200 foot buffer – Conservation Element Policy 3.2 A
- Class II waters - 50 foot buffer - Conservation Element Policy 3.3 A
- Class III waters - 25 foot buffer – Conservation Element Policy 3.4 A
- On lots with unarmored shorelines the waterward extent of the buffer is the mean high water line. On bulkheaded lots, the waterward extension of the buffer is established by the bulkhead line. A maximum width of 25 feet or 20% (whichever is greater) may be cleared for access.

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5. Powerboat-To-Shoreline Ratios

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Table 1

Limiting Habitat Features	Criteria for Evaluation (each increases the number of habitat features by 1, unless otherwise specified)
Manatee Abundance Manatee Mortality Seagrass Class II, OFW, or Aquatic Preserves	1st level: 10 or more manatees observed/overflight within 5 mile radius (1 point) 2nd level: 25 or more manatees observed/overflight within 5 mile radius (2 points) 1st level: # of watercraft mortalities within a 5 mile radius/total number of watercraft mortalities in Brevard (≥ 0.05 is significant) (1 point) 2nd level: # of watercraft-related deaths within a 5 mile radius in the last 5 years/total number of watercraft mortalities in Brevard in the last 5 years (> 0.10 is significant) (2 points) 5% or more present on the project site is significant Site is located in one of these designated areas
Offsetting Features	Criteria for Evaluation (each decreases the number of habitat features by 1)
Speed Zones Within 3 miles of Sebastian inlet	Site is located within a year-round "Slow Speed" or "Idle Speed" Zone Site is located within 3 mile radius of Sebastian Inlet

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Table 2

# Manatee Habitat Features	Existing Facility	New Facility
0	5:100	4:100
1	5:100	4:100
2	3:100	2:100
3	2:100	1:100
4	1:100	1:100
5	1:100	1:100
6	1:100	1:100

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e. **Variance Criteria:** It is recommended that a variance may be given to the powerboat-to-shoreline ratio for those existing marina and boat launching facilities subject to the 1 powerboat slip to 100 feet of owned contiguous shoreline restriction (1:100), provided the facility meets all the variance criteria listed below and can demonstrate that it will not have an adverse impact on manatees. If an existing facility meets all of the variance criteria, it may be permitted to increase the powerboat-to-shoreline ratio by 1:100 if the waters in and adjacent to the channels leading to the facility are designated "slow speed" or "idle speed" year-round as authorized by the Florida Manatee Sanctuary Act Chapter 68C-22.003, F.A.C. or other federal regulations or local ordinances, or if the facility is within 3 miles of the Sebastian Inlet. The facility may be allowed to increase the powerboat-to-shoreline ratio by 2:100 if both are applicable. In no case shall the maximum total buildout of 3 powerboat slips per 100 feet of owned contiguous shoreline (3:100) be exceeded. However, adherence to these criteria does not automatically ensure the applicant's ability to exceed the allowable powerboat restrictions as defined above. The plan restrictions will remain in effect, if at the time of review, additional information about manatees or the proposed facility indicates threats not addressed by these criteria. Consideration can be given for additional site-specific factors or operating practices (e.g. seasonal operation, etc.) that may be proposed by either the applicant or the County that may result in improved conditions for manatees or manatee protection. Nothing in this section shall exempt any marina from obtaining the usual required permits and/or authority from all applicable reviewing agencies with proper jurisdictional authority. The criteria are:

- 1) The facility is not located within a 1st or 2nd level manatee aggregation area (using the Manatee Abundance Habitat Feature as defined in 5 d of this Policy and in the Table above), or other area where sensitive manatee activities occur.

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- 2) The facility must provide net benefit to manatees and/or their habitat. For example, facilities may include a manatee “refuge” space as part of the design, a conservation easement, restoration of adjacent wetlands such as mangrove or seagrass restoration to increase the net coverage of the nearby area, reduced nutrient input to receiving waters, requiring prop guards on any high traffic vessels such as water taxis or dive boats or rental boats, etc. The marina construction and subsequent uses will neither destroy nor negatively impact mangrove and benthic (seagrass, hard bottom, etc.) communities and the water quality.
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- 3) The facility must have sufficient water depth, as stated in B. 1. a. of this Policy, in the marina basin and in any access channel, and does not require any new dredging or filling that would degrade shallow water habitat (this may exclude maintenance dredging, or pile installation). Entrance/exit channels near marinas shall be adequately marked if marina repairs or expansion are proposed.
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- 4) The site shall contain appropriate signage (including vessel speed and manatee information signs), and provide educational material advising boaters of essential manatee habitats in the vicinity.
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- 5) Multi-family residential docking facilities will require that all vessels moored at the site be registered to individuals residing at the site.
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- 6) The marina has adequate water circulation, tidal flushing, and meets State of Florida and local water quality standards.
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- 7) Before expanding and exceeding the allowable powerboat slips defined above, an existing facility must demonstrate not less than 85% occupancy over the previous 2 years of operation. New facilities should be able to demonstrate the need for additional boat slips in the vicinity based on occupancy of existing marina slips within the boater sphere of influence. The boater’s sphere of influence shall be a five (5) mile radius.
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6. Boat Ramps
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- In order to minimize adverse impacts to manatees, boat ramps are best located in areas with few natural resources, with relatively low manatee abundance and relatively low watercraft-induced manatee mortalities, and with deep water access and marked navigation channels. Boat ramp siting or expansion in Brevard County shall be evaluated using the following criteria:
- 834
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836
- a. All sites considered by Brevard County for new or expanded boat ramp facilities shall be evaluated for site suitability prior to acquisition and development.
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839
- b. All proposed new boat ramps or the expansion of existing boat ramps in the unincorporated areas of Brevard County shall be brought before the Board of County Commissioners for their review.

- 840 c. The siting of new or the expansion of existing boat ramp facilities shall
841 be limited to areas that meet the Preliminary Assessment Criteria for
842 water depth stated in section B. 1. a. of this Policy.
- 843 d. The siting of new or the expansion of existing boat ramp facilities shall
844 be prohibited in areas that meet or exceed the 2nd level of manatee
845 abundance or the 2nd level of manatee mortality as shown in Table 1
846 above.
- 847 e. The siting of new or expansion of existing boat ramp facilities shall be
848 prohibited in areas with greater than 5% seagrass coverage including
849 all ramps, docks, access walkways, finger piers, mooring areas, turning
850 basins, and ingress and egress pathways.
- 851 f. The siting of new or the expansion of existing boat ramp facilities shall
852 be required to meet the criteria included in Policy 3.3 E of the
853 Conservation Element and Section B. of this Policy with the exception
854 of Seagrass (5.4 B. 2.), Manatee Related Best Management Practices
855 (5.4 B. 3.), and Water Quality (5.4 B. 4.).
- 856 g. All sites considered for the siting of new or the expansion of existing
857 boat ramp facilities shall be evaluated for the number of habitat
858 features present using the Boat Ramp Feature Assessment table below
859 and using the manatee mortality and abundance criteria as defined
860 under Manatee Habitat Features in the glossary.
- 861 h. Boat Facility Siting Zone A is not considered preferable for additional
862 boat ramp siting due to the high number of habitat features present.
863 In Boat Facility Siting Zone A, a site that has less than 2 habitat features
864 based on the criteria in the Boat Facility Feature Assessment may be
865 considered for a new or expanded boat ramp with up to a maximum
866 of 15 parking spaces.
- 867 i. In Boat Facility Siting Zone B (Barge Canal), the establishment of a new
868 public or private boat ramp for public use shall be the same
869 requirements as for the development of a new or expanded marina as
870 described in Boat Facility Siting Zone B (5.4 B. 5.). For the purposes of
871 boat ramps, one boat-trailer parking space shall be considered the
872 equivalent of one powerboat slip. New or expanded boat ramps on
873 the Barge Canal which are associated with a marina and which are to
874 be used solely by the tenants of that marina for the launching of boats
875 stored at that marina shall not be limited in the number of parking
876 spaces.
- 877 j. In Boat Facility Siting Zone C (Port Canaveral Harbor), the siting of new
878 or expansion of existing boat ramps shall be unrestricted.
- 879

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**Table 3
Boat Ramp Feature Assessment**

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LIMITING HABITAT FEATURES	Criteria for Evaluation (each increases number of habitat features by 1, unless otherwise specified)
Manatee Abundance	1st level: 10 or more manatees observed/overflight within 5 mile radius (1 point) 2nd level: 25 or more manatees observed/overflight within 5 mile radius (2 points)
Manatee Mortality	1st level: # of watercraft mortalities within a 5 mile radius/total number of watercraft mortalities in Brevard (≥ 0.05 is significant) (1 point) 2nd level: # of watercraft-related deaths within a 5 mile radius in the last 5 years/total number of watercraft mortalities in Brevard in the last 5 years (> 0.10 is significant) (2 points)
Class II, OFW, or Aquatic Preserves	Site is located in one of these designated areas
Offsetting Features	Criteria for Evaluation (each decreases the number of habitat features by 1)
Speed Zones	Site is located within a year-round "Slow Speed" or "Idle Speed" Zone
Within 3 miles of an inlet	Site is located within 3 mile radius of Sebastian Inlet

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- k. In Boat Facility Siting Zone D, a site with no more than 2 habitat features shall be considered suitable for siting of a new boat ramp or the expansion of an existing boat ramp. Sites with 0 or 1 habitat feature shall be eligible for a boat ramp with up to a maximum of 40 boat trailer parking spaces. Sites with 2 habitat features shall be eligible for a boat ramp with up to a maximum of 15 boat trailer parking spaces.
- l. Boat Ramp Variance Criteria: The ability to secure additional parking slots at public ramps could be reconsidered by the FWC if additional law enforcement, additional preservation, or impact reduction along the lagoon is demonstrated.
- m. The following specific sites are identified individually to address existing boat ramp deficiencies in Brevard County and are exempted from the boat ramp siting criteria above:
 - 1) It is recommended that Brevard County's relocation of the Pineda Landing facility include 36 parking spaces.
 - 2) It is recommended that Brevard County provide 50 additional parking spaces by expanding existing public ramp facilities or by developing a new location in the south mainland area. The expansion of an existing facility or the siting of a new facility, as provided for above shall minimize impacts to manatees and

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906 natural resources and should be evaluated by the Boat Ramp
907 Manatee Habitat Feature Assessment as defined above. It is
908 recommended that the evaluation result in a score of no greater
909 than two habitat features. The County will screen sites to select the
910 most appropriate and coordinate with FWC staff on the site
911 selection.

912
913 C. Commercial/industrial and commercial/recreational marina
914 development within commercial, heavy and light industrial and planned
915 industrial park land use designations shall require a Conditional Use Permit.
916 Residential/recreational marinas shall be a permitted use in these land use
917 designations.

918
919 D. Residential/recreational marinas may be considered within residential
920 land use designations with a Conditional Use Permit and a Binding
921 Development Concept Plan.

922
923 E. No fueling or repair facilities are permitted within residential zoning
924 classifications.

925
926 F. When locating new marinas or expanding existing marinas, biologically
927 productive habitats shall be preserved to the fullest extent possible.
928 Mitigation is the last resort for habitat destruction, and shall be of a two-to-
929 one or greater ratio of in-kind replacement.

930
931 G. Marina facilities shall be located where maximum physical advantage for
932 flushing and circulation exists, where the least dredging and maintenance
933 are required, and where marine and estuarine resources will not be
934 significantly affected.

935
936 H. Marina basins shall be sited where there is an existing basin and access
937 channel with an average water depth of three (3) feet below mean low
938 water, except at the shoreline.

939
940 I. Marinas and docking facilities should be approved which require minimal
941 or no dredging or filling to provide access by canal, channel or road.
942 Preference shall be given to marina sites with existing channels. In the
943 event that dredging is required, the mooring areas and the navigation
944 access channels shall not be dredged to depths greater than eight (8)
945 feet. Any required dredging operations shall utilize appropriate
946 construction techniques and materials to comply with state water quality
947 standards, such as turbidity screens, hydraulic dredges, properly sized and
948 isolated spoil deposition area to control spoil dewatering. All dredging
949 activities must be done with effective turbidity controls. Where turbidity
950 screens or similar devices are used, they should be secured and regularly
951 monitored to avoid manatee entrapment.

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- J. Marinas shall be located in areas with good flushing and circulation. New marina or substantially expanded facilities shall be designed to take advantage of existing water circulation and shall not adversely affect existing circulation patterns. Improvement of circulation shall be a consideration when expanding or upgrading existing facilities. However, any buffer zone established by the Florida Department of Environmental Protection Shellfish Environmental Assessment Section (FDEP-SEAS) shall be maintained.
 - K. The proposed site shall be compatible with existing land use designations. Marinas shall demonstrate that they have sufficient upland areas to accommodate all needed support facilities. These standards include, but should not be limited to, adequate parking, work areas and retention areas for stormwater and work area runoff, and shoreline protection buffers.
 - L. Marina facilities shall not degrade water quality below existing Florida Department of Environmental Protection water classification standards.
 - M. Marinas shall not be located in approved or conditionally approved shellfish harvesting waters or Class II waters, or other environmental areas designated by the County so as to substantially and materially have a negative impact on these waters.
 - N. Commercial/recreational and commercial/industrial marinas shall not be located in Aquatic Preserves, or Outstanding Florida Waters, or other environmental areas designated by the County so as to substantially and materially have a negative impact on these waters.
 - O. Construction of multi-slip docking facilities and boat ramps shall be directed to locations where there is quick access to deep, open water at least eight (8) feet in depth (dredgeable), where the multi-slip docking facilities take the place of several single-slip docks and allow public access to the water, and where the associated increase in boat traffic will be outside of known manatee aggregation areas, and where seagrass beds or other wetlands supporting manatee habitat will not be disturbed.
 - P. All marina facilities shall comply with manatee protection measures established in Conservation Element Policy 9.9.

993 **Policy 5.5**

994 Brevard County shall require hurricane plans to be submitted to the Florida
995 Division of Emergency Management ~~Division~~ in conjunction with marina site plans for
996 review.
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998 **Policy 5.6**

999 Marinas within the coastal zone shall be inspected annually by Brevard County
1000 and results of these inspections shall be coordinated with other agencies. Inspections
1001 shall be coordinated with existing programs and duplication with existing inspection
1002 programs shall be avoided. It is recommended that inspection of commercial marinas
1003 occur as part of the business license renewal procedure. Items to be inspected and
1004 reviewed may include the following.

1005 **Criteria:**

- 1006 A. Pumpout facilities/marine sanitation devices, if required.
- 1007
- 1008 B. Compliance with power/sailboat mix, if required.
- 1009
- 1010 C. Spill prevention, control, containment and cleanup plans.
- 1011
- 1012 D. Waste collection and disposal methods.
- 1013
- 1014 E. **Required** Fire fighting equipment, if required.
- 1015
- 1016 F. Monitoring of marina basin water quality for bacteriological levels to
1017 insure compliance with state and federal standards. Live-aboards at
1018 marinas shall be inspected to ensure that marine sanitation devices
1019 (MSDs) are present and operational. If a water monitoring program is
1020 required, water-dependent uses shall be assessed an annual fee
1021 adequate to fund a water quality monitoring program, **if required**.
- 1022

1023 **Policy 5.7**

1024 Brevard County shall investigate the utilization of tourist taxes or boating
1025 improvement funds to develop public boat launching facilities and related amenities.

1026 **Policy 5.8**

1027 Brevard County should consider the acquisition of property for boat ramps in
1028 their recreational purchasing program.

1029 **Policy 5.9**

1030 All new boat ramps should have parking areas constructed utilizing permeable
1031 pavement where appropriate and have the proper stormwater management system in
1032 place.

1033 **Policy 5.10**

1034 ~~Brevard County shall review shore line development within the coastal zone in order to
1035 maximize opportunities for water dependent land uses. The following criteria, at a
1036 minimum, shall be utilized.~~

1037 **Criteria:**

- 1038 ~~A. Water related uses shall be built on uplands.~~
- 1039
- 1040 ~~B. Development which is feasible only through creation of land by dredging and
1041 filling of areas below the mean high water line shall not be approved. Exceptions may~~
- 1042
- 1043
- 1044

1045 ~~be considered where overriding benefit to the natural resource can be demonstrated.~~

1046 ~~C. Water dependent commercial and industrial uses may be considered for siting~~
1047 ~~adjacent to the Indian River Lagoon.~~

1049 ~~D. Water related commercial and industrial uses may be considered for siting only~~
1050 ~~adjacent to Class III waters of the Indian River Lagoon.~~

1052 **Policy 5.11**

1054 The Brevard County Land Development Regulations shall include a provision for
1055 water-enhanced commercial development within the coastal zone. Such uses shall be
1056 permitted as Conditional Uses within the BU-1 zoning category.

1057 **Policy 5.12**

1058 ~~By 2010,~~ Brevard County ~~shall~~ ~~should~~ develop and implement a water and
1059 sediment quality monitoring program for water-dependent users, man-made canals
1060 and other selected areas with significant upland runoff within the coastal zone.

1061 **Criteria:**

- 1062 A. Brevard County shall establish a classification program for the various
- 1063 water dependent uses.
- 1064
- 1065 B. Brevard County shall establish a water quality monitoring program for
- 1066 each of the designated classes of water dependent uses.
- 1067
- 1068 C. Water dependent uses shall be assessed an annual fee adequate to fund
- 1069 the required water quality monitoring program.
- 1070
- 1071 D. The County shall require the activity to cease if adopted water quality
- 1072 standards are not maintained.
- 1073
- 1074 E. Continued operation resulting in degradation of the water quality below
- 1075 accepted standards shall result in a fine, as established by Brevard
- 1076 County.
- 1077
- 1078 F. Waiver provisions should be included for operations below an established
- 1079 threshold.
- 1080
- 1081 G. This program shall be in coordination with the Florida Department of
- 1082 Environmental Protection ~~Natural Resources,~~ and other appropriate
- 1083 agencies.
- 1084
- 1085

1086 **Consider replicating the water dependent use fee program for maintaining low-impact**
1087 **design features.**

1088 **Policy 5.13**

1090 Brevard County shall support environmentally and economically sound
1091 development of Port Canaveral and related facilities, which is consistent with this
1092 Comprehensive Plan (Policy 5.4 of the Transportation Element).

1093
1094 **Policy 5.14**

1095 Brevard County should continue to monitor boating activity and boat facility
1096 demand.

1097
1098 **Policy 5.15**

1099 During rezoning and other development order approval reviews, Brevard County
1100 should give immediate shoreline use priorities (in descending order of priority) to:

1101 **Criteria:**

- 1102 A. Water-dependent uses such as fish, shellfish and wildlife production,
1103 recreation, water dependent industry and utilities, marinas and
1104 navigation;
- 1105
- 1106 B. Water-related uses such as certain utilities, commerce and industrial uses;
- 1107
- 1108 C. Water-enhanced uses such as some recreation uses;
- 1109
- 1110 D. Non-water dependent or related activities such as residential; and
- 1111
- 1112 E. Of lowest priority are those uses which are non-water dependent, non-
1113 water enhanced and which result in an irretrievable commitment of
1114 coastal resources.
- 1115

1116 **Policy 5.16**

1117 Brevard County should encourage the construction of marine sanitation device
1118 (MSD) pumpout facilities.

1119
1120 **Policy 5.17**

1121 Brevard County shall utilize available management plans in developing
1122 standards for marina siting and other water-dependent uses. These management plans
1123 include, but are not limited to, Aquatic Preserve Management Plans, the Surface Water
1124 Improvement Management (SWIM) Plan and the IRLCCMP.

1125
1126
1127 **Coastal High Hazard Areas**

1128
1129 **Objective 6 (also Objective 3 of the Capital Improvement Element)**

1130 Limit future public expenditures for infrastructure and service facilities which subsidize
1131 growth within the coastal high hazard areas of Brevard County. Expenditures for public
1132 land acquisition or enhancement of natural resources shall be encouraged.

1133

Commented [RP4]: Delineation of CHHA, storm surge elevation, future investment in capital improvements should consider effects of climate change.

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1134 **Policy 6.1 (also Policy 3.1 of the Capital Improvement Element)**

1135 Brevard County shall designate coastal high hazard areas to be those areas
1136 below the elevation of the Category 1 storm surge elevation as established by a Sea,
1137 Lake and Overland Surges from Hurricanes (SLOSH) computerized storm surge model, as
1138 defined in Chapter 163, Florida Statute (see Map ~~Z3~~).

1139 **Policy 6.2 (also Policy 3.2 of the Capital Improvement Element)**

1140 Brevard County shall not support or finance new local transportation corridors
1141 which lie within the coastal high hazard ~~area zone~~ or areas zoned as Environmental
1142 Area, except where there are no other cost-feasible alternatives. Corresponding
1143 improvements may only be considered when the facilitation of such improvements is
1144 needed to support the densities programmed on the Future Land Use Map (FLUM) series
1145 of the Comprehensive Plan.
1146

1147 **Policy 6.3 (also Policy 3.3 of the Capital Improvement Element)**

1148 Brevard County should not locate sewer and water transmission lines within the
1149 coastal high hazard area ~~zone~~, except where there is no ~~practical and~~ cost-feasible
1150 alternative ~~and where practical~~ due to engineering, safety and cost considerations,
1151 ~~and where necessary utilizing lack of alternative~~ existing rights-of-way, ~~or for septic to~~
1152 ~~sewer conversion projects selected specifically to improve ground and surface water~~
1153 ~~quality.~~
1154

1155 **Policy 6.4 (also Policy 3.4 of the Capital Improvement Element)**

1156 If County utility lines are relocated for any purpose, they should be located
1157 outside of the coastal high hazard ~~area zone~~, except where there is no cost-feasible
1158 alternative.
1159

1160 **Policy 6.5 (also Policy 3.5 of the Capital Improvement Element)**

1161 Public facilities, except for recreational facilities, shall not be located by Brevard
1162 County within the coastal high hazard ~~area zone~~, except where there are no other
1163 cost-feasible alternatives. Corresponding improvements may only be considered when
1164 the facilitation of such improvements is needed to support the densities programmed
1165 on the Future Land Use Map (FLUM) series of the Comprehensive Plan.
1166

1167 **Coastal Residential Densities**

1168 **Objective 7**

1169 Limit densities within the ~~coastal high hazard area zone~~ and direct development
1170 outside of this area.
1171

1172 **Conservation Element Policy 4.2 (proposed)**

1173 **Brevard County Code of Ordinances requires that if the cost of any reconstruction,**
1174 **rehabilitation, addition or other improvements to a building equals or exceeds 50% of**
1175 **the building's market value, such work is considered a substantial improvement under**
1176 **Chapter 62. The existing building is then required to meet the same standards as a new**
1177 **building. For residential structures, these requirements typically mean raising the living**
1178 **area of the building a minimum of one foot above the base flood elevation.**
1179
1180

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1181 i. Substantial improvement shall mean any repair from damage or destruction,
1182 reconstruction, improvement, or additions of a structure, the cost of which equals or
1183 exceeds 50% of the assessed market value of the structure as is listed by the Brevard
1184 County Property Appraiser's Office or by a certified appraisal. The assessed value of the
1185 structure shall be determined before the improvement is started, or if the structure has
1186 been damaged and is being restored, before the damage or destruction occurred.

1187 **Conservation Policy 4.3 (proposed; adopt and renumber)**
1188 **For structures that cannot be located outside of the floodplain, initial design**
1189 **construction and retrofitting shall include modification to prevent or minimize flooding of**
1190 **habitable space, including:**

- 1192 • Elevation of the structure above flood protection levels.
- 1193 • Construction of barriers (floodwalls, berms, etc.).
- 1194 • Dry floodproofing (water tight floor and wall systems).
- 1195 • Wet floodproofing (permits entry and passage of flood waters).
- 1196 • Backflow prevention on sewer lines

1197
1198
1199
1200 **Policy 7.1**

1201 Brevard County shall not increase residential density designations for properties
1202 located on the barrier island between the southern boundary of Melbourne Beach and
1203 the Sebastian Inlet.

1204
1205 **Policy 7.2**

1206 Brevard County shall continue to implement the Transfer of Development Rights
1207 program which has been established to transfer density from transfer districts within the
1208 coastal high hazard area to receiving districts outside of the coastal high hazard area.

1209
1210 **Policy 7.3**

1211 Brevard County shall continue its program of land acquisition and management
1212 for recreation and preservation, contingent upon availability of funding.

1213
1214 **Policy 7.4**

1215 Brevard County shall review federal and state development proposals which are
1216 to be located within the coastal high hazard areas, and shall support those projects
1217 which are consistent with this Plan.

1218
1219 **Policy 7.5**

1220 Brevard County shall maintain the Brevard County Comprehensive Emergency
1221 Management Plan (BrevCEMP). This plan shall be consistent with this Comprehensive
1222 Plan, and shall be coordinated with the municipalities, the appropriate state and
1223 federal agencies, and be approved by the appropriate state agency(s).

1224

1225 **Policy 7.6**
1226 The existence of sewer, water, roadways or other public infrastructure shall not
1227 be considered adequate rationale for an increase in zoning density or intensity within
1228 the coastal high hazard area.

1229 **Policy 7.7**
1230 Once public acquisition of recreation and/or conservation lands occurs within
1231 coastal high hazard areas, the Future Land Use Map shall be amended to designate
1232 the same as Recreation or Conservation lands. Such redesignation shall not serve as a
1233 basis for increasing established residential density designations in said coastal high
1234 hazard area.
1235

1236 **Policy 7.8**
1237 Public facilities, such as hospitals, wastewater treatment plants or fire stations,
1238 shall not be located on causeways.
1239

1240
1241 **Hurricane Evacuation**

1242 **Objective 8 - Hurricane Evacuation**
1243 Reduce excessive evacuation times where they currently exist, and maintain all other
1244 evacuation times within the acceptable standard. Acceptable evacuation standards
1245 will be reviewed and updated as necessary but shall not exceed the times indicated in
1246 the current Brevard County Comprehensive Emergency Management Plan
1247
1248

1249 **Policy 8.1**
1250 Brevard County shall maintain acceptable hurricane evacuation times based
1251 upon the following criteria:

- 1252 **Criteria:**
1253 A. The most current behavioral response scenario.
1254 B. The requirement to evacuate prior to sustained tropical storm force (40
1255 mph) winds.
1256
1257

1258 **Policy 8.2**
1259 Brevard County shall coordinate with the municipalities and appropriate state
1260 agencies to develop Evacuation Zone Management Plans to reduce evacuation times
1261 above the current optimum behavioral response time. The following shall be
1262 considered, at a minimum:

- 1263 **Criteria:**
1264 A. Roadway and other infrastructure improvements and funding
1265 mechanisms.
1266 B. Programs designed to improve the behavioral response to hurricane
1267 evacuation orders.
1268
1269
1270

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1271 C. Land use strategies.

1272

1273 **Policy 8.3**

1274 Brevard County Emergency Management shall continue to coordinate with
1275 NASA to allow evacuation of North Merritt Island through Kennedy Space Center, if
1276 necessary.

1277

1278 **Policy 8.4**

1279 Brevard County shall identify roadway and operational improvements to the
1280 hurricane evacuation network based upon the number of people who cannot be
1281 evacuated within an optimum evacuation time limit.

1282 **Criteria:**

1283 A. Priority shall be given to improvements serving the zone with the highest
1284 number of people remaining after the current optimum evacuation time.

1285

1286 B. The remaining improvements shall be given priority in descending order
1287 according to the number of people remaining after the optimum
1288 evacuation time.

1289

1290 C. Brevard County, in cooperation with the Florida Department of
1291 Transportation **and the Space Coast TPO Master Plan**, shall identify key
1292 hurricane evacuation routes that are vulnerable to flooding, erosion and
1293 critical points of congestion during the established evacuation time.

1294

1295 D. Brevard County shall present recommended roadway, operational and
1296 maintenance improvements to the appropriate implementing and
1297 funding agencies.

1298

1299 **Policy 8.5**

1300 In those areas where citizens cannot be evacuated within the evacuation
1301 standards in the Brevard County Emergency Management Plan adopted January 1,
1302 2008, development orders may be deferred until such time as adequate evacuation
1303 capacity has been programmed.

1304

1305 **Policy 8.6**

1306 Brevard County shall consider hurricane evacuation times, as well as other
1307 factors, in determining the timing and priority of roadway improvements which are
1308 programmed by the Board of County Commissioners.

1309

1310

1311 **Policy 8.7**

1312 Brevard County shall cooperate with the Red Cross and other agencies to
1313 develop an on-going public education program to notify the public as to the necessity
1314 to evacuate as quickly as possible in order to reduce or eliminate evacuation times in
1315 excess of the optimum behavioral response time.

1316

1317 **Policy 8.8**
1318 Brevard County's Comprehensive Emergency Management Plan (BrevCEMP)
1319 shall be consistent with the state comprehensive emergency management plans.

1320 **Policy 8.9**
1321
1322 Based upon hurricane vulnerability concerns and excessive evacuation times,
1323 new mobile home development or recreational vehicle parks shall not be permitted on
1324 the barrier island **in unincorporated Brevard County**, to the extent permitted by law.
1325 ~~Expansions to an existing mobile home development may be permitted if such~~
1326 ~~development results in a decrease in land use intensity and an overall reduction in~~
1327 ~~programmed residential densities and is consistent with the character of the~~
1328 ~~surrounding area.~~

1329 **Policy 8.10**
1330 ~~By 2011,~~ Brevard County shall require a hurricane management plan which
1331 reduces excessive hurricane evacuation time for existing recreational vehicle park
1332 development within the south beaches.
1333

1334 **Policy 8.11**
1335 Brevard County shall encourage the State of Florida to identify a dedicated
1336 funding source for the improvement of primary hurricane evacuation routes, such as US
1337 192, SR 528, SR 520 and Interstate 95. The funding source should be in addition to state
1338 and federal funds already received by Brevard County for urban area roadway
1339 improvements.
1340

1341 Hurricane Shelters

1342 **Objective 9**
1343 Provide adequate, safe hurricane shelter space to meet the needs of the at risk
1344 and special needs population ("shelter space" shall be considered to include both
1345 private and public shelters).
1346

1347 **Policy 9.1**
1348 Brevard County shall continue to cooperate with the Red Cross and State
1349 Emergency Management to provide an emergency shelter manager training course
1350 and encourage interested citizens of Brevard County to become shelter managers.
1351

1352 **Policy 9.2**
1353 Brevard County Office of Emergency Management shall continue to cooperate
1354 with the Red Cross to develop a public education program on hurricane preparedness,
1355 including the locations of hurricane evacuation shelters and the need for emergency
1356 shelter managers.
1357

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1363 **Policy 9.3**
1364 Brevard County shall cooperate with the Red Cross in designating appropriate
1365 public and private structures as hurricane shelters.
1366

1367 **Policy 9.4**
1368 Brevard County shall utilize the Housing and Human Services Department to
1369 provide appropriate facilities and adequate staffing for the special needs shelters.
1370

1371 **Policy 9.5**
1372 Brevard County shall support the School Board in their efforts to utilize enhanced
1373 hurricane shelter protection standards for all reconstruction and new development in
1374 accordance with FS 235.26.
1375

1376 **Policy 9.6**
1377 Public buildings within Brevard County should be reviewed to determine if
1378 qualified to be utilized as hurricane sheltering. Beginning in the year 2000, all newly
1379 constructed public buildings shall meet the criteria established for enhanced shelter
1380 protection in the State Requirements for Educational Facilities (SREF).
1381

1382 **Policy 9.7**
1383 Brevard County shall study the feasibility of increasing residential construction
1384 standards to reduce hurricane shelter deficits and ensure the delivery of safe housing
1385 for citizens of Brevard County.
1386

1387 **Policy 9.8**
1388 ~~By 2010,~~ Brevard County shall develop a hazard mitigation strategy in its land
1389 development regulations which prohibits the development of new recreational, mobile
1390 or manufactured housing and the expansion of existing recreational, mobile or
1391 manufactured housing unless the developer/owner has provided emergency sheltering
1392 sufficient to house a minimum of 50% of the residents of that development.
1393 **RECOMMENDED TO INCLUDE IMPLEMENTATION DATE.**
1394

1395 **Policy 9.9**
1396 ~~By 2011,~~ Brevard County will encourage all existing recreational, mobile or
1397 manufactured housing communities to have emergency shelters and a hurricane
1398 management plan that will result in faster evacuation times for their residents.
1399 **RECOMMENDED TO INCLUDE IMPLEMENTATION DATE.**
1400

1401 **Post-Disaster Redevelopment**

1402
1403 **Objective 10**
1404 Expedite post-disaster recovery and reduce or eliminate the future risk to human life,
1405 and public and private property from natural hazards via recovery and re-
1406 development strategies adopted in the BrevCEMP.
1407

1408 **CONDUCT AN AUDIT OF THE DEVELOPMENT STRATEGIES IN THE BREVCEMP FOR CONSISTENCY WITH THE**
1409

COASTAL MANAGEMENT ELEMENT

| ~~November 2017~~ ~~August 2014~~ ~~December 2016~~ | - 33
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1410 **COASTAL MANAGEMENT ELEMENT AND PERIL OF FLOOD REQUIREMENTS**

1411
1412 **Policy 10.1**

1413 Brevard County's Code Compliance Department and Public Works Department
1414 shall review all non-emergency and long-term redevelopment proposals utilizing the
1415 following criteria:

1416 **Criteria:**

1417 **A. Redevelopment plans will be examined based on the functional life of the**
1418 **improvement for projected impacts due to the changing dynamic of**
1419 **climatic events.**

- 1420 A. If utility lines, including but not limited to sewer, water, gas, electric and
1421 cable TV, must be relocated after a storm event, they should be
1422 permanently located landward (west) of the 1986 FDEP Coastal
1423 Construction Control Line and underground except for feed lines servicing
1424 individual parcels. Repair of these lines on a temporary basis to protect
1425 health and safety shall be permitted in their existing locations.
- 1426
- 1427 B. Underground storage tanks which are located seaward of the Brevard
1428 County Coastal Setback Line (CSL) shall be relocated landward (west) of
1429 the 1986 FDEP Coastal Construction Control Line.
- 1430
- 1431 C. Water-dependent commercial uses seaward of the 1981 FDEP Coastal
1432 Construction Control Line which are damaged by more than 50% of their
1433 assessed value or fair market value as determined by an MNAI appraisal
1434 supplied by the property owner may be reconstructed seaward (east) of
1435 the 1981 FDEP CCCL consistent with the coastal zone construction
1436 requirements.
- 1437
- 1438 D. Water-related commercial uses seaward (east) of the 1981 FDEP Coastal
1439 Construction Control Line which are damaged by more than 50% of their
1440 assessed value or fair market value as determined by an MNAI appraisal
1441 supplied by the property owner should be relocated landward (west) of
1442 the 1981 FDEP CCCL unless the project has no feasible alternative and is
1443 found to be in the public interest.
- 1444
- 1445 E. Water-enhanced commercial uses seaward (east) of the 1981 FDEP
1446 Coastal Construction Control Line which are damaged by more than
1447 50% of their assessed value or fair market value as determined by an
1448 MNAI appraisal supplied by the property owner should be relocated
1449 landward (west) of the 1981 FDEP CCCL.
- 1450
- 1451 F. If non-habitable minor structures which are damaged by more than fifty
1452 (50) percent of their assessed value or fair market value as determined by
1453 an MNAI appraisal supplied by the property owner are reconstructed,
1454 they shall be relocated and constructed in compliance with coastal zone
1455 construction requirements.

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- G. Brevard County should develop a program for the possible relocation of residential housing, if required after a natural disaster.

CONSIDER ADOPTING IMPLEMENTATION DATE

Policy 10.2

~~The replacement of infrastructure shall be constructed in conjunction with existing development or as part of an integral network of infrastructure.~~

Policy 10.3

~~By 2012,~~ Brevard County should analyze those public structures within the coastal zone which are most likely to be damaged or destroyed during a hurricane. The analysis shall be coordinated by the Planning and Development Department Zoning Office and shall consider the following criteria, at a minimum:

Criteria:

- A. The cost effectiveness of relocation versus repair shall be analyzed.
- B. Alternatives shall be considered in the light of mitigative impacts, growth management consistency, impacts to the public, timeliness, legal issues, environmental impacts and cost.
- C. The following alternatives, at a minimum, shall be analyzed:
 - 1. Repair of the structure to the pre-disaster conditions.
 - 2. Repair of the structure to the pre-disaster conditions with physical protective structures, as may be legally permissible, such as seawalls or revetments when consistent with policy 5 of this element.
 - 3. Vertical relocation of the structure, e.g. elevating roadways with bridges.
 - 4. Relocation further inland.
- D. Reconstruction or relocation of SR A1A and other roadway segments within the coastal high hazard area shall be included within this study.
- E. Analysis of County service center and other facilities shall be in conjunction with the County's Space/Needs Assessment.
- F. Those structures within the high risk vulnerability zone to be included are the Central Brevard Service Complex, District II Commission Office, District II Road and Bridge, County Sign Shop, public libraries and County fire stations.

1499 G. The study shall be consistent with the East Central Florida Regional
1500 Planning Council studies. The hurricane scenarios and loss estimates shall
1501 be consistent with the Hurricane Loss Study and shall be coordinated with
1502 other appropriate agencies.

1503
1504 H. The impact of sea level rise and the projected 30-year erosion line shall
1505 also be analyzed.

1506 **Policy 10.4**

1507
1508 In the event of a disaster, all infrastructure and other County owned
1509 improvements, which were not included within the above outlined study, shall be
1510 analyzed to determine the cost effectiveness of relocation versus repair.

1511 **Policy 10.5**

1512
1513 The Brevard County ~~Code Compliance Department~~ shall provide copies of
1514 building permits which have been issued for storm damage repair to the County Hazard
1515 Mitigation Team for their evaluation for identification of areas susceptible to repeated
1516 damage by hurricane erosion and flooding.

1517 **Utilize this policy to collect data on areas to be designated as Coastal Planning Areas or
1518 for additional protections from natural hazards.**

1519
1520 **Policy 10.6**

1521
1522 Brevard County shall continue to conduct disaster related exercises at regular
1523 intervals, as determined by the ~~Office of~~ Emergency Management ~~Office~~, or in
1524 conjunction with the East Central Florida Regional Planning Council, Local Emergency
1525 Planning Committee and other state or federal agencies.

1526 **Policy 10.7**

1527
1528 As identified in the BrevCEMP, Emergency Support Function 18 (ESF 18) shall be
1529 the primary lead to conduct a post-disaster evaluation to assess property damages
1530 necessary for disaster relief and post-disaster redevelopment funds. The ESF 18 should
1531 have available a listing of property values coordinated with land use maps to facilitate
1532 such property assessment procedures. County staff, such as the Planning and
1533 ~~Development Department/Zoning Office~~ staff, will be utilized as manpower.

1534 **Utilize this policy to collect data on areas to be designated as Coastal Planning Areas or
1535 for additional protections from natural hazards.**

1536 **Policy 10.8**

1537
1538 The BrevCEMP shall be coordinated with other local, regional and state entities.
1539 As additional interagency hazard mitigation reports are received, they shall be
1540 reviewed and incorporated into the BrevCEMP.

1541 **Policy 10.9**

1542
1543 Brevard County ~~should~~ **shall** require that when utility lines, including, but not
1544 limited to sewer, water, gas, electric and TV cable, are relocated for any purpose, they

1546 shall be placed underground **and / or outside of the CHHA for the functional life of the**
1547 **infrastructure.**

1548
1549 **Coastal Access**

1550
1551 **Objective 11**

1552 Provide adequate public access to the beach, estuarine and river shorelines consistent
1553 with public needs and the shoreline's natural resource requirements.

1554
1555
1556 **Policy 11.1**

1557 Brevard County shall acquire new beach access sites, improve existing sites or
1558 provide alternative access to non-designated beach access points. The following
1559 minimum criteria shall apply:

1560 **Criteria:**

- 1561 A. Acquisition and site improvements of those areas of the beach identified
1562 as most deficient for beach access shall be given the highest priority.
1563 Efforts shall be undertaken to provide public access to all of Brevard
1564 County's beaches consistent with the FDEP's criteria for state cost-share
1565 funding for beach management.
- 1566 B. Site improvements, parking facilities and drainage shall be secondary to
1567 improvements to the naturally functioning dune system.
- 1568 C. Access shall be consistent with the standards included in the Recreation
1569 and Open Space Element of this Plan.
- 1570 D. Priority shall be given to those sites which are heavily utilized for beach
1571 recreation.
- 1572 E. Brevard County shall make efforts to balance the demand for beach
1573 access with the protection of the beach and dune habitat and species.

1574
1575
1576
1577
1578
1579 **Policy 11.2**

1580 Brevard County shall complete the Beach and Riverfront Acquisition Program,
1581 contingent upon availability of funding, with priority being given to the acquisition of
1582 land to fulfill the Identified Needs, as adopted by the Brevard County Board of County
1583 Commissioners.

1584
1585 **Policy 11.3**

1586 Brevard County shall prioritize future improvements to those oceanfront
1587 properties, contingent upon availability of funding, which have been purchased and
1588 are identified for additional beach access development.

1589

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1590 **Policy 11.4**
1591 Brevard County shall continue to coordinate with all beachfront municipalities
1592 the continued development and implementation of the Brevard County Beach
1593 Management Program. The Beach Erosion Advisory Committee, established by
1594 Chapter 70-603, Laws of Florida, should continue to function as a mechanism to
1595 communicate with the beachfront municipalities on beach-related issues and as the
1596 primary technical advisory committee to the Board of County Commissioners on the
1597 beach program.

1598 **Policy 11.5**
1599 Brevard County shall continue to pursue funds for dune revegetation to be used
1600 when constructing dune crossovers as replacements for unimproved dune access.
1601

1602 **Policy 11.6**
1603 Brevard County shall coordinate with the Florida Department of Transportation in
1604 providing waterfront access on causeways and bridges.
1605

1606 **Policy 11.7**
1607 Brevard County shall require private property owners to allow public use of
1608 beaches which are renourished with public funds. Access can be accomplished
1609 through publicly owned access points or improved dune crossovers located on
1610 easements.
1611

1612 **Policy 11.8**
1613 Brevard County shall review beachfront development to ensure that it does not
1614 interfere with public access in those instances where the public has established ocean
1615 access-ways through private lands by prescription, prescriptive easement or other legal
1616 means. The developer may improve, consolidate, or relocate such public access
1617 provided it is consistent with this Plan.
1618

1619 **Policy 11.9**
1620 Brevard County shall investigate the feasibility of acquiring narrow strips of land
1621 along the Indian River Lagoon, where such areas could provide visual access or
1622 provide parking for passive recreation within the Lagoon.
1623

1624 **Port Canaveral**

1625 **Objective 12**
1626 Brevard County will continue to identify provisions of the Port Master Plan which it
1627 considers inconsistent with the Coastal Management Element of the County
1628 Comprehensive Plan and will continue to offer to coordinate with Port Canaveral in
1629 resolving any inconsistencies. Brevard County shall continue to request copies of
1630 proposed plan amendments submitted for transmittal to the Department of Economic
1631 Opportunity Community Affairs and shall continue to review and comment on such
1632

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1635 amendments to the Port Master Plan consistent with the County's procedure for
1636 reviewing plans of other jurisdictions and Chapter 163.3177 (6) (g).

1637

1638 **Policy 12.1**

1639 Brevard County shall continue to cooperate with the Port Canaveral Authority
1640 and the Florida Inland Navigation District in the identification of suitable spoil disposal
1641 sites within unincorporated Brevard County.

1642

1643

1644 **Recreational and Commercial Working Waterfronts**

1645 In 2005 and 2006, the Legislature recognized that there is an important state
1646 interest in facilitating boating and other recreational access to the state's navigable
1647 waters. This access is vital to recreational users and the marine industry in the state, to
1648 maintaining or enhancing the \$57 billion economic impact of tourism and the \$14 billion
1649 economic impact of boating in the state annually, and to ensuring continued access to
1650 all residents and visitors to the navigable waters of the state. The Legislature recognizes
1651 that there is an important state interest in maintaining viable water-dependent support
1652 facilities, such as public lodging establishments, boat hauling and repairing and
1653 commercial fishing facilities, and in maintaining the availability of public access to the
1654 navigable waters of the state. The Legislature further recognizes that the waterways of
1655 the state are important for engaging in commerce and the transportation of goods
1656 and people upon such waterways and that such commerce and transportation is not
1657 feasible unless there is access to and from the navigable waters of the state through
1658 recreational and commercial working waterfronts.

1659

1660 The purpose of the Brevard County Working Waterfront Objective is to implement the
1661 relevant and mandated provisions of Chapter 2005-157, and Chapter 2006-220 of the
1662 Laws of Florida. The Legislature requires that local governments, through their
1663 comprehensive plans, address development activities that diminish access to the
1664 state's navigable waters. The recreation and open space element of all local
1665 comprehensive plans now must include waterways. (F.S. § 163.3177(6)(e)) In addition,
1666 all coastal counties and municipalities in Florida now have a legislatively-mandated
1667 duty to include, in the coastal management element of their Comprehensive Plan,
1668 strategies that will be used to preserve recreational and working waterfronts. (F. S. §
1669 163.3178(2)(g)) Further, coastal counties must amend the future land use element of
1670 their comprehensive plan to create "regulatory incentives and criteria" that encourage
1671 the preservation of recreational and commercial working waterfronts. More
1672 specifically, the purpose is to protect and promote Brevard County as a recreational
1673 and commercial working waterfront community; protect and improve public access to
1674 the shorelines and waters of Brevard County; preserve and protect the cultural heritage
1675 and physical character of the area as a working waterfront community; and enhance
1676 the aesthetic character of the area by directing development in a manner that
1677 maintains the working waterfront identity of the County.

1678

COASTAL MANAGEMENT ELEMENT

November 2017 August 2014 December 2016

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1679 **Objective 13**

1680 To establish a comprehensive program to promote and protect public access to the
1681 marine and coastal waters of the County, and to ensure the economic viability of
1682 recreational and commercial working waterfronts.

1683

1684 **Policy 13.1**

1685 The County shall identify, inventory and characterize all existing publicly-
1686 accessible recreational and commercial working waterfronts in Brevard County on a
1687 parcel-by-parcel basis, including but not limited to parking facilities for beach and
1688 shoreline access, coastal roads, facilities providing scenic overlooks, public lodging
1689 establishments, docks, wharfs, lifts, wet and dry marinas, boat ramps, boat hauling and
1690 repair facilities, commercial fishing facilities, boat construction facilities, and other
1691 support structures over the water and shall continue to maintain this inventory.

1692 **Policy 13.2**

1693 The County shall identify, inventory and characterize all private facilities that
1694 would otherwise qualify as recreational or commercial working waterfronts because
1695 they provide access to the marine and coastal waters of the County and shall continue
1696 to maintain this inventory.

1697

1698 **Policy 13.3**

1699 ~~By 2013, the~~ County ~~shall~~ should identify, inventory and characterize all parcels
1700 suitable for future development as publicly-accessible recreational and commercial
1701 working waterfronts in Brevard County. Suitable for future development includes vacant
1702 parcels, ~~and~~ developed parcels not currently being used for water dependent
1703 activities, recurrent flooded parcels, which, because of their proximity, biophysical
1704 nature or other factors, could become recreational and commercial working
1705 waterfronts through a change in land use. This program will be coordinated with Green
1706 and Nature-based infrastructure and environmental hazard resiliency improvement
1707 programming.

1708 **Policy 13.4**

1709 ~~By 2013, the~~ County ~~shall~~ should identify, inventory and characterize existing
1710 right-of-ways, easements and other public property interests adjacent to or capable of
1711 providing public access or enhancing public access to the shorelines and waters of
1712 Brevard County. This program will be coordinated with Green and Nature-based
1713 infrastructure and environmental hazard resiliency improvement programming.

1714

1715 **Policy 13.5**

1716 ~~By 2013, based on data and analysis, the~~ County ~~shall~~ should assess the future
1717 demand for public water access to the shorelines and waters of Brevard and shall
1718 establish activity-based levels of service standards for public water access. This program
1719 will be coordinated with Green and Nature-based infrastructure and environmental
1720 hazard resiliency improvement programming.

1721

1722 **Policy 13.6**

1723 The Brevard Marine Advisory Council shall continue to review and make
1724 recommendations to the Board concerning recreational and commercial working
1725 waterfronts in Brevard County.

1726 **Policy 13.7**

1727 ~~By 2012, the~~ County shall continue to develop strategies to ensure continued
1728 public access to navigable waters through the identification and implementation of
1729 regulatory incentives and criteria. This program will be coordinated with Green and
1730 Nature-based infrastructure and environmental hazard resiliency improvement
1731 programming.

1732 **Policy 13.8**

1733 The County shall prioritize recreational and commercial working waterfronts in
1734 existing or new land acquisition programs to purchase suitable parcels or the non-water
1735 dependent development rights to suitable parcels as determined by the inventory
1736 created under the Coastal Management Element of the comprehensive plan. Current
1737 funding strategies can include tourist taxes, or boating improvement funds to develop
1738 public launching facilities, green and / or nature-based infrastructure improvements,
1739 and related amenities.

1740 **Criteria:**

- 1741 A. Funding may come from fees, bonds, community redevelopment district
1742 financing, or other sources as approved by Board, and may be
1743 supplemented through revenue sharing with appropriate state and
1744 federal programs.
1745
1746 B. The County's share of revenue collected from boating registration fees
1747 shall be spent on boating infrastructure projects pursuant to Chapter
1748 328.72(15), F.S.
1749

1750 **Policy 13.9**

1751 The County shall not vacate, diminish, or otherwise impair publicly-owned
1752 pathways, sidewalks, roads, parking areas, docks or boat launching facilities, and
1753 other access points that are currently used, or susceptible to use, by the public to
1754 access the shorelines unless specific findings are made demonstrating that the action
1755 is necessary and suitable mitigation measures are or will be in place and only after a
1756 public hearing and decision by a super majority of the Board of Commissioners.
1757 (currently in Board Policy)

1758 **Policy 13.10**

1759 ~~By 2012, the~~ County shall continue to inventory the waters of Brevard County to
1760 determine appropriate sites for one or more managed anchorages and/or mooring
1761 fields that shall be available to the boating public on a first come, first served basis. If
1762 one or more suitable sites are found, the County may establish a publically accessible-

1763 managed anchorage and mooring field(s), taking into account environmental
1764 protection requirements and the concerns of shore side residents.

1765 **Policy 13.11**

1766 ~~By 2013, the~~ County ~~shall should~~ develop incentives for encouraging private
1767 waterfront property owners to make their properties available for public use for
1768 purposes that are consistent with the uses permitted in recreational and commercial
1769 working waterfronts.

1770 **APPENDIX A**

1771
1772 **LIST OF MAPS**

1773	Map	Title
1774		
1775	1	Marine Facilities
1776		
1777	2	Evacuation Routes & Shelters
1778		
1779	3	Coastal High Hazard Areas
1780		TO BE UPDATED WITH CHHA MAPS FROM EAST CENTRAL FLORIDA REGIONAL
1781		PLANNING COUNCIL VULNERABILITY ANALYSIS (2021)
1782		
1783		
1784		

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Comprehensive Plan

EAR Amendments 2017

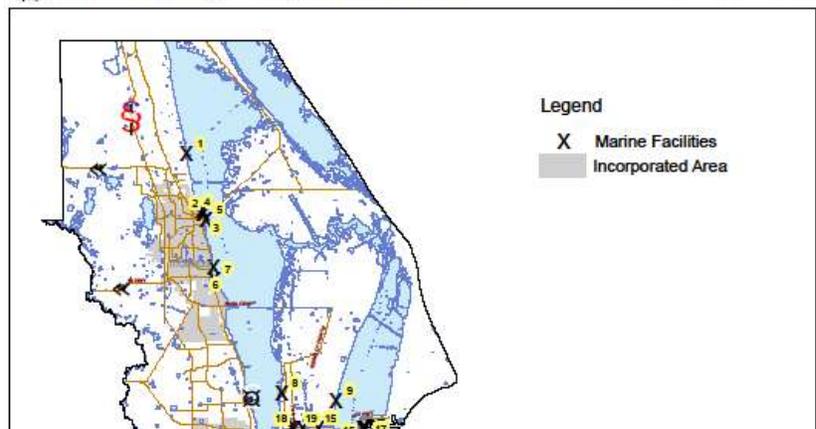


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Brevard County - Comprehensive Plan

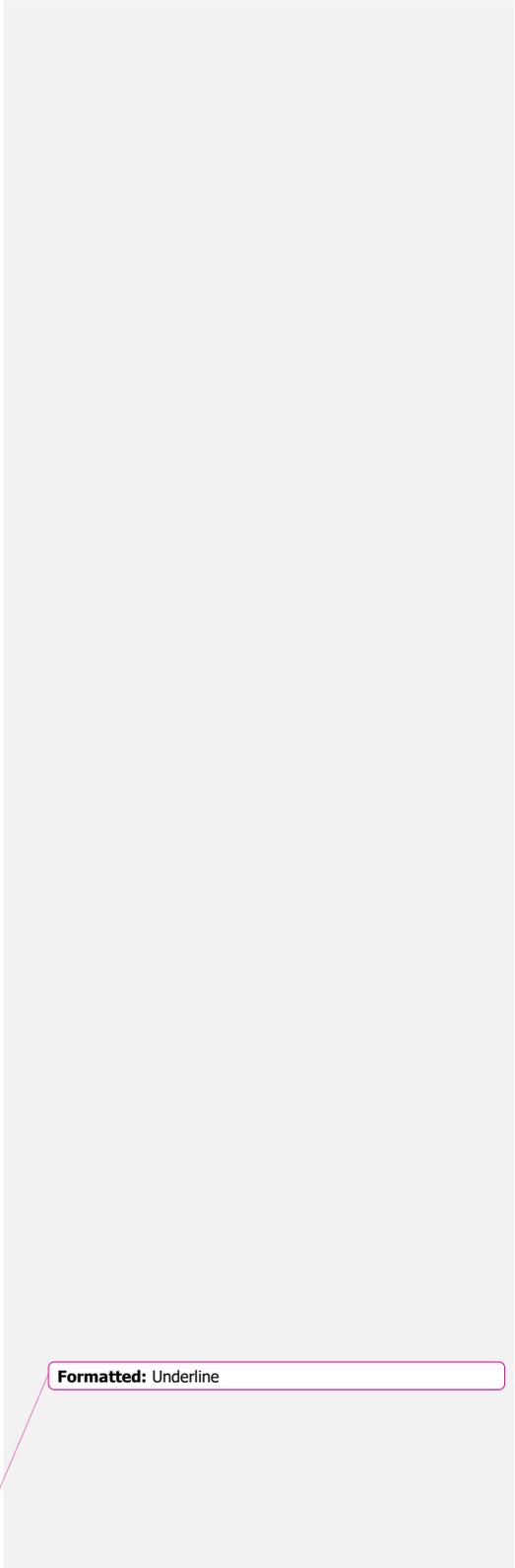
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**Map 1
Marine Facilities**



COASTAL MANAGEMENT ELEMENT

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Map 1 Legend
(Webpage Note: Reverse Side of Map – Enlarged for Display Online)

MAP REF #	STREET	CITY	WATERBODY
1	2000 Jones Av.	Mims	Indian River
2	801 Marina Road	Titusville	Indian River
3	451 Marina Road	Titusville	Indian River
4	419 N. Washington Ave.	Titusville	Indian River
5	41 N. Broad Street	Titusville	Indian River
6	S. Washington Ave. North of SR 50	Titusville	Indian River
7	4749 S. Washington Ave.	Titusville	Indian River
8	River Moorings Drive	N. Merritt Island	Indian River
9	1300 E. Hall Rd.	Merritt Island	Banana River
10	505 Glen Cheek Dr.	Port Canaveral	Port Canaveral
11	520 Glen Cheek Drive	Port Canaveral	Port Canaveral
12	628 Glen Cheek Drive	Port Canaveral	Port Canaveral
13	960 Mullet Road	Port Canaveral	Port Canaveral
14	350 SeaRay Dr.	Merritt Island	Barge Canal
15	2700 Harbortown Drive	Merritt Island	Barge Canal
16	800 Scallop Dr.	Port Canaveral	Port Canaveral
17	910 Mullet Road	Port Canaveral	Port Canaveral
18	290 Marine Harbor Drive	Merritt Island	Barge Canal
19	2750 Tingley Drive	Merritt Island	Barge Canal
20	6701 N. Atlantic Ave.	Cape Canaveral	Banana River

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21	6815 N. Atlantic Ave.	Cape Canaveral	Banana River
22	Winar Drive	Merritt Island	Sykes Creek
23	20 Myrtice Ave.	Merritt Island	Indian River
24	14 Myrtice Ave.	Merritt Island	Indian River
25	<u>P.O. Box 1886</u>	Cocoa	Indian River
26	12 Marina Isles Blvd.	Indian Harbor Beach	Banana River
27	96 Willard St. Unit 101	Cocoa	Indian River
28	410 E. Cocoa Beach Cswy.	Cocoa Beach	Banana River
29	1872 E. 520 Cswy.	Merritt Island	Banana River
30	1872 E. 520 Cswy.	Merritt Island	Banana River
31	96 Willard St. Unit 101	Cocoa	Indian River
32	480 Cocoa Beach Cswy.	Cocoa Beach	Banana River
33	100-104 Riverside Dr.	Rockledge	Indian River
34	582 S. Banana River Dr	Merritt Island	Banana River
35	1025 Riveredge Drive	Rockledge	Indian River
36	200 S. Banana River Drive	Merritt Island	Banana River
37	1360 S. Banana River Dr.	Merritt Island	Banana River
38	1825 Minuteman Cswy.	Cocoa Beach	Banana River
39	1611 Minuteman Cswy.	Cocoa Beach	Banana River
40	1525 Minuteman Cswy.	Cocoa Beach	Banana River
41	2705 S. Tropical Trail	Merritt Island	Indian River
42	760 S. Brevard Ave.	Cocoa Beach	Banana River
43	2290 S. Hwy A1A	Cocoa	Banana

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		Beach	River
44	3360 S. Atlantic Ave.	Cocoa Beach	Banana River
45	5695 U.S. Highway 1	Viera	Indian River
46	199 Utopia Circle	Merritt Island	Indian River
47	1629 Atlas Ave.	PAFB	Banana River
48	Tequesta Harbor	Merritt Island	Indian River
49	6155 N. U.S. Hwy 1	Melbourne	Indian River
50	6175 N. Harbor City Blvd.	Melbourne	Indian River
51	5435 N. U.S. Highway 1	Melbourne	Indian River
52	4399 N. Harbor City Blvd.	Melbourne	Indian River
53	876 Marina Road	PAFB	Banana River
54	10 Palmer Road	Indian Harbor Beach	Banana River
55	1399 Banana River Drive	Indian Harbor Beach	Banana River
56	100 Datura Drive	Indian Harbor Beach	Banana River
57	96 E. Eau Gallie Cswy.	Melbourne	Indian River
58	587 Young Street	Melbourne	Eau Gallie River
59	1135 U.S. Highway 1	Melbourne	Eau Gallie River
60	911 N. Harbor City Blvd.	Melbourne	Eau Gallie River
61	729 N. Harbor City Blvd.	Melbourne	Indian River
62	705 S. Harbor City Blvd.	Melbourne	Indian River
63	2210 S. Front Street.	Melbourne	Crane Creek
64	1202 E. River Drive	Melbourne	Crane Creek
65	1208 E. River Drive	Melbourne	Crane Creek

COASTAL MANAGEMENT ELEMENT

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66	1308 E. River Drive	Melbourne	Crane Creek
67	Riverside Drive	Melbourne Beach	Indian River
68	160 Versailles Drive	South Beaches	Indian River
69	Landings Road off A1A	South Beaches	Indian River
70	Solway Drive off A1A	South Beaches	Indian River
71	Ocean Way off A1A	South Beaches	Indian River
72	4220 Dixie Hwy NE	Palm Bay	Turkey Creek
73	4350 Dixie Hwy NE	Palm Bay	Indian River
74	5001 Dixie Hwy NE	Palm Bay	Indian River
75	3800 U.S. Highway 1	Valkaria	Indian River
76	750 Mullet Creek Rd.	South Beaches	Indian River
77	240 Hammock Shore Dr.	South Beaches	Mullet Creek
78	4660 U.S. Highway 1	Grant	Indian River
79	5185 U.S. Highway 1	Grant	Indian River
80	6075 U.S. Highway 1	Grant	Indian River
81	8525 U.S. Highway 1	Micco	Indian River
82	9502 S. A1A	South Beaches	Indian River
83	8685 N. U.S. Highway 1	Micco	Indian River
84	4015 Main Street	Micco	Sebastian River
85	6485 S. U.S. Highway 1	Rockledge	Indian River
86	6533 S. U.S. Highway 1	Melbourne	Indian River
87	4263 N. U.S. Highway 1	Melbourne	Indian River
88	2459 Pineapple Ave.	Melbourne	Indian

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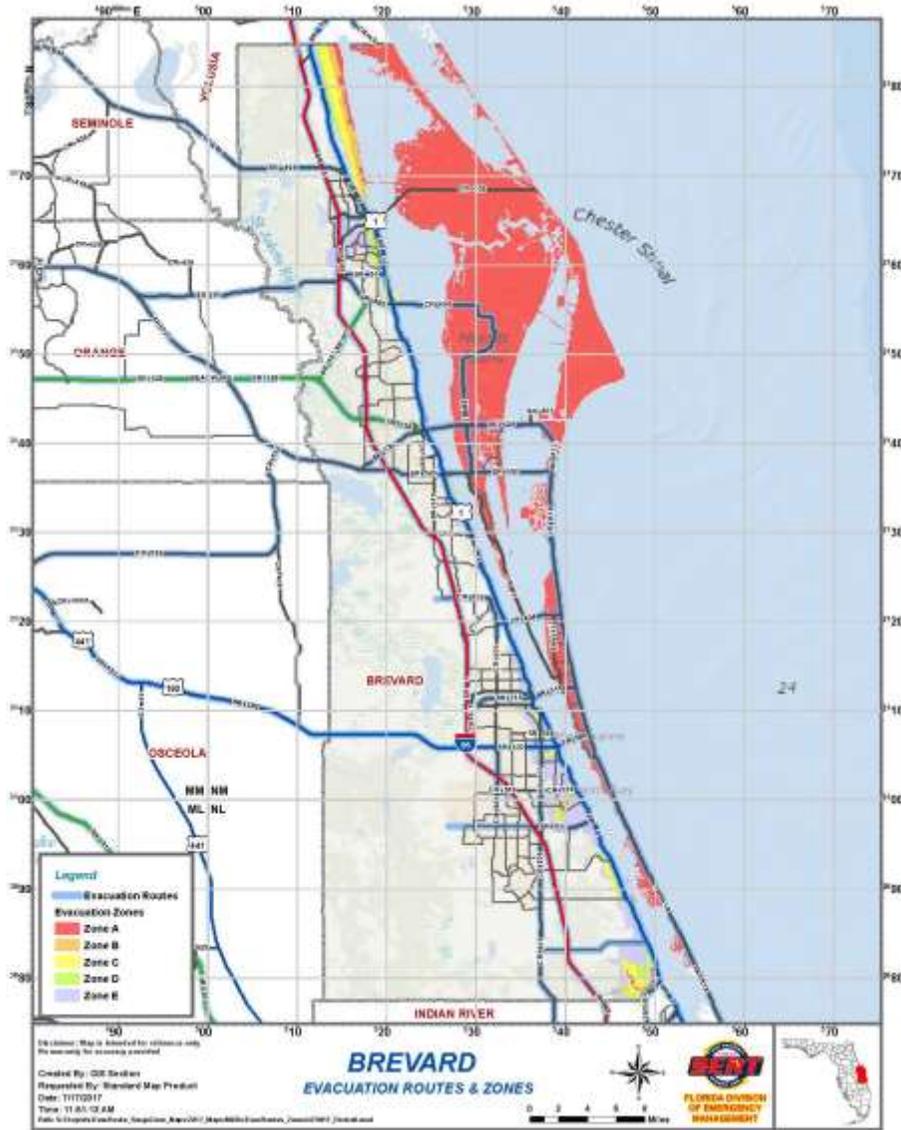
			River
89	1477 Pineapple Ave.	Melbourne	Indian River

COASTAL MANAGEMENT ELEMENT

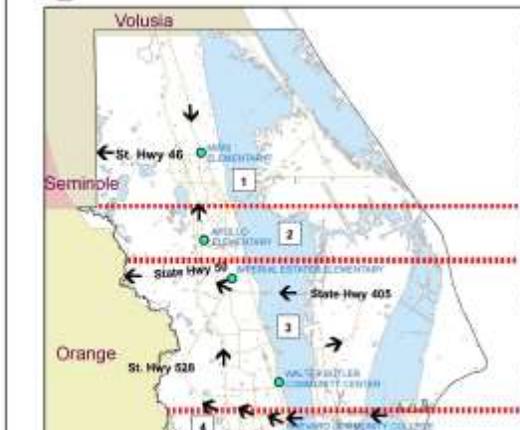
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Brevard County - Comprehensive Plan



This map displays general County information and was compiled from recorded documents. It is not suitable for site-specific uses. The Brevard County Board of Commissioners does not assume responsibility for errors or omissions thereof.

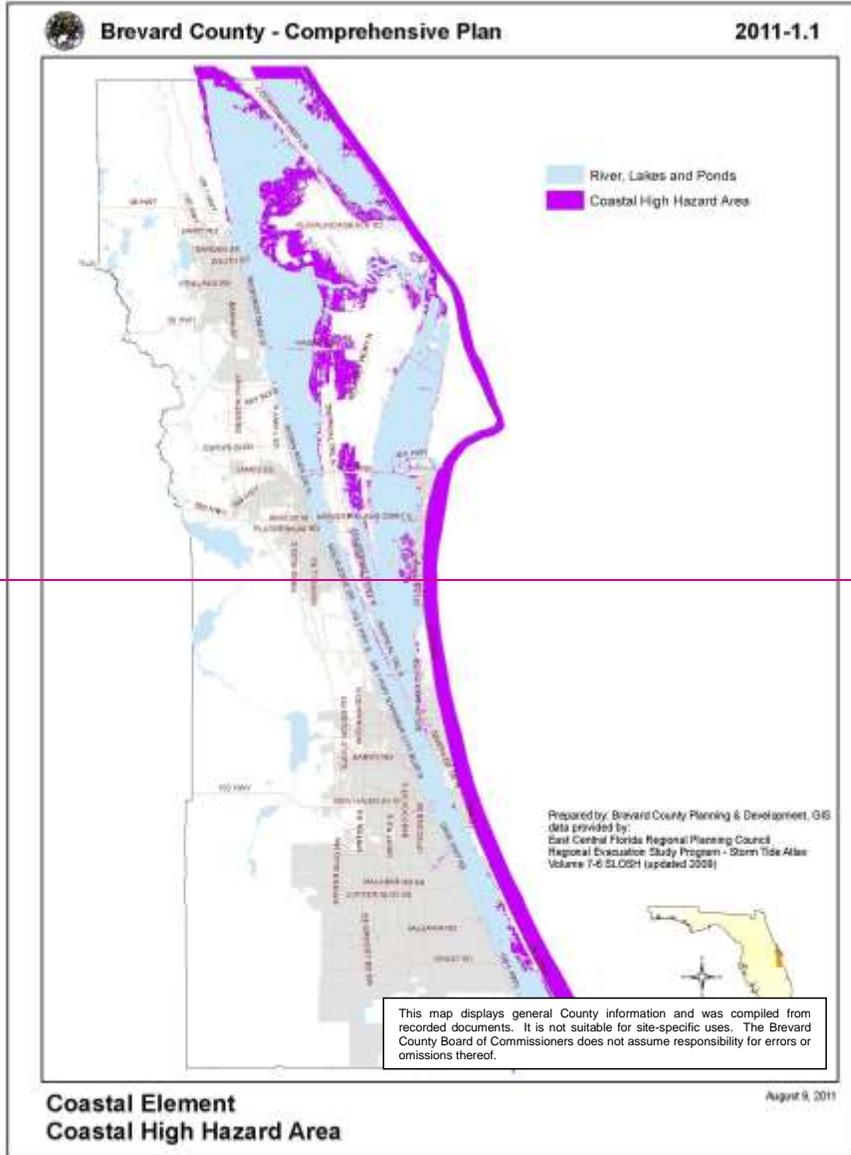
Evacuation and Shelter Routes

- 1 Residents north of Garden St. to north County line, evacuate west on State Rd. #46 or shelter at Mills Elementary School.
- 2 Residents from Garden St. to State Rd. #50 evacuate to I-95 or west on State Rd. #50, or shelter at Apollo Elementary School.
- 3 Residents of North Merritt Island, Port St. John & South Titusville, evacuate west on State Rd. #405 to State Rd. #50 or shelter at Imperial Estates Elementary School on Kathy Dr. off of Season Road.
- 4 Merritt Island, the beachside & mainland residents north of State Rd. #520 evacuate west on State Rd. #528 (Beekins) or shelter at Brevard Community College, Coosa or Walter Butler Community Center, Coosa on US Hwy 1.
- 5 Residents north of Patrick AFB and Mason Lane on Merritt Island, evacuate west on State Rd. # 520 or shelter at Manatee Elementary School, Mainland residents south of State Rd # 520 use Barnes Blvd, Egner Blvd, or Fluke Blvd. Evacuate to I-95 or shelter at Manatee Elementary School.
- 6 Residents south of Patrick AFB to north limits of Indian Harbour Beach & south of Mason Lane on Merritt Island, evacuate west on Pinoda Cay to Wickham Road north to I-95 or shelter at SCC Melbourne vicinity Wickham and Post Rd. Mainland residents north of Avaroe Rd. to

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Map 2
Evacuation Routes and Shelters



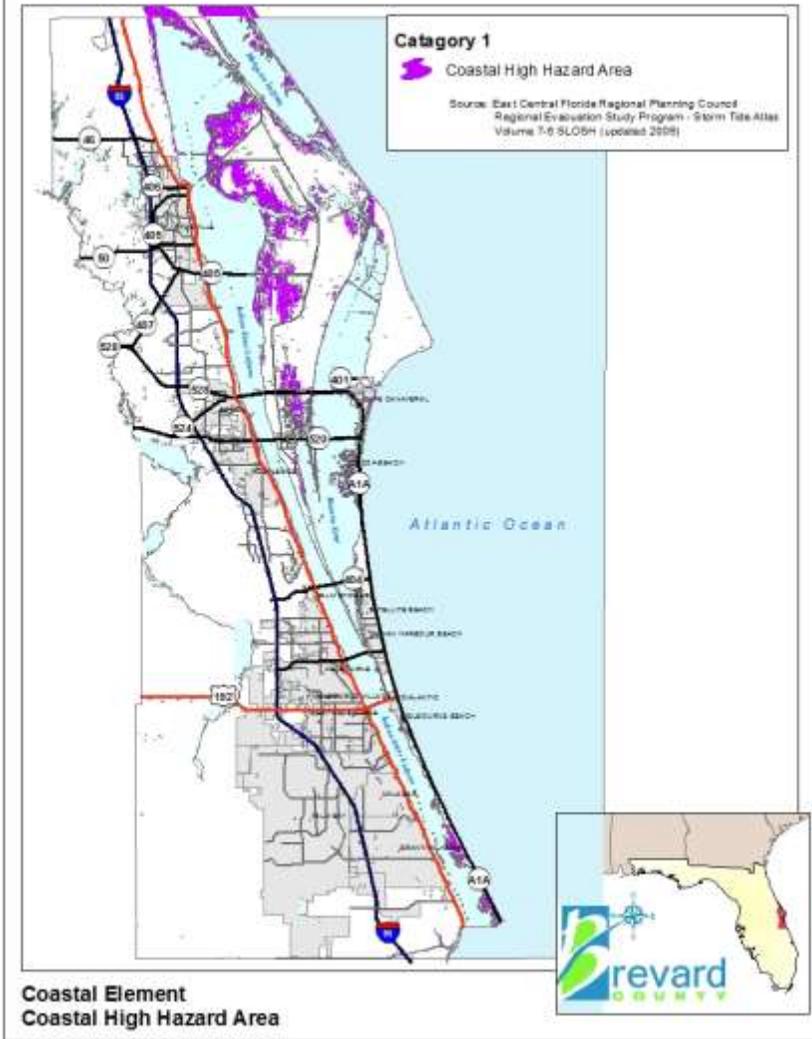
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Anne has map

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COASTAL MANAGEMENT ELEMENT

November 2017 August 2014 December 2016



1802
1803
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Map 3
Coastal High Hazard Area

COASTAL MANAGEMENT ELEMENT

November 2017 August 2014 December 2016

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1805
1806 **APPENDIX-B**
1807

1808 **LIST OF FIGURES**
1809

Figure Page	Title	
1	Diagram Reflecting the Spatial Relationship between the FDEP 1981 Coastal Construction Control Line (CCCL), the Brevard County Coastal Construction Line (CCL) and the Brevard County Coastal Setback Line (CSL)	6

1818
1819 **MANATEE HABITAT FEATURE MAP SERIES AND UPDATE SCHEDULE**
1820

1821 **MAPS:**

- 1822 1. **Submerged Aquatic Vegetation (SAV)** - 1994 coverage supplied with the draft MPP.

1823 Source:

1824 St. Johns River Water Management District
1825 (904) 329-4500

1826 Update Schedule: As available
1827

- 1828 2. **Manatee Abundance (Aerial Surveys)** - September 1997-September 1999 map
1829 supplied with the draft MPP.

1830 Source:

1831 Florida Fish and Wildlife Conservation Commission
1832 Bureau of Protected Species Management
1833 (904) 922-4330

1834 Update Schedule: As available
1835

- 1836 3. **Manatee Mortality** - Watercraft-related or Total Manatee Mortality (all causes) from
1837 1974-2001 supplied with the draft MPP.

1838 Source:

1839 Florida Fish and Wildlife Conservation Commission
1840 Bureau of Protected Species Management
1841 (904) 922-4330

1842 Update Schedule: As available
1843

- 1844 4. **Manatee Protection Boat Speed Zones** - October 2000 as provided with the draft
1845 MPP, or more recent data.

COASTAL MANAGEMENT ELEMENT

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1846 Source:
1847 Florida Fish and Wildlife Conservation Commission
1848 Bureau of Protected Species Management
1849 (904) 922-4330

1850 Update Schedule: As needed

1851
1852 5. **Manatee Freshwater Sources Map** - March 1994 as provided with the MPP.

1853 Source:
1854 Brevard County
1855 Natural Resources Management **Department Office**
1856 (321) 633-2016
1857 Update Schedule: As available
1858

1859 6. **Class II Waterbody, Outstanding Florida Waterway (OFW), or Aquatic Preserve** - 2001
1860 as provided in the MPP.

1861 Source:
1862 Florida Department of Environmental Protection
1863 Division of Surface Water Quality
1864 (850) 245-8427
1865 Update Schedule: As available
1866
1867
1868
1869
1870