



## **City of Starbase, Texas**

### **Dune Protection and Beach Access Plan**

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# 1 LEGAL AUTHORITY AND INTENT

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The City of Starbase, Texas (**City**) establishes this Dune Protection and Beach Access Plan (**Plan**) under the Texas Open Beaches Act (Tex. Nat. Res. Code Ch. 61) and Dune Protection Act (Tex. Nat. Res. Code Ch. 63), with the intent to safeguard the public's right to free and open beach access and to implement a local beachfront construction and dune protection permitting system.

Upon delegation of authority to the City by Cameron County under Tex. Nat. Res. Code Ch. 63, the City will assume jurisdiction over those parts of Boca Chica Beach and its associated dune systems that lie within the municipal limits and extraterritorial jurisdiction (**ETJ**) of the City as depicted in **Exhibit C**. This Plan is adopted by ordinance, consistent with state law, and is subject to certification by the Texas General Land Office (**GLO**) under 31 TAC §15.3.

The City's responsibilities include:

- Enforcing the Open Beaches Act and protecting public ingress and egress
- Administering a local beachfront construction certificate and dune protection permitting program in accordance with 31 TAC §§15.1–15.10
- Aligning local regulations with the Texas Coastal Management Program and relevant statutes

All regulations in this Plan are intended to:

- Maintain the integrity of the beach/dune system
- Protect public safety and private property
- Preserve public access while ensuring coastal resilience

The Plan's intent is to ensure that beach access at Boca Chica Beach remains free and open, and that dunes are protected and restored as vital natural buffers.

## **2 DEFINITIONS**

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For purposes of this Plan, the following terms have the meanings assigned below:

### **Beachfront Construction Area**

The Beachfront Construction Area (**BCA**) is the area landward of the mean high tide line and extending inland either to the first public road generally parallel to the beach or to a distance of 1,000 feet, whichever is greater.

### **Building Setback Line**

Pursuant to 31 TAC §§15.17(a)(1)–(2), the Building Setback Line (**BSL**) is coextensive with the Eroding Area Boundary defined below. The BSL/Eroding Area Boundary is shown on **Exhibit D**. To the maximum extent practicable new construction should occur landward of the BSL.

### **Dune Protection Line**

The Dune Protection Line (**DPL**) is a regulatory line to be established by the City upon delegation of authority to the City by Cameron County under Tex. Nat. Res. Code Ch. 63 and approval by the GLO, that delineates the seaward boundary of dune protection jurisdiction. No activity that may adversely affect dunes or dune vegetation is permitted seaward of this line without a dune protection permit (Tex. Nat. Res. Code §63.012; 31 TAC §15.3(b)).

### **Eroding Area Boundary**

The Eroding Area Boundary (**EAB**) shall be whichever distance landward of the Line of Vegetation is greater: 200 feet, or the distance determined by multiplying 50 years by the annual historical erosion rate (based on the most recent data published by the University of Texas at Austin, Bureau of Economic Geology). The EAB is shown on **Exhibit D**. Under 31 TAC §15.2(32), eroding areas are those areas seaward of the EAB.

### **Line of Vegetation**

The extreme seaward boundary of natural vegetation that spreads continuously inland. If there is no clearly marked Line of Vegetation, the line may be determined under Tex. Nat. Res. Code §§61.016 – 61.017.

### **Mitigation Plan**

A site-specific plan to restore or replace lost dune volume and vegetation due to permitted activity, at a minimum of a 1:1 ratio. Required for all construction that adversely affects dune systems.

### **Special Event**

Any organized activity or gathering on the public beach that includes structures, vehicles, amplified sound, or over 25 people, and which may affect access or dunes. Requires a Special Event Permit from the City.

### 3 PLAN SCOPE

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This Plan governs those sections of Boca Chica Beach within the municipal limits and ETJ of the City.

All provisions are consistent with, or stricter than, state requirements. In case of any conflict, state law and 31 TAC §15 prevail.

The Plan will be reviewed:

- At least once every five (5) years, and
- Within 90 days of any major storm event that affects the beach

Amendments to this Plan must be adopted by ordinance and certified by the GLO per 31 TAC §15.3(o) through the rulemaking process, including publication in the Texas Register and a 30-day public comment period.

### 4 PUBLIC BEACH ACCESS RIGHTS

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Boca Chica Beach is a public beach, and the City is committed to upholding the public's right to free and open access, in accordance with the Texas Open Beaches Act.

The City recognizes the long-standing public access to the beach via State Highway 4 without entrance fees. This tradition will continue under this Plan.

- Pedestrian access to Boca Chica Beach is and shall remain free of charge.
- Vehicular access to Boca Chica Beach is and shall remain free of charge.

### 5 BEACHFRONT CONSTRUCTION CERTIFICATE REQUIREMENT

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To prevent construction from interfering with public access or impairing dunes, a beachfront construction certificate is required for any activity within the Beachfront Construction Area (BCA) as the area:

- 1,000 feet landward of the mean high tide line, or
- Landward to the first public road, whichever is greater.

This applies to all of Boca Chica Beach within the municipal limits and ETJ of the City.

No construction, remodeling, or placement of structures in the BCA may begin without first obtaining a beachfront construction certificate.

All construction must comply with 31 TAC §§15.3–15.7 unless provided for explicitly in this Plan.

#### 5.1 NO CONSTRUCTION IN ERODING AREAS

To protect the integrity of the beach and dune system from the effects of chronic erosion, the City establishes an Eroding Area Boundary (EAB) under 31 TAC §15.2(32). The EAB is shown on **Exhibit D**. The EAB shall be whichever distance landward of the Line of Vegetation is greater: 200 feet, or the distance determined by multiplying 50 years by the annual historical erosion rate (based on the most recent data published by the University of Texas at Austin, Bureau of Economic Geology). Under 31 TAC §15.2(32), eroding areas are those areas seaward of the EAB.

### **5.1.1 CONSTRUCTION PROHIBITION**

No person may construct, place, or maintain any permanent structure seaward of the EAB except as provided for in this Plan. This restriction applies regardless of whether the DPL is further landward. This prohibition of construction is meant to protect the most critical areas of the dune system and support the City's Erosion Response Plan as detailed in Appendix A.

### **5.1.2 EXEMPTIONS**

The City will allow, with the necessary certificates, the construction of public amenities and access improvements seaward of the EAB.

The City may allow temporary structures seaward of the EAB if:

- They do not adversely affect dunes, vegetation, or public access; and
- They do not violate GLO rules or guidance.

The City will consider an exemption for properties for which the owner has demonstrated that no practicable alternatives to construction seaward of the EAB exist as provided for under Tex. Admin. Code § 15.17(a)(3)(A).

All exemptions must:

- Be consistent with the public interest
- Avoid harm to beach access
- Minimize environmental impacts
- comply with 31 TAC §§15.3-15.7 and §15.17(a)(4) and any additional prohibitions under this Plan.

All exempt construction must require:

- A. plans and certifications for the structure by a registered professional engineer licensed in the State of Texas providing evidence of the following:
  - i. a minimum two-foot freeboard above base flood elevation (BFE);
  - ii. no enclosures below BFE;
  - iii. the adequacy of elevated building foundations and the proper placement, compaction, and protection of fill when used as construction for all newly constructed, substantially damaged, and substantially improved buildings elevated on pilings, posts, piers, or columns in accordance with the latest edition of specifications outlined in American Society of Civil Engineers, Structural Engineering Institute, Flood Resistant Design and Construction, ASCE 24-05;
  - iv. feasible relocation of any habitable structure; and
  - v. all construction is designed to minimize impacts on natural hydrology;
- B. location of all construction should be landward of the landward toe of the foredune ridge, where practicable.

This provision shall be reviewed as part of the City's required five-year plan review or after any major erosion event.

## **5.2 IMPERVIOUS FOUNDATIONS LANDWARD OF THE EAB**

In addition to the uses already permitted under 31 TAC §§15.3–15.7, the use of impervious foundations (e.g., slab-on-grade or perimeter-grade footings) is permissible landward of the EAB. Impervious surfaces will be allowed beneath and immediately adjacent to commercial and industrial facilities to the extent required for support or function of the facility, subject to the following conditions:

### **5.2.1 ELIGIBILITY AND CONDITIONS**

- The foundation must be entirely landward of the EAB
- The proposed construction must include engineered drainage controls to prevent concentrated runoff toward the beach or dune system
- The project must undergo GLO consistency review as part of the City’s permit process

### **5.2.2 NOT PERMITTED**

No impervious foundation shall be permitted:

- Seaward of the EAB, or
- Where it would cause ponding, channeling, or dune destabilization; or
- Where it would materially weaken dunes or materially damage dune vegetation

## **6 DUNE PROTECTION REGULATIONS**

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### **6.1 DUNE PROTECTION LINE**

Upon delegation of authority to the City by Cameron County and approval by the GLO, the City will establish a Dune Protection Line (**DPL**) across Boca Chica Beach within the municipal limits and ETJ of the City pursuant to Texas Natural Resources Code §63.012. This line:

- Runs parallel to the Gulf shoreline, approximately 1,000 feet landward of the mean high tide line
- Marks the seaward boundary of enhanced regulatory protections

The DPL is a dynamic line, subject to change based on natural beach movement. The City shall:

- Review the DPL at least every five years, and
- Within 90 days after any major storm impacting Boca Chica Beach

The DPL may be adjusted by City Commission ordinance, with GLO approval, to ensure continued protection of critical dunes.

### **6.2 PROTECTED DUNE AREA**

The area seaward of the DPL, including all natural or restored dunes, is designated as environmentally protected.

Prohibited activities without a permit include:

- Disturbing dune vegetation
- Grading or removing sand



- Driving or parking on dunes
- Building structures on dunes

The City shall:

- Post clear signage prohibiting dune entry
- Install physical barriers to prevent trespass
- Enforce violations under this Plan and applicable state laws

### **6.3 DUNE PROTECTION PERMIT REQUIREMENT**

Any activity that may adversely affect dunes or dune vegetation within the protected area requires a dune protection permit.

This includes:

- Construction
- Sand movement
- Access improvements
- Vehicular operations

Any proposed adverse impacts to dunes or dune vegetation must comply with the mitigation sequence in 31 TAC §15.4(f).

Permit violations may result in daily penalties and required remediation. The City will enforce penalties under the Texas Natural Resources Code and 31 TAC §15.

## 7 COMBINED PERMIT PROCEDURE

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Applicants must submit:

- Dune Permit Checklist (**Exhibit A**)
- Combined Application Form (**Exhibit B**)
- Site plans, impact assessments, and mitigation plan as applicable

Mitigation is required at a 1:1 ratio, including:

- Replacement of disturbed dune volume
- Re-vegetation with native species

All mitigation must be:

- Located seaward of the DPL, and
- Completed as soon as practicable after the activity in accordance with 31 TAC §15.4(g)

The City Commission shall:

1. Coordinate with the GLO for consistency review in accordance with 31 TAC §§15.3(s)(7)-(8) and §15.4(d)
2. Order a site inspection
3. Hold a public meeting to approve or deny the application
4. Impose conditions on permit approval as needed

Under 31 Tex. Admin. Code § 15.3(s)(8), when determining whether to approve a proposed activity, the City Commission shall review and consider:

1. the permit or certificate application;
2. the proposed activity's consistency with 31 Tex. Admin. Code § 15 and this Plan, including the dune protection and beachfront construction standards contained in both;
3. any other law relevant to dune protection and public beach use and access which affects the activity under review;
4. the comments of the GLO; and
5. any other information the City may consider useful to determine consistency with this Plan, including resource information made available by federal and state natural resource entities and landowners immediately adjacent to the proposed activity.

The City shall not issue a dune protection permit or beachfront construction certificate that is inconsistent with this Plan, 31 Tex. Admin. Code § 15, and other state, local, and federal laws related to the requirements of the Dune Protection Act and Open Beaches Act.

Further, when determining whether to issue a dune protection permit the City shall consider the following items and information:

1. all comments submitted to the local government by the GLO;
2. cumulative impacts and indirect effects of the proposed construction on all dunes and dune vegetation within critical dune areas or seaward of the DPL;
3. cumulative impacts and indirect effects of other activities on dunes and dune vegetation located on the proposed construction site;
4. the pre-construction type, height, width, slope, volume, and continuity of the dunes, the pre-construction condition of the dunes, the type of dune vegetation, and percent of vegetative cover on the site;
5. the most recent historical erosion rate as determined by the University of Texas at Austin, Bureau of Economic Geology, and whether the proposed construction may alter dunes and dune vegetation in a manner that may aggravate erosion;
6. the applicant's mitigation plan for any unavoidable adverse effects on dunes and dune vegetation and the effectiveness, feasibility, and desirability of any proposed dune reconstruction and revegetation;
7. the impacts on the natural drainage patterns of the site and adjacent property;
8. any significant environmental features of the potentially affected dunes and dune vegetation such as their value and function as floral or faunal habitat or any other benefits the dunes and dune vegetation provide to other natural resources;
9. wind and storm patterns including a history of washover patterns;
10. location of the site on the flood insurance rate map; and
11. success rates of dune stabilization projects in the area.

The City may only approve a permit application if it finds that the activity will not materially weaken dunes or dune vegetation or reduce the effectiveness of any dune as a means of protection in accordance with 31 TAC §15.4(d).

If approved, the permit or certificate may include conditions. If denied, the applicant may revise and resubmit.

Applicants must also obtain any required local, state or federal permits, including from the U.S. Army Corps of Engineers if applicable.

Appeals of City Commission permitting decisions shall follow the procedures established by City ordinance, consistent with due process.

## **8 SPECIAL EVENT PERMITS ON THE BEACH**

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The City will require a permit for any special event held on Boca Chica Beach within the municipal limits and ETJ of the City. A special event is an activity that may include:

- Use of temporary structures or facilities (e.g., tents, stages)
- Placement of equipment or vehicles
- Activities that could impede public beach access or affect dune areas

### **8.1 SANITARY FACILITIES FOR SPECIAL EVENTS**

All special events held on the beach must provide temporary sanitary facilities (such as portable toilets and handwashing stations) as needed based on the expected number of participants. The number and location of these facilities must be included in the event application and approved by the City. All sanitary facilities must be removed promptly after the event and kept clean throughout the event duration. The City may require additional facilities or servicing to protect public health and avoid contamination of the beach or dunes.

### **8.2 HOW TO APPLY**

- Applications must be submitted at least 30 days before the event and must include:
- A short description of the event (what, when, how many people),
- A site plan showing where things will be set up including temporary sanitary facilities,
- A plan for trash cleanup and portable toilets,
- A fee (set by the City), and
- A refundable deposit for cleanup.

### **8.3 APPROVAL PROCESS**

The City Commission will review the application to make sure:

- Public beach access is protected,
- Dunes and vegetation are not harmed,
- The event is safe and well organized.

The City may approve the permit with conditions to reduce impacts, such as limits on vehicles, required cleanup, or special access routes. A copy of the approved permit will be sent to the GLO after issuance.

### **8.4 RULES FOR EVENTS**

Events must not block public access to the beach, dunes and dune vegetation must not be damaged, all trash must be removed, vehicles are only allowed in approved areas, and events must end on time.

### **8.5 ENFORCEMENT**

If the rules are not followed, the City may:

- End the event early,
- Keep part or all of the deposit,
- Deny future permits to the organizer.

## **9 SUSTAINABILITY, ENFORCEMENT, AND PUBLIC SAFETY BEST PRACTICES**

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### **9.1 GENERAL BEACH MAINTENANCE**

General and routine beach maintenance including beach cleanup, collection and removal of trash and mechanical beach raking shall be performed without a permit requirement.

Mechanical beach raking shall be conducted in compliance with 31 TAC §15.7(m).

### **9.2 ENVIRONMENTAL SUSTAINABILITY AND DUNE CONSERVATION**

The City will implement best practices for long-term dune and beach health, including:

- Natural Dune Growth:
  - Seaweed (wrack) will not be removed unless necessary.
  - Mechanical cleaning will avoid vegetated areas.
- Dune Restoration Projects: The City will support restoration through:
  - Native planting (e.g., sea oats)
  - Sand fencing installation
  - Seeking grants for dune nourishment post-storm
  - All such activities shall be conducted according to approved beachfront construction certificates and dune protection permits.

### **9.3 ENFORCEMENT OF BEACH AND DUNE REGULATIONS**

Key enforcement mechanisms include:

- Monitoring of vehicles:
  - Recreational vehicle use is banned on dunes per Tex. Nat. Res. Code § 63.093
  - Speed limit of 15 MPH on beach for all vehicles
  - Parking allowed only seaward of dune toe, not on dunes
- Permit Enforcement:
  - Unpermitted work will be halted with a stop-work order
  - Daily fines may apply for violations
  - Restoration of damage may be ordered at violator's expense
- Agency Coordination:
  - Permittees are responsible for obtaining any required federal permits
  - Projects will be coordinated with USACE, TPWD, and U.S. Fish and Wildlife if wildlife or wetlands are impacted

## **10 PUBLIC SAFETY MEASURES**

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### **10.1 HAZARDOUS CONDITIONS AND CLOSURES**

- Except for emergencies related to public safety or as set forth in Section 6.2 below, the City may not impair or close an existing access point, close a public beach to pedestrian or vehicular traffic, or modify public beach parking without prior approval from the GLO.
- In case of storms, hazardous surf, or other emergencies related to public safety, the City may temporarily close beach areas.
- Closures must be minimized in scope and duration.
- The GLO must be notified by the local government as soon as practicable upon the time of closure and upon the time of reopening of the beach.

### **10.2 BEACH CLOSURE PROCEDURE PURSUANT TO TEXAS SPACE COMMISSION ORDER**

In accordance with the authority granted to the Texas Space Commission under Texas Government Code § 482, and consistent with the City's responsibility to uphold the provisions of Government Code § 424, including those related to trespass, damage, or interference with designated critical infrastructure and consistent with the public's right of access under the Texas Open Beaches Act, and any access requirements related to spaceflight activities included in the April 2025 Mitigated Finding of No Significant Impact and Record of Decision for the Final Tiered Environmental Assessment, the City may temporarily close portions of the public beach or adjacent areas in accordance with a written order issued by the Texas Space Commission authorizing a temporary closure of a highway, venue, or area as defined in Natural Resources Code § 33.203(11), including areas of a beach, to protect public safety during space flight activities. If a future record of decision modifies the dates of public beach access closures, increases the duration or total number of hours of closures in excess of the 2025 decision or changes the public notice process, express written GLO approval will be required prior to implementation.

#### **10.2.1 APPROVAL BY MAYOR OR GOVERNING BODY**

The closure shall not take effect unless and until it is approved by the mayor or the governing body of the City.

#### **10.2.2 PUBLIC NOTICE**

The City shall provide notice of any such closure through its official website in accordance with the April 2025 Mitigated Finding of No Significant Impact and Record of Decision for the Final Tiered Environmental Assessment.

#### **10.2.3 COORDINATION WITH LAW ENFORCEMENT AND STATE AGENCIES**

The City shall coordinate with local law enforcement to ensure public safety, compliance with applicable statutes, and enforcement of closure boundaries. The City recognizes that such areas also qualify as critical infrastructure under Government Code § 424 and are subject to enhanced security and enforcement protocols.

#### **10.2.4 RESTORATION OF ACCESS**

The City shall take all necessary steps to restore public access to the affected area, including removal of signage or barriers and notification to the public as soon as practicable once the area is deemed safe for public use.

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## **11 PUBLIC ACCESS POLICY**

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Both pedestrian and vehicular access to Boca Chica Beach will remain free of charge to the public. No permits shall be issued that would impair the public's ability to freely access the beach.

## **12 FUTURE AMENDMENTS TO THE PLAN**

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In accordance with 31 TAC §15.3(o):

- All amendments to this Plan must be certified by the Texas General Land Office (GLO).
- Amendments follow the same process as initial certification, including:
  1. Publication of a proposed rulemaking action in the Texas Register
  2. A 30-day public comment period
  3. Final adoption after public comment response and GLO rulemaking

The City commits to:

- Holding public hearings before adoption of any amendment
- Updating the Plan at least every five years, and
- Reviewing and amending the Plan following any major storm

Through this process, the City will ensure the Plan remains current, compliant with state law, and responsive to environmental and community needs.



## **APPENDIX A: EROSION RESPONSE PLAN (ERP)**

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### **1 PURPOSE AND AUTHORITY**

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This Erosion Response Plan (ERP) is adopted as an appendix to this Plan, as required by:

- Texas Natural Resources Code §33.607(e)
- Texas Administrative Code Title 31 §15.17

The ERP provides policies and procedures to guide decision-making in response to coastal erosion threats affecting public and private development, including actions during:

- Storm recovery
- Long-term shoreline retreat
- Dune restoration needs

### **2 GEOGRAPHIC SCOPE**

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This ERP applies to the entire beachfront of Boca Chica Beach within the municipal limits and ETJ of the City. The only beach access corridor is via State Highway 4.

### **3 BUILDING SETBACK LINE**

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Pursuant to 31 TAC §15.17(a)(1), the City will establish a permanent Building Setback Line (**BSL**) that is coextensive with the EAB. The BSL/EAB is shown on Exhibit D.

Under 31 TAC §15.17(a)(2), construction of new structures is prohibited seaward of this BSL except as provided herein.

The intent of the BSL is to protect those areas of the dunes most vulnerable to erosion and shoreline retreat and most vital to safety during major storm events through the closure of the area to any development.

#### **3.1 EXEMPTIONS**

As allowed under 31 TAC §15.17(a)(3), the following are exempt from the setback prohibition:

- Redevelopment or repair of existing structures located seaward of the setback line, if consistent with GLO policy and erosion mitigation practices
- Temporary structures, dune walkovers, public amenities or public access improvements authorized by the City and reviewed by the GLO

The City will allow, with the necessary certificates, the construction of public amenities and access improvements seaward of the BSL.

The City may allow temporary structures seaward of the BSL if:

- They do not adversely affect dunes, vegetation, or public access; and
- They do not violate GLO rules or guidance.

The City will consider an exemption for properties for which the owner has demonstrated that no practicable alternatives to construction seaward of the BSL exist as provided for under Tex. Admin. Code § 15.17(a)(3)(A).

All exemptions must:

- Be consistent with the public interest
- Avoid harm to beach access
- Minimize environmental impacts
- Construction must comply with 31 TAC §§15.3-15.7 and §15.17(a)(4) and any additional prohibitions under this Plan.

All exempt construction must require:

- A. plans and certifications for the structure by a registered professional engineer licensed in the State of Texas providing evidence of the following:
  - i. a minimum two-foot freeboard above base flood elevation (BFE);
  - ii. no enclosures below BFE;
  - iii. the adequacy of elevated building foundations and the proper placement, compaction, and protection of fill when used as construction for all newly constructed, substantially damaged, and substantially improved buildings elevated on pilings, posts, piers, or columns in accordance with the latest edition of specifications outlined in American Society of Civil Engineers, Structural Engineering Institute, Flood Resistant Design and Construction, ASCE 24-05;
  - iv. feasible relocation of any habitable structure; and
  - v. all construction is designed to minimize impacts on natural hydrology;
- B. location of all construction should be landward of the landward toe of the foredune ridge, where practicable.

This provision shall be reviewed as part of the City's required five-year plan review or after any major erosion event.

## **4 EROSION RESPONSE POLICY**

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The City adopts the following principles:

- Avoid new construction in areas vulnerable to erosion
- Relocate structures threatened by erosion, if feasible
- Discourage shoreline armoring (e.g., seawalls, revetments, bulkheads) except in limited emergency circumstances, and only as authorized by the GLO
- Seek removal of structures that become located on the public beach or that impede access due to erosion

## **5 DUNE RESTORATION AND ENHANCEMENT FOR STORM PROTECTION AND CONSERVATION**

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To protect public and private property, critical infrastructure, and ecological resources, the City adopts the following procedures per 31 TAC §15.17(a)(6) for preserving, restoring, and enhancing critical sand dunes for natural storm protection and conservation purposes:

### **5.1 DESIGN SPECIFICATIONS FOR CRITICAL FRONT ROW DUNES**

Under the requirements of 31 TAC §15.17(a)(6)(A), The City establishes the following minimum target dimensions for restored or enhanced critical front row dunes along Boca Chica Beach:

- Minimum Height: Not less than 75% of the FEMA-designated Base Flood Elevation (BFE) from mean sea level, as determined by the most current Flood Insurance Rate Maps (FIRM).
- Minimum Width: At least 30 feet wide, measured perpendicular to the shoreline, unless site-specific constraints require an alternative design. While minimum dune width may vary by location, a target width of 30 feet is recommended based on regional restoration practices, unless a narrower profile is shown to provide equivalent protection based on engineering review.
- Vegetative Cover: At least 80% vegetative coverage using native dune-stabilizing species (by ground area, not number of plants) on the landward slope and crest. Site-specific conditions may warrant adjusted targets, but in no case shall vegetative cover fall below 70% within the first growing season post-planting unless otherwise authorized by the City in consultation with the GLO.
- These standards apply to new restoration areas and serve as guidance for mitigation and enhancement projects approved by the City.

### **5.2 IDENTIFICATION OF DUNE GAPS AND BLOWOUTS**

The City, in coordination with the General Land Office and relevant environmental partners, shall identify and map the following priority dune restoration sites along Boca Chica Beach:

- Areas with visible breaches or blowouts in the foredune ridge
- Gaps in the foredune ridge that compromise dune continuity or reduce storm surge resistance
- Dune areas adjacent to beach access points where erosion is accelerated by foot or vehicle traffic
- The City shall maintain and update this list during ERP reviews and post-storm assessments.

### **5.3 DUNE REVEGETATION PROJECTS AND SPECIES SELECTION**

The City will implement and promote revegetation projects using only native, site-adapted species suited for dune stabilization. Approved species include:

- Marshhay cordgrass (*Spartina patens*)
- Bitter panicum (*Panicum amarum*)
- Sea oats (*Uniola paniculata*)

- Beach morning glory (*Ipomea pes-caprae*; *Ipomea imperati*)
- Sea purslane (*Sesuvium portulacastrum*)
- Seashore dropseed (*Sporobolus virginicus*)
- Seashore Paspalum (*Paspalum vaginatum*)

Revegetation shall follow best practices for spacing, seasonal timing, and watering (if necessary), and be coordinated with dune mitigation required through the City's permitting program.

#### **5.4 ENHANCED DUNE PROTECTION MEASURES**

The City has established a no build policy seaward of the EAB and BSL in an express effort to protect the foredune complex.

#### **5.5 IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS**

To meet the requirements of subsections 5.1 through 5.4, the City adopts the following goals:

- Goal 1: Identify and Prioritize Gaps in the Foredune Ridge
  - Complete a visual survey and prepare a map and memo identifying gaps or blowouts in the front row dune system and create a restoration plan for gap sites.
- Goal 2: Launch Pilot Revegetation Project
  - Plan a small-scale dune planting effort, using volunteers, City staff, or external partners.
- Goal 3: Build Support and Seek Funding
  - Identify at least one potential grant opportunity for dune restoration by end of 2026 and prepare a basic letter of interest or application with assistance from the GLO or a partner organization.

These goals provide a clear and achievable foundation for gradually expanding dune protection efforts as the capacity, data, and resources grow for a newly created community.

#### **5.6 FUNDING SOURCES AND GRANT STRATEGY**

The City will pursue funding for dune restoration and enhancement from, among others, the following sources:

- Texas Coastal Erosion Planning and Response Act (CEPRA) Program
- NOAA Coastal Resilience Grants
- Texas Coastal Management Program Grants

### **6 POST-STORM RESPONSE PROTOCOL**

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After major storms or hurricanes, the City will:

- Conduct damage assessments with partner agencies
- Identify structures at risk due to erosion
- Require relocation or removal of structures on the public beach
- Prioritize natural dune restoration

## EXHIBIT A – DUNE PERMIT CHECKLIST

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GLO construction certificate and dune protection permit requirements

This checklist helps applicants and City reviewers ensure that each beachfront construction certificate & dune protection permit application is complete before submission. It follows the requirements in 31 TAC §§15.3–15.7 and GLO’s permit guidance.

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### Applicant Information

- Name
- Address
- Phone number
- Fax (if applicable)

### Property Information

- Name of property owner
  - Complete legal description of tract
  - Situs address (if available)
- 

### Site Information

- % of existing open space on tract
  - Dated photographs of:
    - Vegetation line
    - Existing dunes (with views N, S, E, W)
  - FEMA elevation requirements
  - Most recent BEG erosion rate data
  - Activity’s expected impact on erosion
- 

### Proposed Project

- Duration of construction
- % of proposed open space
- Number and type of structures
- Parking spaces
- Description and location of walkways or dune walkovers, and design plans and elevation views for any proposed walkways or walkovers
- Floor plan and elevation view
- Description and location of:
  - Impervious surfaces
  - Pervious surfaces
- Statement affirming:
  - No adverse effect on public beach
  - Compliance with beach access laws
- Proof of financial assurance (if in eroding areas)

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#### Dune Mitigation (if applicable)

- Comprehensive mitigation plan, including:
    - Methods to avoid/minimize impacts
    - Restoration strategy
  - Effects on dune system
  - Financial capability proof (e.g. letter of credit or bond)
  - Contact information for all landowners immediately adjacent to the tract and an affirmation that the adjacent landowners will be provided with notice of the hearing at least 10 days prior to the hearing on the application
- 

#### Maps and Surveys

At least one of the following:

- Certified survey by a licensed surveyor
  - Site plan and/or plat identifying:
    - Legal description
    - Tract boundaries and size
    - Proposed and existing structures
    - Access roads and walkovers
    - Dune Protection Line, Line of Vegetation, Eroding Area Boundary, mean high tide
    - Distance from the proposed construction and the Dune Protection Line, Line of Vegetation, Eroding Area Boundary and mean high tide
    - Existing and proposed grades and elevations
    - Drainage and topography data (with NOAA reference)
- 

#### If Available

- FEMA Elevation Certificate
  - Current topographic survey
  - Erosion rate documentation
- 

#### For Large-Scale Construction Projects

- Unit count and density
- Alternatives analysis
- Drainage impact assessment
- 30-day GLO review acknowledgment

**EXHIBIT B – COMBINED BEACHFRONT CONSTRUCTION CERTIFICATE & DUNE  
PROTECTION PERMIT APPLICATION**

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**I. Purpose**

This form is required for any construction or activity:

- Within 1,000 feet of the mean high tide line, or
  - Seaward of the first public road, whichever is greater
- 

**II. Type of Activity (Check All That Apply)**

- ☐ Dune Enhancement (vegetation planting, sand fencing)
  - ☐ Beach-Quality Fill / Dune Restoration
  - ☐ Beach Access Improvements (walkovers, ADA mats, vehicular access)
  - ☐ Driveway / Slab / Fence
  - ☐ Residential or Commercial Structure Construction or Relocation
- 

**III. Property Information**

- Street Address / Location: \_\_\_\_\_
  - Legal Description (Lot, Block, Subdivision): \_\_\_\_\_
  - Brief Description of Work: \_\_\_\_\_
  - Construction Duration Estimate: \_\_\_\_\_
- 

**IV. Applicant Information**

**Property Owner**

- Name: \_\_\_\_\_
- Mailing Address: \_\_\_\_\_
- Phone: \_\_\_\_\_
- Email: \_\_\_\_\_

**Applicant / Representative (if different)**

- Name: \_\_\_\_\_
- Mailing Address: \_\_\_\_\_
- Phone: \_\_\_\_\_
- Email: \_\_\_\_\_

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## V. Certification and Signature

I certify that:

- I am the property owner or authorized representative,
- I have read and understand the requirements of the Plan,
- The attached information is true and complete, and
- I agree to comply with all applicable city, state, and federal laws.

Signature (Owner): \_\_\_\_\_ Date: \_\_\_\_\_

Signature (Applicant, if different): \_\_\_\_\_ Date: \_\_\_\_\_

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## VI. Application Fee

☐ \$500 – Nonrefundable Application Fee

Make checks payable to: City of Starbase

Memo: *Beachfront Construction Permit* and include project address

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## VII. Required Attachments

Depending on project type (as checked above), include all relevant items from:

- Exhibit A – Dune Permit Checklist
- Maps, surveys, photos, mitigation plans, construction drawings

Application will not be processed until all required items are received and the GLO has reviewed and issued its consistency letter.



# EXHIBIT C – CITY JURISDICTION & ETJ



