

County of Nueces

MIKE PUSLEY
Commissioner
Precinct 1

**BETTY JEAN
LONGORIA**
Commissioner
Precinct 2



SAMUEL L. NEAL
County Judge
Nueces County Courthouse, Room 303
901 Leopard Street
Corpus Christi, Texas 78401-3697

OSCAR ORTIZ
Commissioner
Precinct 3

**H.C. "CHUCK"
CAZALAS**
Commissioner
Precinct 4

ORDER

ADOPTING AMENDMENTS TO THE NUECES COUNTY BEACH MANAGEMENT PLAN

WHEREAS, Nueces County has an interest in providing safe and healthy beaches for use by the public and in preserving the natural resources of the coastal environment; and,

WHEREAS, the Nueces County Beach Management Plan ("Plan") was adopted on March 25, 1992, pursuant to the authority granted local governments under the Open Beaches Act, Chapter 61, Texas Natural Resources Code, the Dune Protection Act, Chapter 63, Texas Natural Resources Code, Subchapter I of Chapter 16, Texas Water Code, the Texas Local Government Code, and other statutes of general applicability; and,

WHEREAS, the Plan was amended in 1996 and 2005 and is certified as consistent with state law by the Texas General Land Office ("TGLO"); and,

WHEREAS, the Commissioners Court established a Beach Management Advisory Committee ("Committee") to make, or review, all recommendations to the Commissioners Court for modifications or amendments to the Plan; and,

WHEREAS, the Committee met numerous times during publicly noticed meetings concerning their recommendations for amendments to the Plan and held two public hearings to further solicit input from local governments and private citizens; and,

WHEREAS, the proposed amendments update the Plan to comply with state requirements, modify the Plan to better address local needs, and correct typographical errors from earlier versions; and,

WHEREAS, pursuant to the Open Beaches Act (Texas Natural Resources Code, Chapter 61), the Dune Protection Act (Texas Natural Resources Code, Chapter 63), and the Beach/Dune Rules (31 TAC §§15.1-15.21), a local government with jurisdiction over gulf beaches must submit its beach management plan and amendments to the plan to the TGLO for certification; and,

WHEREAS, it is the desire of the County Commissioners Court to adopt the proposed amendments to the Plan and forward to the TGLO for certification.

NOW, THEREFORE, BE IT ORDERED that the Nueces County Commissioners Court hereby adopts the proposed amendments to the Plan, as set forth in the attached Exhibit "A", incorporated herein by reference and directs that they be forwarded to the TGLO for certification.

DULY ADOPTED BY VOTE OF THE COMMISSIONERS COURT OF NUECES COUNTY, TEXAS, ON THIS THE 14th DAY OF JULY, 2010.

Samuel L. Neal, Jr.
County Judge

Mike Pusley
Commissioner, Precinct 1

Betty Jean Longoria
Commissioner, Precinct 2

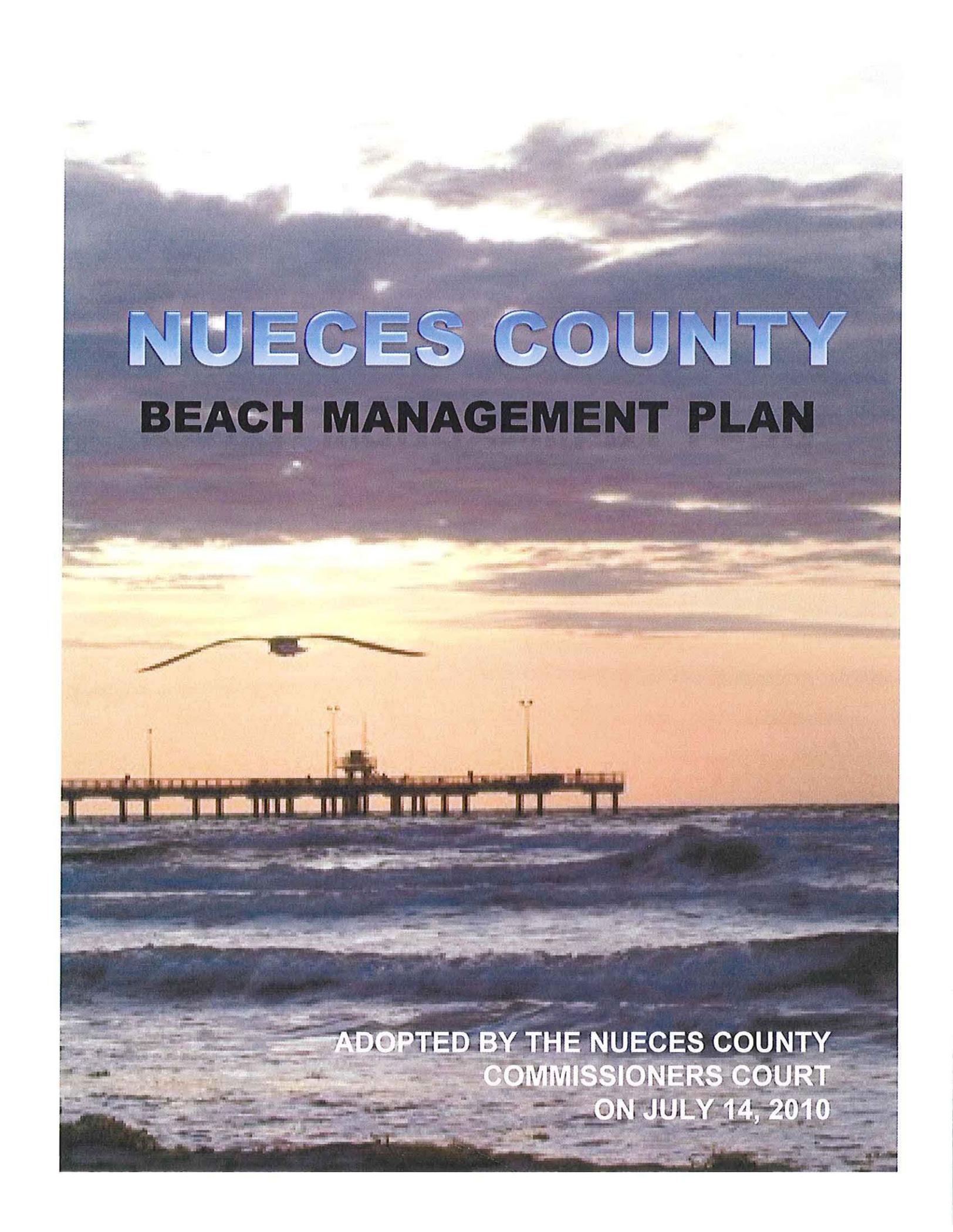
Oscar O. Ortiz
Commissioner, Precinct 3

H.C. "Chuck" Cazalas
Commissioner, Precinct 4



Simon Saenz, III

Diana T. Barrera, County Clerk, chief deputy
Nueces County, Texas

The background of the cover is a photograph of a beach at sunset. The sky is filled with soft, colorful clouds in shades of orange, yellow, and blue. The sun is low on the horizon, creating a bright glow. In the middle ground, a long wooden pier extends into the ocean. A seagull is captured in flight, its wings spread wide, flying across the sky above the pier. The ocean waves are visible in the foreground, with white foam from the surf. The overall mood is serene and coastal.

NUECES COUNTY

BEACH MANAGEMENT PLAN

**ADOPTED BY THE NUECES COUNTY
COMMISSIONERS COURT
ON JULY 14, 2010**

NUECES COUNTY

**BEACH MANAGEMENT
PLAN**

Nueces County Beach Management Plan

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Nueces County Beach Management Plan
As Adopted by the Nueces County Commissioners Court on July 14, 2010

I. STATEMENT OF OBJECTIVES AND AUTHORITIES

A. Authority, Generally

This order is adopted pursuant to the authority granted to Local governments under the Open Beaches Act, Chapter 61, Texas Natural Resources Code, the Dune Protection Act, Chapter 63, Texas Natural Resources Code, Subchapter I of Chapter 16, Texas Water Code, the Texas Local Government Code, and other statutes of general applicability.

B. Objectives

It is the objective of the Commissioners' Court of Nueces County, in adopting this Nueces County Beach Management Plan, to:

1. provide safe and healthy beaches for use by the public;
2. to preserve the natural resources of the coastal environment;
3. to operate within available funds;
4. to recognize the authority of other local governments within Nueces County to adopt Beach Access Plans, as required by Section 61.015 of the Texas Natural Resources Code;
5. to codify and continue Nueces County's compliance and enforcement of the Texas Dune Protection Act, Section 63 of the Texas Natural Resources Code and
6. to recodify previous orders of this Court regulating traffic, animals, and littering on the public beaches of Nueces County.

C. Jurisdictions and Authority

1. Many of the authorities and permitting requirements contained in this plan currently or in the future will require additional permitting from cities within Nueces County.
2. Permits dealing with beachfront construction will need to be obtained from the local governments administering those responsibilities; the cities of Corpus Christi or Port Aransas, Texas.

Nueces County Beach Management Plan
As Adopted by the Nueces County Commissioners Court on July 14, 2010

II. DUNE PROTECTION.

A. Adoption, Compliance, and Modification

1. This order is adopted pursuant to the authority granted local governments under the Open Beaches Act, Chapter 61, Texas Natural Resources Code, the Dune Protection Act, Chapter 63, Texas Natural Resources Code. Subchapter I of Chapter 16, Texas Water Code, and other statutes of general applicability.
2. All persons, county officers, employees, and contractors shall comply with this order, subject to the penalties as described herein see Section X.
3. Amendments to this order shall be effective only upon approval by the General Land Office.

B. Areas Exempt

1. This order applies to all private and public land within the county that lies seaward of the dune protection line except state or national parks, wildlife refuges, preserves, or similar state or federal areas exempted by the Texas Natural Resources Code, as amended.
2. Other than state or national parks, wildlife refuges, preserves, and similar areas, this order applies to land owned by state agencies, subject to the provisions of the Texas Natural Resources Code, Sec. 31.161et seq.

C. Delegation of Authority

1. The Commissioners Court reserves the right to delegate any or all of the authorities granted unto it by Section 63 of the Texas Natural Resources Code regarding dune protection permitting to any municipality located within Nueces County and having as a portion of its boundaries portions of land within the dune protection zone, as defined herein.
2. Any delegation of any or all authorities must meet the following guidelines:
 - a. The delegation must take the form of a written agreement between the Commissioners Court and the City Council of the municipality involved.
 - b. The delegation may be for any or all of the authorities granted to the Commissioners Court.
 - c. The delegation shall specify which authorities of the Commissioners Court are to be delegated and the limitations and review thereof. Generally the authorities include, but are not limited to:
 - (1) The setting of the location of the Dune Protection Line
 - (2) The authority to issue permits, under this order,
 - (3) requirements for reporting to the Commissioners Court.
 - (4) the authority to adopt master planned developments, as defined herein
 - d. The delegation may not bind successive Commissioners Courts.
 - e. The delegation may not take effect until the following has occurred:
 - (1) The Commissioner of the General Land Office has approved the delegation as to form and content,
 - (2) The municipality being delegated to must have received certification from the Commissioner of the General Land Office of a Dune Protection Plan incorporating the powers and authorities granted unto the municipality by the Commissioners Court.
 - (3) The Commissioners Court has approved the municipalities Dune Protection Plan.

D. Dune Protection Line

1. Location.

The Commissioners Court establishes the following line as the dune protection line for the purpose of protecting critical dune areas within Nueces County and within those areas within Nueces County subject to the authority of this Commissioners' Court:

A LINE RUNNING PARALLEL TO THE BEACH 1000 FEET LANDWARD OF
MEAN HIGH TIDE, EXCEPT IN THE AREA OF NORTH PADRE ISLAND
WHERE THERE EXISTS A SEAWALL OR SEAWALLS AND BULKHEADS
IN THAT AREA THE DUNE PROTECTION LINE SHALL FOLLOW THE
EASTERN MOST PORTIONS OF THE BASE OF THE SEAWALL OR
BULKHEADS IMMEDIATELY ADJACENT TO SAID SEAWALL.

2. Map

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As Adopted by the Nueces County Commissioners Court on July 14, 2010

- a. The Commissioners Court shall create a map to represent the location of the Dune Protection Line.
 - b. The map shall contain references to permanent monuments established by the Nueces County Engineer to allow fixed references to the location of the Dune Protection Line
 - c. The map shall contain a minimum of two points on the line tied to the Texas State Plane Coordinate System.
 - d. The map approved by the Nueces County Commissioners Court, as submitted by the Nueces County Engineer, is hereby incorporated, by reference, into this plan.
3. Review
- a. The Commissioners Court shall review the location of the dune protection line at least once every five years to determine whether the line is adequately located to achieve its stated purposes. In addition the Commissioners Court shall review the adequacy of the location of the line within 90 days after a tropical storm or hurricane affects the portion of the coast lying within the jurisdiction of the County. The Commissioners Court may amend this order to adjust the line whenever necessary to achieve its stated purposes.
 - b. Any amendments to the Dune Protection Line established by the Commissioners Court shall conform to the requirements stated herein Section II.D.2.
4. Amendment
- Prior to acting on any amendment to this order which would modify the line, the Commissioners Court shall hold a public hearing to consider the modifications. Not less than one week nor more than three weeks before the date of the hearing, the Commissioners Court shall both publish notice of the hearing at least three times in the newspaper with the largest circulation in the county and notify the General Land Office in writing. The notice to the General Land Office shall include a written description of the line.
- E. Alteration of Dunes Prohibited Without Permit
- Unless the Commissioners Court properly issues a dune protection permit, as described herein, authorizing the conduct, no person shall damage, destroy, or remove a sand dune or a portion of a sand dune seaward of the dune protection line, or kill, destroy, or remove in any manner any vegetation growing on a sand dune seaward of the dune protection line.
- F. Exempt Activities
- The following activities are exempt from the requirement for a dune protection permit, but may nevertheless may require a beachfront construction certificate or a permit pursuant to other county, city, or other jurisdictional orders:
1. exploration for and production of oil and gas and reasonable and necessary activities directly related to such exploration and production, including construction and maintenance of production and gathering facilities, pipelines, and other construction seaward of the dune protection line which serve wells located outside the dune protection line, provided that such facilities are located no farther than two miles from the well being served;
 2. grazing livestock and reasonable and necessary activities directly related to grazing; and
 3. recreational activities other than operation of a recreational vehicle.
 4. Beach Maintenance activities conducted by local governmental authorities between the vegetation line and the line of mean low tide, under the guidelines established in Section VI.J, of this order.
 5. Emergency response activities conducted under local governmental authority between the vegetation line and the dune protection line, when failure to carry out such activity will cause unreasonable hazard to the public or public facilities and infrastructure. The Beach Management Advisory Committee shall submit to the Office of the Nueces County Judge a written report of the emergency activities undertaken within 30 days of the event. In every case of such activity, reasonable efforts shall be made to avoid and minimize impacts to dunes and dune vegetation, and reasonable mitigation efforts may be required. Notice shall be given by the authority declaring the emergency to the Nueces County Department of Public Works and General Land Office within 24 hours after the event requiring emergency activities.

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As Adopted by the Nueces County Commissioners Court on July 14, 2010

G. Master Planned Developments

1. In lieu of the permit process described herein, developers of large tracts of land may request adoption of a master planned development, as a separate order of the Commissioners Court and within the scope of this Dune Protection plan. This adoption may allow the negotiation of terms and conditions unique to the development in question.
 - a. In any negotiation under this section the General Land Office and the municipality in which the proposed development is located shall be parties to all negotiations.
2. "Master planned development" means a development for which approval is requested by submission of a comprehensive plan containing maps, drawings, narrative, tables, and other information about the proposed use of specific land and/or water including descriptions of uses and use intensities, building and/or site improvement locations and sizes, relationships between buildings and improvements, vehicular and pedestrian access and circulation systems, parking, utility systems, storm-water management and treatment systems, geography, geology, impact assessments, regulatory-approved checklist, and phasing. Information in the master plan may be conceptual or detailed depending on the status of its regulatory approval.
3. At least 10 days prior to acting on a request for approval of a master planned development within the area subject to this order the County Judge shall send the plan to the General Land Office for review.
4. When acting on a request for approval of a master planned development, the Commissioners Court shall consider:
 - a. the development's potential effects on dunes, dune vegetation, and the applicant's proposal to mitigate for such effects throughout the construction;
 - b. the contents of the plan; and
 - c. whether any component of the development, such as installation of roads or utilities, or construction of structures seaward of a dune protection line, will subsequently require a permit; and
 - d. the allocation of responsibilities for complying with the terms of the master plan. This includes, but is not limited to construction and maintenance of mitigation, and liability for violations of the terms of the master plan order.
5. If the Commissioners Court determines that all development contemplated by the plan complies with all requirements of this order, a permit for the development may be issued.
6. If the Commissioners Court determines that any development contemplated by the plan does not comply with the requirements of this order and for that reason can not be approved without an amendment to this order, the Commissioners Court shall not issue a permit, but may submit the plan to the General Land Office for consideration as an amendment to this order.
7. The permit application shall follow the application process portions of this chapter.

H. Application Process.

1. Request for Determination of Need for Dune Protection Permit Process
 - a. Potential applicants may submit descriptions of the proposed construction activity to the office of County Judge for a determination of whether a permit would be required for the activity. If the potential applicants seeks to establish that no permit is required, the applicant shall demonstrate that the proposed, construction will not adversely affect critical dune areas. The applicant shall, at a minimum, submit the following items for consideration:
 - (1) a site map which shows the location of the proposed activity and the distance between the proposed construction activity and mean high tide, the vegetation line, and the dune protection line.
 - (2) photographs of the site
 - (3) a written statement which describes the topography of the site and includes a statement that no critical dunes areas exist in the area of the proposed construction activity.
 - b. The County Judge shall send notice of any proposed determination that the construction activity does not require a permit to the General Land Office and to the Chair of the Beach

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Management Advisory Committee for review at least ten(10) working days before the determination is made.

- c. Upon making a determination, the County Judge shall notify the potential applicant whether the proposed construction activity requires a permit.

2. Initial Application

Persons, firms, corporations, or partnerships having interest in land desiring to conduct activities specified in Section II.E shall submit an application for a Dune Protection Permit to the Office of County Judge of Nueces County.

3. County Judge's Process

- a. The County Judge shall review the application to determine that all components of the application have been received.
- b. The County Judge shall review the application to determine the proposed activities' compliance with this order.
- c. Upon initial determination of compliance the Judge shall forward the application to the Chairperson of the Beach Management Advisory Committee for review, consideration, public comment and recommendation by the Beach Management Advisory Committee.

4. Committee Review

- a. The Chairperson of the Beach Management Advisory Committee shall call a special meeting of the Beach Management Advisory Committee to conduct an on-site inspection and meet to consider the application. This meeting shall be held on the next regularly scheduled meeting date of the Beach Management Advisory Committee, provided that the meeting shall not be held sooner than 14 days of the receipt of the application by the Chairperson.
- b. The County Judge shall notify the planning department of any other local government having concurrent jurisdiction of the dates and times of hearing to consider this application,
- c. The Chairperson of the Beach Management Advisory Committee shall conduct a meeting of the committee to examine the application and provide advice to the Commissioners' Court.
- d. At the committee hearing the committee may consider information provided by:
 - (1) The County Engineer;
 - (2) Representatives of any local government having concurrent jurisdiction;
 - (3) The applicant;
 - (4) other resource persons; and
 - (5) the public.
- e. Changes in the application
 - (1) if the applicant proposes changes to the application during the committee meeting, the committee chair shall notify the Office of County Judge.
 - (2) Additionally, the applicant shall, within 10 days of the committee meeting, submit to the County Judge a modified application, consistent with the applicant's proposed changes.
 - (3) The County Judge shall determine if additional Committee meetings should be called to consider the revised application.
 - (4) The applicant shall be the sole binding proponent of amendments to any application under consideration,
- f. Within 14 days of the hearing the committee shall forward to the Office of the County Judge a report of their findings. If the report is not received by the Office of County Judge within these time lines, the Judge may proceed in the process, as outlined herein. The report shall, at a minimum, report to the Office of County Judge and the Commissioners Court the committee's opinion of the following items:
 - (1) whether the proposed activity is a prohibited activity as defined in Section III.A.2, of this order (Prohibited Activities);
 - (2) whether the proposed activity will materially weaken dunes or materially damage dune vegetation seaward of the dune protection line based on substantive findings under

Nueces County Beach Management Plan

As Adopted by the Nueces County Commissioners Court on July 14, 2010

Section III.A.3.a of this order (Material Weakening);

- (3) whether are practicable alternatives to the proposed activity and adverse effects can be avoided;
- (4) whether the applicant's mitigation plan will adequately minimize, mitigate, and/or compensate for any unavoidable adverse effects;
- (5) whether the proposed activity complies with all applicable requirements of this order.

5. General Land Office Review

Upon receipt of the Committee report the County Judge shall immediately forward to the Commissioner of the General Land Office the following information:

- a. The final application, as the Commissioners Court will consider it;
- b. A statement of opinion that the proposed activity is, or is not, consistent with the requirements of the Nueces County Beach Management Plan.
- c. If available, a copy of the most recent flood insurance rate map for the area within the application,
- d. If available, the date and time that the Commissioners Court will meet to consider the application. That date is to be no less than ten business days beyond the date the application is forwarded.
- e. a request for timely comment on the application.

6. Commissioners Court Process

- a. The County Judge shall request that the application be placed on the agenda for consideration by the Commissioners Court:
 - (1) For large-scale construction activity, not less than thirty (30) working days after the application with all required contents has been received by the General Land Office; and
 - (2) For all other proposed activity not less than ten (10) working days after the application with all required contents has been received by the General Land Office.
- b. The Commissioners Court shall review the application and make their determinations as specified in section III of this order,

I. Application Contents

1. Definitions

See Section XVI (Definitions) for definitions of large-scale and small-scale construction.

2. Contents of Applications

a. Large and Small-Scale Construction

For all proposed construction (large and small-scale), applicants shall submit the following items and information:

- (1) the name, address, phone number, and if applicable, fax number of the applicant, and the name of the property owner if different from the applicant;
- (2) a complete legal description of the tract and a statement of its size in acres or square feet;
- (3) the number of proposed structures and whether the structures are amenities or habitable structures;
- (4) the number of parking spaces;
- (5) the approximate percentage of existing and finished open spaces (those areas completely free of structures);
- (6) the floor plan and elevation view of the structure proposed to be constructed or expanded;
- (7) the approximate length of the construction process;
- (8) a description (including location) of any existing or proposed walkways or dune walkovers on the tract;

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As Adopted by the Nueces County Commissioners Court on July 14, 2010

- (9) a grading and layout plan identifying all elevations (in reference to the National Oceanic and Atmospheric Administration datum), existing contours of the project area (including the location of dunes and swales), and proposed contours for the final grade;
- (10) photographs of the site which clearly show the current location of the line of vegetation and the existing dunes on the tract;
- (11) the effects of the proposed activity on the beach/dune system which cannot be avoided should the proposed activity be permitted;
- (12) if required a comprehensive mitigation plan which includes a detailed description of the methods which will be used to avoid, minimize, mitigate and/or compensate for any adverse effects on dunes or dune vegetation. Additional details of mitigation planning may be found in Section III.A.3. and Section IV of this order.
- (13) an accurate map or plat of the site identifying:
 - (a) the site by its legal description including, where; applicable, the subdivision, block, and lot;
 - (b) the location of the property lines and a notation of the legal description of adjoining tracts;
 - (c) the location of the structures, the footprint or perimeter of the proposed construction on the tract;
 - (d) proposed roadways and driveways and proposed landscaping activities on the tract;
 - (e) the location of any seawalls or any other erosion response structures on the tract and on the properties immediately adjacent to the tract; and
 - (f) if known, the location and extent of any pre-existing human modifications on the tract.
- (14) for subdivision development, except for that authorized in an unexpired master-planned development, a statement that the applicant or owner shall include the following notice on the plat: "A dune protection permit is required for any construction activity on each lot seaward of the Dune Protection Line (1000 feet from the mean high tide line)."
- (15) a preliminary determination by the applicant as to whether the proposed construction complies with all aspects of the county's dune protection plan;
- (16) a preliminary determination by the applicant as to how the proposed beachfront construction complies with the local government's dune protection plan and the beach access plan provisions adopted by the local government with such authority relating to public beach ingress/egress, off-beach parking, and avoidance of reduction in the size of the public beach due to erosion including, but not limited to:
 - (a) evidence of the applicant's co-application to the local government with beachfront construction certification responsibility, as defined in Section 61 of the Texas Natural Resources Code, for the proposed project.
- (17) the permit fees required by Section II.J of this order.

b. Large-Scale Construction

For all proposed large-scale construction, applicants shall submit the following additional items and information:

- (1) if the tract is located in a subdivision and the applicant is the owner or developer of the subdivision, a certified copy of the recorded plat of the subdivision, or, if not a recorded subdivision, a copy of the preliminary plat of the subdivision as filed with the local government having jurisdiction over subdivision development of the site, such preliminary plat having been certified by a licensed surveyor, and a statement of the total area of the subdivision in acres or square feet;
- (2) in the case of multiple-unit dwellings, the number of units proposed;
- (3) alternatives to the proposed location of construction on the tract or to the proposed methods of construction which would cause fewer or no adverse effects on dunes and dune vegetation; and

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As Adopted by the Nueces County Commissioners Court on July 14, 2010

- (4) the proposed activities' impact on the natural drainage pattern of the site and the adjacent lots.
- c. For all proposed construction (large and small-scale), if applicants already have the following items and information, local governments shall require the following items and information to be submitted in addition to the other information required:
 - (1) a copy of a blueprint of the proposed construction, such print to indicate detailed floor plans and structural layout of the proposed project;
 - (2) a copy of a topographical survey of the site;
 - (3) the most recent local historical erosion rate data (as determined by the University of Texas at Austin, Bureau of Economic Geology) and the activity's potential impact on coastal erosion; and
 - (4) a copy of the FEMA "Elevation Certificate."
- J. Fees
 - 1. The Commissioners Court hereby establishes reasonable fees for permits applied for.
 - 2. Permit fees are application fees and shall not be refunded except;
 - a. If the applicant withdraws the application prior to review by the County Judge; or
 - b. If the application is filed in error.
 - 3. Permit fees collected are to be credited to the general operation funds of Nueces County.
- K. Variances from Federal Requirements

The County Judge shall inform the General Land Office and FEMA Region 6 before the County issues any variance from FEMA's regulations found in Volume 44 of the Code of Federal Regulations, Parts 59-77.

Nueces County Beach Management Plan
As Adopted by the Nueces County Commissioners Court on July 14,2010

III. DUNE PROTECTION PERMIT ACTIONS BY THE COMMISSIONERS COURT.

A. Issuance or Denial of Permit.

1. Data considered

To determine whether to issue or deny a permit the Commissioners Court shall review and consider:

- a. the information in the permit application;
- b. the' recommendations and findings of the County Engineer;
- c. the proposed activity's consistency with this order;
- d. any other law relevant to dune protection and public beach use and access which affects the activity under review;
- e. the report of the Beach Management Advisory Committee,
- f. the comments if received, of the, General Land Office, if received prior to the meeting of the Commissioners Court. Thereafter, the permit may be issued or denied regardless of whether the General Land Office submits comment on the application. If the General Land Office comments on the application the receiving County authority shall forward copies of the comments to the Beach Management Advisory Committee and the Commissioners Court;
- g. cumulative and indirect effects of the proposed construction on all dunes and dune vegetation seaward of a dune protection line;
- h. cumulative and indirect effects of other activities on dunes and dune vegetation located on the proposed construction site;
- i. 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;
- j. the local 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;
- k. all practicable alternatives to the proposed activity, proposed site, or proposed methods of construction;
- l. 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 re-vegetation;
- m. the impacts on the natural drainage patterns of the site and adjacent property;
- n. 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;
- o. wind and storm patterns including a history of washover patterns;
- p. location of the site on the flood insurance rate map;
- q. success rates of dune stabilization projects in the area; and
- r. any other information the Commissioners' Court considers useful, including resource information made available to it by federal and state natural resource entities.

2. Permits prohibited

The Commissioners' Court shall not issue a permit that is:

- a. inconsistent with this order or is
 - (1) inconsistent with the General Land Office rules for Management of the Beach/Dune System (31 TEXAS ADMINISTRATIVE CODE. Sec. 15.1 - 15.10),
 - (2) inconsistent with the Open Beaches Act (Chapter 61. Texas Natural Resources Code).
 - (3) inconsistent with the Dune Protection Act (Chapter 63₁ Texas Natural Resources Code), or

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- (4) inconsistent with any other state, local, and federal laws related to the requirements of the Dune Protection Act and the Open Beaches Act.
 - (5) the requirements of these listed regulations or laws are incorporated into this order by reference.
 - b. activities that are likely to result in the temporary or permanent removal of sand from the portion of the beach/dune system located on or adjacent to the construction site, including:
 - (1) moving sand to a location landward of the dune protection line; and
 - (2) temporarily or permanently moving sand off the site, except for purposes of permitted mitigation, compensation, or an approved dune restoration or beach nourishment project, and the project does not cause any adverse effects on the sediment budget;
 - (3) depositing sand, soil sediment, or dredged spoil which contains any of the toxic materials listed in Volume 40 of the Code of Federal Regulations, Part 302.4, in concentrations which are harmful to people, flora, and fauna as determined by applicable, relevant and appropriate requirements for toxicity standards established by the local, state, and federal governments;
 - (4) creating dredged spoil disposal sites such as levees and weirs, without the appropriate local, state, and federal permits;
 - c. constructing or operating industrial facilities not in full compliance with all relevant laws and permitting requirements prior to the effective date of this order;
 - d. operating recreational vehicles;
 - e. mining dunes;
 - f. detonating bombs or explosives;
 - g. constructing concrete slabs or other impervious surfaces within 200 feet landward of the line of vegetation except for such a surface that
 - (1) supports and does not extend beyond the perimeter of a habitable structure elevated on pilings, provided no walls are erected that prohibit the natural transfer of sand, or
 - (2) do not exceed 5% of the footprint of the permitted habitable structure it serves;
 - h. depositing trash, waste, or debris including inert materials such as concrete, stone, and bricks that are not part of the permitted on-site construction;
 - i. constructing cisterns, septic tanks, and septic fields seaward of any structure serviced by the cisterns, septic tanks, and septic fields; and
3. Required Findings
- The Commissioners Court may issue a permit only if it finds as fact, after a full investigation, that the particular conduct proposed will not;
- a. materially weaken any dune or materially damage dune vegetation or reduce the effectiveness of any dune as a means of protection against erosion and high wind and water. To find that there will be no such material weakening or damage, the Commissioners Court must find that:
 - (1) the activity will not result in the potential for increased flood damage to the proposed construction site or adjacent property;
 - (2) the activity will not result in runoff or drainage patterns that aggravate erosion on or off the site;
 - (3) the activity will not result in significant changes to the natural permeability of a dune or its ability to transmit rainwater to the water table;
 - (4) the activity will not disturb unique flora or fauna or result in adverse effects on dune complexes or dune vegetation; and
 - (5) the activity will not significantly increase the potential for washovers or blowouts to occur.
 - b. the proposed activity is not a prohibited activity as defined in Section III.A.2 of this Plan (Permits Prohibited);

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- c. there are no practicable alternatives to the proposed activity that would result in less adverse effects to critical dune areas.
 - d. the applicant's mitigation plan will adequately minimize, mitigate, and/or compensate for any unavoidable other adverse effects; and
 - e. the proposed activity complies with any applicable requirements of this order.
4. Dune Inventory and Programs for Mitigation Activities
- a. Nueces County, in coordination with the General Land Office and the University of Texas at Austin, Bureau of Economic Geology, may conduct an inventory of the dune conditions within its jurisdiction and may identify sites and locations for dune restoration and repair for off-site mitigation. This inventory may be coordinated with Kleberg County as necessary to include adjacent dune complexes.
 - b. Nueces County and locally affected public entities, may evaluate the potential for establishing a vegetation reserve program for managing off-site, in-kind mitigation.
 - (1) The establishment or creation of such a reserve shall require the specific approval of the General Land Office prior to implementation.
 - (2) This section shall not be construed to establish such a reserve, rather to authorize the planning and pre-authorization developmental work on such a reserve.
- B. Administrative Record
- 1. The County Engineer shall compile and maintain an administrative record which demonstrates the basis for each final decision regarding issuance or denial of a permit. The administrative record shall include copies of the following:
 - a. all materials received from the applicant as part of or regarding the permit application;
 - b. the transcripts, if any, or the minutes and/or tape of the Commissioners' Court meeting during which a final decision regarding the permit was made; and
 - c. all comments received regarding the permit.
 - 2. The County Engineer shall keep the administrative record for three years from the date of a final decision on a permit. The County Judge shall send to the General Land Office upon request by the agency, a copy of those portions of the administrative record that were not originally sent to those agencies for review and comment. The County Judge shall provide to the permittee, upon request, copies of any materials in the administrative record regarding the permit not submitted to the County Judge by the permittee in the application.
- C. Terms and Renewal of Permits
- 1. Permits shall be valid for three years from the date of issuance.
 - 2. The Commissioners Court may renew a permit for a period not exceeding 90 days if the activity as proposed in the application for renewal complies with this order and the permittee supplements the original application material with addition information indicating any changes to the activity or information. The Commissioners Court shall issue only two renewals for each permit. Thereafter, the permittee must apply for a new permit.
 - 3. If the proposed construction is changed in any manner which causes or increases adverse effects on dunes, dune vegetation, or public beach use and access, the permittee shall not be eligible for a renewal but must apply for a new permit.

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D. Compliance Monitoring and Certification.

1. The provisions of the dune protection permit shall be met. The dune protection permit shall state conditions of compliance consistent with those approved by the Commissioners Court. These conditions may be in addition to those stated in the dune permit application.
2. Upon receipt of a dune protection permit, the permittee shall notify the County of the planned schedule for construction. The County reserves the right to access property to inspect and monitor the permitted activity during construction and until expiration of the dune protection permit or issuance of a letter of acceptance under paragraph (3) below, whichever is first. The County will notify the permittee in writing of any concerns during construction, for corrective action and remedy on the part of the permittee.
3. The Commissioners Court may require a permittee to pay for County inspection and monitoring of any permitted activity at any time as a condition in the letter of compliance, as a condition of continued authorization of the activity, or as a condition of certification. The Commissioners Court or its designated representative will set a reasonable fee for such inspection and monitoring. The Commissioners Court may also require a permittee to conduct or pay for a monitoring program to study the success of authorized dune mitigation or compensation efforts. If at any time the Commissioners Court finds that the activity is not consistent with the conditions of the permit, the Commissioners Court may order the activity to cease until a plan for compliance is agreed upon.
4. Within thirty (30) days of completion of large-scale projects and construction of habitable structures, the permittee will submit to the County Engineer an affidavit signed and sealed by the permittee's engineer, architect or geologist licensed in the State of Texas attesting that the provisions of the dune protection permit, including dune mitigation and/or compensation, have been met, and that the permitted work has been completed. The County will then verify that the provisions have been met and the County Engineer will send a letter of acceptance or rejection of the attestation to the permittee with copies to the Texas General Land Office and to the City of jurisdiction with construction permitting authority.
5. The Commissioners Court may, or at the request of the General Land Office shall, require a permittee to conduct or pay for a monitoring program to study the effects on the public beach of the permittee's coastal and shore protection project, and shall require the permittee to notify the General Land Office and the County Engineer of any discernible change in the erosion rate caused by the project.

E. Termination of Permits.

1. The Commissioners Court may void a permit if:
 - a. The Court finds that a permittee has failed to comply with any requirement of the permit or this Plan.
 - b. The Court finds the permit is inconsistent with the beach dune rules adopted by the General Land Office (31 TAC, 15.1-15.10), as amended, or
 - c. a material change occurs after the permit is issued; or
 - d. a permittee fails to disclose any material fact in the application.
 - e. "Material change" includes human or natural conditions which have adversely affected dunes, dune vegetation, or beach access and use that either did not exist at the time of the original application, or were not considered by the Commissioners Court in making the permitting decision because the permittee did not provide information regarding the site condition in the original application.
2. A permit automatically terminates if construction comes to lie within the boundaries of the public beach by artificial means or by natural causes.

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F. Beach Nourishment Standards

The Commissioners Court shall not authorize a beach nourishment project unless it finds and the project sponsor demonstrates that:

- a. the project is consistent with all applicable requirements of this order;
- b. the sediment to be used is effective grain size, mineralogy, and quality or is the same as the existing beach material;
- c. the proposed nourishment material does not contain any toxic materials listed in Volume 40 of the Code of Federal Regulations, Part 302.4, in concentrations which are harmful to people, flora, and fauna as determined by applicable, relevant, and appropriate requirements for toxicity standards established by the local, state, and federal governments;
- d. there will be no adverse environmental effects on the property surrounding the area from which the sediment will be taken or on the site of the proposed nourishment;
- e. the removal of sediment will not have any adverse impacts on flora and fauna; and

G. Dune Walkover Standards

The Commissioners Court shall not authorize construction of dune walkovers or other beach access mechanisms unless it finds and the project sponsor demonstrates that the following requirements are met.

- a. The walkover is restricted, to the greatest extent possible, to the most landward point of the public beach.
- b. The walkover is constructed and located in a manner that will not interfere with or otherwise restrict public use of the beach at normal high tides.
- c. Permittee shall relocate walkovers to follow any landward migration of the public beach or seaward migration of dunes using the following procedures and standards.
 - (1) After a, major storm or any other event causing significant landward migration of the landward boundary of the public beach, permittee shall shorten any dune walkovers encroaching on the public beach to the appropriate length for removal of the encroachment. This assessment must be coordinated with the local government having Beach Access certification authority for the location where the walkover is located.
 - (2) In cases where the migration of the landward boundary of the public beach occurs slowly over a period of time or where a dune walkover needs to be lengthened because of the seaward migration of dunes, the permittee shall apply for a permit authorizing the modification of the structure.

H. Special Requirements for Eroding Areas.

1. "Eroding areas" are portions of the shoreline experiencing an historical erosion rate of greater than two feet per year based on published data of the University of Texas at Austin, Bureau of Economic Geology.
2. In addition to the other requirements of this order, in eroding areas, permittee shall within the area landward of the line of vegetation to a distance of 200 feet:
 - a. elevate all structures on pilings in accordance with FEMA minimum standards or above the natural elevation (whichever is greater);
 - b. design structures located on property within a distance equal to sixty times the erosion rate for the area in question from the public beach so that they can be relocated;
 - c. not pave or alter the ground below the lowest habitable floor, except stabilization of driveways;
3. If there is any conflict between the requirements of this subsection and the requirements of any other provision of this order, this subsection controls.

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I. General Erosion and Flood Protection Requirements.

1. Permittee, shall:
 - a. locate all construction as far landward as is practicable;
 - b. not engage in any construction which may aggravate erosion;
 - c. not construct any new erosion response structure, except a retaining wall located greater than 200 feet landward of the line of vegetation; or except a special structure, as authorized below in Section III.J. of this order.
 - d. not maintain or repair existing erosion response structure located on the public beach;
 - e. not enlarge or improve an existing erosion response structure located less than 200 feet landward of the line of vegetation;
 - f. not maintain or repair an existing erosion response structure located less than 200 feet landward of the line of vegetation that is more than 50% damaged, except:
 - (1) when failure to repair the damaged structure will cause unreasonable hazard to a public building, public road, public water supply, public sewer system, or other public facility immediately landward of the structure; or
 - (2) when failure to repair the damaged structure will cause unreasonable flood hazard to habitable structures because adjacent erosion response structures will channel flood water to the habitable structure;
 - g. not engage in construction that does not comply with FEMA's regulations governing construction in flood hazard areas; and
 - h. design construction so as to minimize impacts on natural hydrology. Construction shall not cause erosion to adjacent properties, critical dune areas, or the public beach.
 - i. Locate residential or commercial structures permitted after May, 2000, at least 350 feet landward from the vegetation line unless no practicable development alternatives are possible; and
 - j. restrict development permitted after May, 2000, in the area between 350 and 200 feet landward of the vegetation line to recreational amenities such as pools and picnic areas. In any case, applicants must demonstrate that every attempt has been made to minimize use of impervious surfaces in this zone.

J. Special Projects

1. Nothing in this plan shall prohibit the Commissioners Court from issuing a valid Dune Protection - Permit, at its discretion, for community benefit projects, permitted by other agencies, including, but not limited to, water exchange passes, beach renourishment projects, recreational structures, or other projects in the public interest.

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IV. DUNE RECONSTRUCTION

- A. Guidelines for Improving, Rebuilding, or Repairing Sand Dunes in Nueces County
1. Generally
 - a. Sand dunes being rebuilt or replaced shall not be weaker than original dunes.
 - b. nothing contained herein shall serve to alter the location of the line of vegetation, as defined herein, by non-natural, or humanly induced means; including but not limited to plantings, irrigation, fertilization, fencing, or placement of materials or vegetation designed to, or which will have the effect of creating or altering a line of vegetation, except as otherwise provided for herein
 - c. these guidelines are intended to provide a structure for the improvement or rebuilding of existing dune fields, not to permit the construction of dune fields or vegetation where none had previously existed.
 - d. This process shall not authorize the removal, destruction, material weakening, alteration of existing vegetation or other actions on existing dunes.
 - e. nothing contained herein shall authorize or permit activities or actions which in any manor damage dunes or dune vegetation.
 - f. Any authorization contained herein is subject to the rules, orders, ordinances, or policies adopted by other local governments within Nueces County exercising their authority under Section 61 & 63 of the Texas Natural Resources Code
 2. Except as otherwise expressly provided in this order, the Commissioners Court shall not authorize restoration of dunes on a public beach unless it finds and the project sponsor demonstrates that the following requirements are met.
 - a. Restored dunes:
 - (1) shall extend no more than 20 feet seaward of the line of vegetation and shall follow the natural migration of the line of vegetation; and
 - (2) shall not restrict or interfere with public use of the beach at normal high tide.
 - b. Restored dunes may be located farther seaward than 20 feet of the line of vegetation only upon:
 - (1) an affirmative demonstration by the sponsor that substantial dunes would likely form farther seaward naturally; and
 - (2) prior written approval of the General Land Office.
 - c. All restored dunes shall be continuous with any surrounding naturally formed dunes; shall approximate the natural position, contour, volume, elevation, vegetative cover, and sediment content of any naturally formed dunes in the proposed dune restoration area; and shall be planted with indigenous vegetation that will achieve the same protective capability as the surrounding natural dunes.
 - d. The following methods or materials may be used to restore dunes:
 - (1) piles of sand having similar grain size and mineralogy as the surrounding beach;
 - (2) temporary sand fence so conforming to General Land Office guidelines;
 - (3) organic bushy materials such as used Christmas trees or seaweed; and
 - (4) sand obtained by scraping accretion beaches only if the scraping is approved by the local government and the project is monitored to determine any changes that may increase erosion of the public beach.
 - e. The following methods or materials shall not be used to restore dunes:
 - (1) hard or engineered structures;
 - (2) materials such as bulkheads rip-rap, concrete, or asphalt rubble, building construction materials, and any non-biodegradable items;
 - (3) fine, clayey, or silty sediments;
 - (4) sediments containing the toxic materials listed in Volume 40 of the Code of Federal Regulations, Part 302.4 in concentrations which are harmful to people, flora, and fauna

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as determined by applicable, relevant, and appropriate requirements for toxicity standards established by the local, state, and federal governments.

- f. Activities affecting restored dunes shall be subject to the requirements of this order. Permittee shall not construct or maintain private structures on restored dunes, except for dune walkovers or similar access ways meeting the requirements of this order.
3. All applications or proposals for reconstructing dunes on the public beach shall be forwarded to the General Land Office at least 10 working days for small-scale construction or 30 working days for large-scale construction prior to the decision on the application.
- B. Permit for Improving, Rebuilding, or Repairing Dunes in Nueces County
 1. When Required
 - a. When a landowner, or a person, firm, partnership, or corporation, seeks to construct, alter, or otherwise take actions designed specifically to increase the heights, width, or volume of a dune, or seeks to take actions designed to place or increase the amount of vegetation on a dune within Nueces County seaward of the Dune Protection Line the proponent shall comply with this section.
 2. General Dune Protection Permit Issued
 - a. The Nueces County Commissioners Court hereby issues a dune protection permit under the authority of this plan. The purpose of this permit is to expedite the improvement, rebuilding, or repair of sand dunes within Nueces County.
 - b. This permit authorizes the County Engineer to issue "letters of compliance" with this permit to authorize conduct within the dune protection zone upon the finding by the County Engineer that the proposed activity is in compliance with this chapter of this plan.
 - c. Authorization for work related to the improvement, rebuilding, or repair of sand dunes under this permit shall consist of a letter of compliance issued by the Nueces County Engineer. The Commissioner may review and comment upon the letter of compliance before its issuance, as provided for in this plan.
 - d. An application for a letter of compliance to be issued shall be addressed to:

The Nueces County Engineer
901 Leopard Street
Corpus Christi, Texas 78401
 - e. Application shall be made in the form of a letter describing the proposed project. The letter of application shall contain a vicinity and location map with subdivision, block, and lot numbers indicated thereon. Drawings showing the dimensions of the proposed dune - building project and a brief description of the materials and methods to be used shall be included. The application shall clearly indicate the location of the existing vegetation line and the proposed activity in relation to the existing vegetation line. The application shall include all fees required by Section II.J of this order.
 - f. The placement of trees, brush or seaweed at the toe of existing dunes by Nueces County shall not require a letter of compliance or permit.
 - g. The County Engineer shall forward a copy of the entire application for a letter of compliance to the Commissioner of the General Land Office and Attorney General for comment and review. The County Engineer shall consider the comments of the Commissioner in the issuance of a letter of compliance. If the Commissioner does not provide written exception to application within ten business days of the receipt of the application by the Commissioner the County Engineer may proceed as authorized under this plan.
 - h. Conditions of Permit
 - (1) All activities identified and authorized under this permit through a letter of compliance, shall be consistent with the terms and conditions of the letter, the Texas Natural Resources Code, all other applicable laws and regulations. The undertaking of any activities not specifically identified and authorized by the letter of compliance shall constitute

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a violation of the terms and conditions of the letter and may result in the modification, suspension, Or revocation of the letter in part or in whole, or may result in prosecution as authorized elsewhere herein.

- (2) This permit, and the letters of compliance that may be issued under this permit, are subject to the provisions of Section IV of this plan, known as guidelines for improving, rebuilding, or repairing sand dunes in Nueces County.
 - (3) No work shall be undertaken until the applicant receives written authorization from the County Engineer in the form of a letter of compliance.
 - (4) Each letter of compliance issued under this permit will have plans and drawings, provided by the applicant, attached thereto which will specify the approved work. The work performed under the letter of compliance must conform to the plans and drawings. The failure to conform work performed shall constitute work performed without a permit and may result in prosecution as authorized elsewhere herein.
 - (5) All work approved under this permit must be completed within one year from the date on which the letter of compliance is issued.
 - (6) The area of the proposed work will be staked so that an on-site inspection may be made by the County Engineer, a representative of the General Land Office, or other interested parties.
 - (7) The holder of a letter of compliance must notify the County Engineer of project completion, in writing, within ten (10) days after project completion. The County Engineer will then notify the Commissioner.
 - (8) No attempt shall be made by the holder of a letter of compliance to prevent the full and free use of the public beach as guaranteed by the Texas Open Beaches Act.
 - (9) The holder of a letter of compliance who fails to complete the authorized work before the expiration of the letter shall, without expense to Nueces County or the State of Texas and in such time and manner as the Commissioners Court or its representative may direct, restore the area to its former conditions. If the holder of a letter of compliance fails to comply with the directive of the Commissioners Court, or its representative, the county may restore the dune area to its former condition, by contract or otherwise, and recover the cost of the restoration from the holder of the letter of compliance or the owner of the land affected.
- C. Guidelines for improving, Rebuilding, or Repairing Sand Dunes in Nueces County
1. Mechanical means of improving, rebuilding, or repairing sand dunes.
 - a. Materials.
 - (1) Standard wood- slat or plastic sand fencing, not to exceed 4 feet in height measured from the ground surface after installation, may be used to construct new sand dunes or to reconstruct damaged sand dunes.
 - (2) Trees, brush, or seaweed, not to exceed 6 feet in height measured from the ground surface are considered suitable material for sand dune building.
 - (3) Inorganic debris, such as vehicle bodies, concrete wire, tires, etc., is not acceptable material for sand dune building.
 - (4) Sand may be imported to reduce dune building time. Importing of sand must be done in accordance with Chapter 61.211- 227 of the Texas Natural Resources Code and other applicable federal, state, and local laws. Sand contaminated with oil may be used to build dunes only with the approval of the Texas Commission on Environmental Quality and the Texas General Land Office.
 - b. Placement of dune building materials.
 - (1) In breach, embayment, or blowout areas.
 - (a) Dune-building structures shall be placed parallel to the gulf shoreline.
 - (b) Dune building structures shall not exceed 100 feet in length without a 35-foot break

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- to prevent entrapment of storm water in the trough between the land and gulf.
- (c) If the width of the breach, embayment, or blowout is less than 100 feet, the length of the dune-building structure shall not exceed two-thirds of the width of the area.
 - (d) Dune-building structures shall be placed first at the landward point of the breach, embayment, or blowout that is farthest from the gulf shoreline.
 - (e) Multiple tiers dune-building structures may be used in these areas to increase sand entrapment and raise ground elevations. Breaks in the multiple tiers shall be offset to facilitate sand entrapment.
 - (f) No dune-building structure shall extend gulfward of the existing dune line on either side of breach, embayment, or blowout.
- (2) For repairing damaged sand dune frontal areas.
- (a) Dune-building structures for repairing damaged sand dune frontal areas shall be placed parallel to the gulf shoreline. The length of these structures shall conform to guidelines described above.
 - (b) Dune-building structures shall be placed no more than 20 feet seaward of the landward boundary of the public beach.
 - (c) The second tier of dune-building structures should be placed on the back slope of the dune created by the first tier to increase dune height and fill any trough which may be present between the existing dune and the newly created dune.
- (3) In washover areas.
- (a) Dune-building structures shall not be erected in washover areas except adjacent to the toe of existing dunes. Washover areas in Nueces County include, but may not be limited to, Packery Channel, Newport Pass, Corpus Christi Pass, and Fish Pass.
 - (b) Erection of dune-building structures adjacent to the toe of existing dunes in washover areas shall follow the guidelines for repairing damaged sand dune frontal areas described in the sections above. The dune building structures should be placed parallel to existing dunes bordering the wash over area instead of parallel to the gulf shoreline.
2. Vegetative means of improving, rebuilding, or repairing sand dunes.
- a. The placement and extent of planted areas shall conform to the guidelines established for mechanical means of improving, rebuilding, or repairing sand dunes in sections above.
 - b. Appropriate native vegetation shall be used for dune restoration and repair. The vegetation shall derive from a nursery or from an approved native vegetation area with high density vegetation.
 - c. Success of vegetative means of improving, rebuilding, or repairing sand dunes may be promoted by mulching, watering, using biodegradable netting, or fertilizing.
 - d. Sand dunes may be mechanically built and then vegetated to reduce dune building time.

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V. NUECES COUNTY BEACH MANAGEMENT ADVISORY COMMITTEE

A. Policy

1. It is the policy of the Commissioners Court of Nueces County that the Beach Management Plan will continue to undergo review, modification, and amendment to meet the changing requirements of the Texas Coastal Zone, the citizens of Nueces County, and other interests.
2. It is the policy of the Commissioners Court that the Nueces County Beach Management Plan and its subsequent modifications should be developed, modified, and amended with the maximum possible citizen input.
3. It is the policy of the Commissioners Court that there should be established standing working committee to advise the Commissioners Court on matters relating to the Beach Management Plan.

B. Establishment of Beach Management Advisory Committee

The Commissioners Court hereby establishes the Beach Management Advisory Committee. The Beach Management Advisory Committee shall serve as an advisory body to the Commissioners Court, on matters within the scope of this order. Nothing contained herein shall limit the authority of the Commissioners Court to establish other standing or ad hoc committees, subcommittees, or task forces as may be needed from time to time.

C. Beach Management Advisory Committee

The Beach Management Advisory Committee shall be composed of six to ten members and a chairperson appointed by the Commissioners Court.

It is the duty of the Beach Management Advisory Committee to:

- (1) Make, or review, all recommendations to the Commissioners Court for modifications or amendments to the Nueces County Beach Management Plan.
- (2) Review and recommend to the Commissioners Court actions on all Dune Protection Permits.
- (3) Make recommendations on issues regarding coastal management.

D. Committee Meetings

It is hereby ordered that all meetings called or conducted under this chapter shall comply with the Texas Open Meetings Act, as amended.

E. Bylaws

The committee shall establish and operate according to bylaws, which shall include standards of ethical conduct. The bylaws shall be capable of amendment by the committee.

F. Funding

Committee members shall serve without compensation by the Commissioners Court. The Nueces County Parks Department shall bear the expenses of the committee. The Commissioners Court must give prior approval for the reimbursement of expenses incurred by individual committee members in fulfilling their official duties. Reimbursement shall be at standard county rates and in accordance with established county policies.

G. Annual Report

The Beach Management Advisory Committee shall provide the Commissioners Court with an annual report of activities.

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VI. MANAGEMENT OF THE PUBLIC BEACH

A. General Access Standards

1. Recognition of other Authorities

- a. The Commissioners Court specifically recognizes that the entire barrier islands within Nueces County lay either within the City limits of Corpus Christi or Port Aransas, or within the extraterritorial jurisdiction of said cities.
- b. The Commissioners Court recognizes that it is the intent of each of those cities to exercise the authority granted under Section 61.015 (a), Texas Natural Resources Code and as such the Commissioners Court does not seek to adopt a "Beach Access Plan", as defined by Section 61.015(a), Texas Natural Resources Code.
- c. Any change in proposed or existing access roads currently maintained by Nueces County will comply with the Beach Access Plan adopted by the city in which jurisdiction the road lies.
- d. All portions of this order which may be co-regulated by these city are specifically adopted with such co-regulation acknowledged.
- e. The Commissioners Court will comply with all relevant portions of Beach Access Plans adopted the referenced cities, upon the approval of said plan by the Texas General Land Commissioner.

2. Public Beach Use Standards

The Commissioners Court shall comply with the following standards when authorizing activities affecting or relating to public beach access and use, subject to the approved beach access plan adopted by local governments with jurisdiction over the affected areas.

- a. Parking areas on or adjacent to the beach shall accommodate one car for each 15 linear feet of beach, subject to the limitations expressed herein.
- b. Where vehicles are permitted operation, vehicular access ways should be provided at no less than one for every two miles of Gulf beach.
- c. Where vehicles are prohibited from driving on and along the beach, access ways providing both ingress and egress shall be no farther apart than 1/2 mile.
- d. Signs shall be posted which conspicuously explain the nature and extent of vehicular controls, parking areas, and access points.

B. Designation of Access Ways, Parking Areas, and Beaches Closed to Motor Vehicles

1. The following areas, within Nueces County shall be maintained as public vehicular access ways to and from the public beach, subject to the terms of approved plans adopted by the cities with appropriate jurisdiction:

Public Gulf beach Access Road # 1

Public Gulf beach Access Road # 1a

Public Gulf beach Access Road #2

Mustang Island State Park Entrance Road (located within Mustang Island State Park)

Public Gulf beach Access Road #3(located within Mustang Island State Park)

Newport Beach Access Road

Zahn Road

Public Gulf beach Access Road #3a (a temporarily located easement, subject to relocation by landowner)

Whitecap Boulevard

Public Gulf beach Access Road #4

Public Gulf beach Access Road #5

The Main Entrance Road to Padre Balli Park

Public Gulf beach Access Road #6

2. The following areas shall be maintained as public pedestrian access ways to and from the public beach:

The Public Beach to the north and south of the Padre Island Seawall

3. The following areas shall be maintained as public beach access parking areas:

All Gulf beaches within Nueces County I outside of the city limits of the

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City of Corpus Christi and the City of Port Aransas, except portions of the beach restricted from parking as pedestrian-only areas. Such areas shall provide immediately adjacent on-beach parking sufficient to accommodate a minimum of one passenger motor vehicle per 15 linear feet of beach.

4. Provisions facilitating access to the beach for disabled persons shall be maintained at each of the above areas as needed to comply with the Americans with Disabilities Act.
5. The following, areas of the public beach are closed to vehicles:
 - a. Only those portions of beach identified by the Commissioners' Court as "safety areas." Such "safety areas" shall take the form of semi-circular separated areas rising landward from the mean low tide line. These areas shall be separated from the main traveled roadway by poles, bollards, or other such markings and shall be designed so as not to reduce traffic flow landward of such areas and shall, at a minimum, provide one standard passenger motor vehicle parking space for every 15 linear feet of beach affected. Additionally, the Commissioners' Court, elsewhere in this order, has restricted the movement, or parking of motor vehicles within 50 feet of the water's edge or within 10 feet of any dune along the public beach. These portions of the public beach are open to public access but are closed to motor vehicles or vehicles.
 - b. any portion of public beach main traveled roadway, as defined in this order, when the main traveled roadway shall be less than twenty five (25) feet in width. Such closure shall only be authorized for the period of time when the width remains less than the prescribed standard. During period of closures authorized under this section, the Court shall view these closures as temporary in nature and shall not provide additional off beach parking as defined herein.
 - c. Any additional closures proposed by the Commissioners Court shall be completed only after approval from the city with appropriate jurisdiction and the General Land Office.

C. Abandonments of Public Access or Parking Areas Prohibited.

The County shall not abandon, relinquish, or convey any right, title, easement, right-of-way, street, path, or other interest that provides existing or potential beach access or parking area, unless an equivalent or better beach access or parking area is first provided consistent with this order.

D. Interfering with Access Prohibited

1. No person shall create, erect, construct or maintain any obstruction, barrier, or restraint on or within a public beach or public access way to and from the beach, that will interfere with the free and unrestricted right of the public to use any public beach.
2. No person shall display or cause to be displayed on or adjacent to any public beach any sign, marker, or warning, or make or cause to be made any written or oral communication or other representation that the public beach, or a public access way to and from the public beach, is private property not subject to use by the public. This provision does not prohibit signs or other written or oral communications that areas landward of the line of vegetation and access ways thereon, other than public access ways, are private property.

E. Beach Closures

1. Public Necessity

The Commissioners Court may by order close areas of the public beach in cases of public necessity: "Public necessity" shall be limited to environmental emergencies, public health and safety emergencies, and governmental entities' performance of governmental functions whose importance justifies the restriction of public access. The Commissioners Court shall limit the closure to the smallest possible area and the shortest possible time necessary.

2. Authority of Peace Officer

This order does not restrict the ability of any peace officer to protect safety or property by exercising powers or carrying out duties conferred on the officer under generally applicable law.

F. Prohibition against littering

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1. Authority
The Commissioners Court has the authority to define and prohibit littering as provided for in Subchapter D of Section 61 of the Texas Natural Resources Code (61.122 {a}).
 2. It shall be an offense for any person to litter, or cause to be littered, any beach in Nueces County, Texas.
 3. This section shall not apply to persons acting under the authority of a letter of compliance with the requirements of Section IV of this plan (Dune Reconstruction) as issued under the authority of Section IV, Dune Reconstruction, of this plan.
 4. It shall be an offense for any person to violate any portion of this section of this order and upon conviction shall be punished as set forth in Section XI, Criminal Penalties.
- G. Camping
1. Authority
The Commissioners Court has the authority to insure, public access to the Gulf beaches as provided for in Section 61 of the Texas Natural Resources Code, (Sections 61.013, 61.014, 61.015, and 61.122). Additionally, the County has the authority to define and prohibit littering as provided for in Subchapter D of Section 61 of the Texas Natural Resources Code (61.122 {a}).
 2. Policy
 - a. It is the finding of the Commissioners Court that there exists on the public beach insufficient solid waste disposal facilities, cooking facilities, liquid waste facilities, or cleaning facilities ,to adequately protect the public at large from the health dangers of inadequately or improperly disposed--of waste materials from long term camping on the beach or in the dune areas and such camping creates a public nuisance or hazard.
 - b. It is the further finding of the Commissioners Court that camping on the beach, or in the dune areas, for a period greater than 14 days significantly restricts the right of the public at large to access and use of the public beach.
 3. No person shall camp on any public beach for a period greater than 14 days. "Camp" means to use for habitation any tent, lean- to, sleeping bag, blanket, automobile, trailer, camper, or other means of shelter
 4. It shall be an offense to camp on the public beach of Nueces County for a period greater than 14 days.
This section shall not be meant to limit the public usages of the public beach for short term camping, recreational camping, or other camping activities.
- H. Animal Control
1. Authority
The Commissioners Court of Nueces County is given authority to regulate animals on public beaches by Subchapter D of Section 61 of the Texas Natural Resources Code (Section 61.122(b)).
 2. Policy
 - a. It is the finding of the Commissioners Court that the unrestricted or uncontrolled running at large of animals can constitutes a threat to the unrestricted right of the public to access or use of the public beach.
 - b. It is the finding of the Commissioners Court that it is the right of existing landowners and tenants and their domestic animals to ingress and egress the public beaches by traversing the dune protection zone.
 - c. In furtherance of sections 61.011, 61.062 and 61.130 of the Texas Natural Resources Code,
it is hereby reaffirmed that the right of the public to use the public beaches and to have the free and unrestricted right of ingress and egress is inviolate, including the public's right to safely ride horses on such public beaches at all times of the year in all areas open to the public.

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- d. It is the finding of the Commissioners Court that a person commits an offense, in violation of section 42.01 of the Texas Penal Code, if he intentionally, knowingly or recklessly makes an offensive gesture or display, makes an unreasonable noise, discharges a firearm, explodes fireworks, throws any object at or near a horse or does any other thing tending to frighten or alarm a horse on a public beach.
 3. Prohibitions
 - a. A person commits an offense if he intentionally, knowingly or recklessly allows a dog or other animal to attack or take such other action calculated to frighten or alarm a horse on a public beach.
 - b. A person commits an offense if he intentionally, knowingly or recklessly operates a motor vehicle in a manner which tends to frighten or alarm a horse on a public beach.
 - c. A person commits an offense if he intentionally, knowingly or recklessly takes, uses or rides any horse without the consent of the owner thereof.
 - d. A person commits an offense if he knowingly or intentionally permits or causes a horse to run at large on the public beach.
 - e. A person commits an offense if he knowingly or intentionally or recklessly allow a dog or other animal to attack or threaten any other animal or any person on a public beach.
 - f. A person commits an offense if he knowingly or intentionally maintains or possesses a horse on a public beach without having on said horse a headstall, bridle, lead rope, reins, or such similar device customarily used to control horses.
 - g. A person commits an offense if such person rides a horse on a public beach while under the influence of alcohol or any other substance, to the degree that such persons may endanger themselves or others.
 - h. A person commits an offense if he rides a horse with a willful and wanton disregard for the safety of persons or property.
 4. The plan specifically incorporates all provisions of the Nueces County Animal Control order adopted May 15, 1991, and recorded in the Minutes of Nueces County Commissioners Court, as amended.
 - a. It shall be an offense for any person to violate any portion of this Chapter. Such offense is punishable as set forth in Section XI, Criminal Penalties, of this plan.
- I. Administrative Organization
1. Designation as Parks
 - a. By this order, under the authority of Section 321.001(b) of the Local Government Code, the Commissioners' Court hereby finds that the entire public beach, as defined herein and in the Texas Natural Resources Code, under the jurisdiction, authority, and responsibility of the Commissioners' Court is suitable for park purposes.
 - b. The Commissioners Court hereby assigns the administration, cleaning and maintenance responsibilities of the public beach, as defined in Section 61 of the Texas Natural Resources Code, to the Nueces County Board of Park Commissioners, a body created under the authority of Section 321 of the Local Government Code.
- J. Standards for Beach Maintenance and Other Activities
1. Protection of Resources

The Commissioners Court shall not authorize or undertake any beach maintenance or management activities that materially weaken dunes or dune vegetation, reduce the protective functions of dunes, result insignificant redistribution of sand, or significantly alter the beach profile. All sand moved or redistributed due to beach maintenance activities of the county shall be returned to a location seaward of the vegetation line.
 2. Preservation of Access

The Commissioners Court recognizes that the primary public method of access to the Gulf beaches in Nueces County is through and by the safe operation of motor vehicles. The

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Commissioners Court wishes to insure public access and parking on the Guff Beach, subject only to the limitations contained in this order. As such beach maintenance may include those activities necessary to maintain a safe passable roadway on the Gulf beach.

- a. "Beach maintenance" means the cleaning or removal of natural or man-made debris from the beach by handpicking, raking, or mechanical means, and the provision of an environment safe for the use of persons, and not restricting the public's right of access. This may include activities necessary to provide for the safe operation of motor vehicles.
- b. Maintenance shall include all activities necessary to accomplish these goals and may include:
 - (1) Hand picking,
 - (2) Raking or sifting,
 - (3) relocation of sand in a manner to allow for the safe operation of motor vehicles, Berms may be created at beaches with high density usage for the purposes of public safety. Such berms may not exceed the height or length necessary for protecting the public.
 - (4) relocation of sand in a manner to control or reduce the spread of tide borne debris along the beach,

3. Authorized Beach Maintenance Procedures

The Commissioners Court hereby authorizes the Director of County Parks, or his representative, to work with the staff from the Texas General Land Office to develop policies and practices within the guidelines of this order.

- a. These policies and practices will be developed prior to the relocation of sand into "berms" for public safety purposes.
- b. The Director may receive, on a case by case basis, approval from the General Land Office for the temporary placement of traffic control "berms"

4. Disposal Methods

The Commissioners Court authorizes the following debris disposal methods.

- a. Natural debris: Natural debris includes non-man-made items including seaweed, driftwood, natural seepage oils, petroleum, and other materials.
 - (1) Natural debris, other than that which is found to be harmful to people, flora, and fauna, may be disposed of by removal from the island to an approved land fill, by placement in blowout areas or breaches of the island dune structure, or by burial seaward of the vegetation line; at or near the site found.
 - (2) Man-made or anthropogenic debris. Man-made debris includes all manufactured items, including, plastics, metal containers, paper products, or other materials. Man-made debris shall be removed from the barrier island and disposed of in landfills, sewage disposal plants, or other approved disposal sites.

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VII. BEACH TRAFFIC ORDERS

A. Authority

The Commissioners Court is authorized by Subchapter D of Section 61 of the Texas Natural Resources Code ({} 61.122{a}) to regulate traffic on Gulf beaches. The following regulations shall apply only to the Gulf beaches within Nueces County parks and property.

B. General Operation of Motor Vehicles

1. Pedestrians shall have the right of way and vehicles shall stop and allow pedestrians to cross to and from the beach.
2. No person shall operate or cause to be operated any vehicle on any beach designated in this order as closed to vehicular traffic.
3. No person shall drive or operate for recreational purposes any dune buggy, marsh buggy, minibike, trail bike, jeep, or any other mechanized vehicle on a dune seaward of the dune protection line.

C. Speed limits

1. From and after the effective date of this order no person shall operate or cause to be operated any motor vehicle at a speed in excess of 15 miles per hour upon the beach of Nueces County.
2. Operation of a vehicle within the stated area at a rate of speed in excess of 15 miles per hour shall constitute an offense.

D. Obstruction of the Main Traveled Roadway

1. It shall be an offense for a person to drive or operate a motor vehicle on any portion of the beach other than on the main traveled roadway of such beach.
This section shall not apply to the driver of any vehicle while proceeding to any other area of the beach for the purpose of parking such vehicle, or returning therefrom, so long as the route taken is the most direct route.
2. It shall be an offense for any person to stop, park, or leave standing any vehicle, whether attended or unattended, upon the main traveled roadway of the beach.
 - a. This section shall not apply to the driver of any vehicle which is disabled while on the main traveled roadway of the beach in such manner and to such extent that it is impossible to avoid stopping and temporarily leaving such disabled vehicle in such position.
 - b. Whenever any peace officer finds a vehicle, trailer, house-trailer, tent, umbrella, surfboard or other object placed, parked or standing upon the main traveled roadway of the beach in violation of this section, such officer is hereby authorized to move such vehicle, or items, or require the driver or other person in charge to move the same, to a position off the main traveled roadway of the beach.

E. Vehicular Operation

1. It shall be an offense for a person to drive or operate a motor vehicle on the beach in willful or wanton disregard for the safety of persons or property.
2. It shall be an offense for a person to drive or operate a motor vehicle with persons seated or standing on the exterior of the motor vehicle. This shall not apply to a vehicle operated with persons fully seated on the floor of the bed of a pickup truck.
3. It shall be an offense for a person to operate a motor vehicle towing any person, object, material, or item other than a registered vehicle.
4. It shall be an offense for a person to operate a vehicle within 50 feet of the water's edge on any Gulf beach located within the boundaries of Nueces County, Texas.
This traffic regulation shall not apply to the following listed activities and segments of Gulf beaches:
 - (1) Vehicle engaged in the actual launching or loading of water craft.
 - (2) Maintenance and emergency vehicles.
5. It shall be an offense for any person to violate any portion of this section of this order and upon conviction shall be punished as set forth in Section XI, Criminal Penalties

F. Parking

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1. Authority

The Commissioners Court is authorized to regulate traffic by subchapter D of Section 61 of the Texas Natural Resources code (§ 61.122{a}) and to impose parking fees by Subchapter C, Section 63 of the Texas Natural Resources Code (§ 63.053{b})

2. Offense

- a. It shall be an offense for any person to park, or leave standing either attended or unattended, a motor vehicle on any portion of the beach within Nueces County, outside of the areas exempted in Section VII.F.4, without having first placed on the lower right hand portion of the front windshield or, in the absence of a windshield such other location where the permit may be permanently attached and readily visible, of the motor vehicle a current permit issued by the Commissioners Court authorizing parking on the Gulf beach.

3. Permits

- a. The Commissioners Court shall make available to the public annual and monthly permits for the fees contained herein.

4. Exempted Areas

- (1) No permit shall be required for parking in a developed (paved) parking area located within a park operated by the Nueces County Board of Park Commissioners.
- (2) In addition, the Commissioners Court may, from time to time, exempt other portions of the beach from the requirements for permitted parking.
- (3) The Commissioners Court may from time to time, establish such other policies as necessary to enforce or enhance this program.

5. Reciprocity

- a. In an effort to insure the reciprocity of parking permit programs between the City of Port Aransas and Nueces County, the Nueces County Commissioners Court additionally exempts all portions of the public beach within the contiguous limits of the City of Port Aransas from the requirements of a parking permit issued by Nueces County.

6. It shall be an offense for any vehicle to park within 25 feet of the waters edge on any Gulf beach located within the boundaries of Nueces County. Texas.

7. It shall be an offense for any person to operate a motor vehicle in such a manner as to travel or park closer than 10 feet to any dune.

8. No vehicle shall park within thirty 30 feet of a manned lifeguard station. The parking of a vehicle within the stated area shall constitute an offense.

9. It shall be an offense for any person to park or place any vehicle, trailer, house-trailer, tent, umbrella, surfboard, or other object on any portion of the beach which, when so parked or placed in conjunction with any other vehicle, trailer, house-trailer, umbrella, surfboard or other object interferes with or obstructs vehicular or pedestrian traffic on any portion of the beach, or which shall constitute a restraint, barrier or obstruction so as to interfere with the rights of the public, individually or collectively, to the free and unrestricted use of the beach.

For the purposes of this section the parking or placement of any trailer, vehicle, motor vehicle, tent, or other structure on the beach for a period of 14 or more days shall be prohibited.

10. Nothing in this plan shall serve to limit the authority of a peace officer to alter pedestrian or vehicular access due to special situations that may from time to time, exist on the beach.

These special situations may include, but are not limited to:

- a. large crowds
b. environmental emergencies

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- c. public safety emergencies .
- d. traffic control emergencies.

11. The parking of a vehicle within stated areas, or in violation of the terms expressed herein, shall constitute an offense and upon conviction shall punished as set forth in Section XI, Criminal Penalties.

G. Pedestrian Crossings

1. Nueces County, by and through its Beach Services Operations, may place signs stating, "Stop for Pedestrians" facing the direction from which traffic is authorized to flow as hereinabove authorized.
2. Such signs shall be placed in a manner as to regulate the flow of traffic and to allow the safe passage of pedestrian traffic across the main traveled roadway.
3. It shall be an offense for an operator of any motor vehicle to fail to come to a complete stop when a pedestrian is within the immediate area of said sign stating, "Stop for Pedestrians," and attempting to cross the traveled portion of said beach.
4. It shall be an offense for any person to violate any portion of this section of this order and upon conviction shall punished as set forth in Section XI, Criminal Penalties.

H. Operation of Motor Vehicles Within the Padre Balli Park Beach Roadway

1. IT IS HEREBY ORDERED that from and after the effective date of this Order motor vehicle traffic on the above described portion of beach shall be one-way only in a southerly direction of travel and confined to the main traveled roadway from Beach Access Road Number 3A to the intersection of the said main traveled roadway of said beach with Padre Balli Park Main Entrance Road.
2. It shall be an offense for any person to operate a motor vehicle on or along the above described portion of beach in any manner other than in a southerly direction of travel and on the main travel-eked roadway of said beach.

I. Offense

Any person who commits an offense, as defined in this chapter, upon conviction shall be punished as set forth in Section XI, Criminal Penalties.

J. Emergency Vehicles

1. The prohibitions in this section do not apply to an authorized emergency vehicle, beach patrol, police, safety, or maintenance vehicle operating within the scope of official duties.

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VIII. BEACH USER FEE PLAN

A. Beach User Fee

1. In order to establish and maintain beach-related services and facilities for the preservation and enhancement of access to and from and safe and healthy use of public beaches by the public, a maximum fee of \$12.00 per year for each vehicle parked in the following public beach areas:
The entire public Gulf beach located within Nueces County, except those portions of the public Gulf beach located within the contiguous city limits of the City of Port Aransas, as of the date of the adoption of this order, and the entire paved parking area located adjacent to Bob Hall Pier in the Padre Balli Park, and the entire portion of Gulf beach located within the boundaries of the Mustang Island State Park.
2. No fee shall be charged by Nueces County in the following areas:
The entire city of Port Aransas, the paved parking area at Bob Hall Pier, and the Mustang Island State Park

B. Permits

1. Beach Parking permits shall be sold to the public for a fee of not more than \$12.00 for a permit good for twelve months from the month of issue.
2. Permits shall be sold in such a manner as to be reasonably available to all members of the public at all times. In furtherance of this section the Commissioners Court, or its designee, may sell permits by the following methods:
 - a. direct sales to the public through the automobile registration process.
 - b. direct sales to the public at other County offices
 - c. sales to merchants and vendors for subsequent sales to the public.
 - (1) the Commissioners Court reserves the right to set fees to be paid to merchants and vendors authorized in Section VIII B.2.c. of this plan. Such fees shall be at a rate determined to be in the best interest of the County. Such fees not to exceed a total of \$0 .50 per permit sold.
 - (2) the Commissioners Court reserves the right to establish further rules, bonds, fees or other procedures to be used in the bulk sales of permits.
3. Permits for camping issued by the Nueces County Board of Park Commissioners for users of the Nueces County Padre Balli Park or the Nueces County Port Aransas County Park shall serve as permits for parking on the beaches of Nueces County within said parks for the period for which the camping permit is valid.
4. Nueces County may, by Interlocal Agreement, Article 4413(32c).VTCS, agree with cities located within Nueces County to accept permits issued by such cities as valid, county permits for the purposes of this section, as authorized by § 63:01-1(b) and (c) of the Texas Natural Resources Code.
5. Nueces County may, by Interlocal Agreement agree with neighboring counties to accept permits issued by such counties, or to administer such counties' permit programs.

C. Use of Fee Revenue

1. Revenues from beach user fees may be used only for beach-related services.
 - a. "Beach-related services" means reasonable and necessary services and facilities directly related to the public beach which are provided to the public to ensure safe use of and access to and from the public beach, such as vehicular controls, management, and parking (including acquisition and maintenance of off-beach parking and access ways); sanitation and litter control; life guarding and lifesaving; the cleaning or removal of debris from the beach by hand picking, raking, or mechanical means; Law enforcement; beach nourishment projects; beach/dune system education; beach/dune protection to restoration projects;

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providing public facilities such as restrooms, showers, lockers, equipment rental's, and picnic areas; recreational and refreshment facilities; liability insurance; and staff and personnel necessary to provide beach-related services. Beach-related services and facilities shall serve only those areas on or immediately adjacent to the public beach.

2. All funds derived by Nueces County from the fee requirement of this chapter shall be used exclusively for the following purposes:
 - a. the costs of printing and distributing the permits.
 - b. other costs of administering the requirements of Section VIII of this order.
 - c. for the provision, construction, maintenance, replacement and repair of:
 - (1) sanitary facilities, on the beach provided for the use and convenience of the public.
 - (2) on and off beach parking facilities,
 - (3) traffic control or road signs, devices or structures on the beach, and
 - (4) sand dunes
 - d. the cleaning and maintenance of the public beach.
 - e. public safety on the beach,
 - f. all costs directly related to the management of the beach, and
 - g. not less than 15% of the funds received shall be set aside to enhance access, provide for safe and healthy use of public beaches, or to provide for public facilities and public services.
- D. Indirect Costs and Accounting
 1. No more than 10% of beach user fee revenues shall be expended on reasonable indirect costs related to beach-related services.

"Indirect costs" means costs of administrative programs, services, or personnel that partially support beach-related services and to which beach user fee revenues are applied using a general rather than detailed method of apportionment.
 2. The Nueces County Auditor shall send quarterly reports to the General Land Office stating the amount of beach user fee revenues collected and itemizing how beach user fee revenues are expended. Beach user fee revenues shall be maintained and accounted for so that fee collections may be directly traced to expenditures on beach-related services. Beach user fee revenues shall not be commingled with any other funds and shall be maintained in special accounts. Beach user fee revenue expenditures shall be documented in a separate financial statement for each different beach user fee. Beach user fee revenue account balances and expenditures shall be documented according to generally accepted accounting principles.

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IX. INTERGOVERNMENTAL COOPERATION

A. Policy

1. It is the finding of the Commissioners Court that the barrier islands, dunes, and beaches of Nueces County are similar in nature to the barrier islands, dunes, and beaches in adjacent areas of the Coastal Bend.
2. It is the finding of the Commissioners Court that the Coastal Bend barrier islands differ from others on the Texas coast.
3. It is the finding of the Commissioners Court that cooperation between Nueces County, the cities located within Nueces County on the barrier islands of Nueces County, adjacent Federal, State, county, and city governments is in the best interests of the public since it can insure:
 - a. consistent beach access polices information and enforcement,
 - b. consistent dune protection polices, information, and enforcement, and
 - c. ease of access to information relating to public beach access, dune protection, and other coastal issues by the public at large.

B. The Intergovernmental Cooperation Advisory Task Force

1. The Nueces County Commissioners Court hereby establishes the Intergovernmental Cooperation Advisory Task Force to function as an advisory committee to the Commissioners Court.
2. The Intergovernmental Cooperation Advisory Task Force shall be composed of:
 - a. Two members appointed by the Commissioners Court of Nueces County, one of whom will serve as chairperson,
 - b. One member of the Beach Management Advisory Committee,
 - c. One member appointed by the County Attorney of Nueces County,
 - d. One member appointed by the Commissioners Court of Kleberg County,
 - e. One member appointed by the City Council of the City of Corpus Christi,
 - f. one member appointed by the City Council of Port Aransas,
 - g. One member appointed by the Nueces County Water Control and Improvement District, Number 4,
 - h. One member appointed by the Superintendent of the Padre Island National Seashore, and
 - i. One member appointed by the Superintendent of the Mustang Island State Park.
3. The task force shall return to the Nueces County Commissioners Court with recommendations to:
 - a. promote intergovernmental cooperation between the jurisdictions on the Coastal Bend barrier islands, and
 - b. recommendations for the preservation of the ecological function of the barrier island features, the establishment of uniform traffic, public access, dune protection, animal control, and other orders or ordinances to be considered by the Commissioners Court.
4. The task force maybe funded by the Nueces County Commissioners Court through the Nueces County Parks Department.
5. The task force shall draw on the resources of the Nueces County Beach Management Advisory Committee for necessary expertise.

C. Agreements

1. The Commissioners Court may enter into interlocal agreements to promote intergovernmental cooperation between jurisdictions on the barrier islands.

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X. CIVIL PENALTIES

Any person who violates either the Dune Protection Act, the Open Beaches Act, this order, or a permit condition is liable for a civil penalty of not less than \$50 nor more than \$1,000 per violation per day. Each day the violation occurs or continues constitutes a separate violation. Violations of the Dune Protection Act, the Open Beaches Act, and the rules adopted pursuant to those statutes are separate violations. The assessment of penalties under one Act does not preclude another assessment of penalties under the other Act for the same act or omission. Conversely, compliance with one statute and the rules adopted thereunder does not preclude penalties under the other statute and the rules adopted pursuant to that statute. The Commissioners' Court shall consider the following mitigating circumstances when referring violations for assessment of penalties: acts of God, war, public riot, or strike; unforeseeable, sudden, and natural occurrences of a violent nature; and willful misconduct by a third party not related to the permittee by employment or contract

XI. CRIMINAL PENALTIES

Any person, firm or corporation violating an offense portion of this plan shall be guilty of a misdemeanor, and upon conviction of such violation shall be punished as follows:

1. for a first conviction, a fine of not less than \$50; nor more than \$100;
2. for a second conviction a fine of not less than \$100 nor more than \$ 200;
3. for any subsequent convictions after the second conviction, a fine of not less than \$ 200 nor more than \$1,000 or confinement in the county jail for not more than 60 days, or both.

For offenses of littering or causing to be littered as cited in Section VI Management of the Public Beach (F) Prohibition Against Littering, any person, firm or corporation violating this offense portion of this plan shall be guilty of a misdemeanor, and upon conviction of such violation shall be punished as follows:

1. for a first conviction, a fine of not less than \$100; nor more than \$200;
2. for a second conviction, a fine of not less than \$200 nor more than \$400;
3. for any subsequent convictions after the second conviction, a fine of not less than \$400 nor more than \$2,000 or confinement in the county jail for not more than 60 days, or both.

XII. GENERAL PROVISIONS

A. Construction.

1. This order and all orders, resolutions, or other enactments related Of pursuant this order shall be read in harmony with county orders of general applicability. If there is any conflict between them which cannot be reconciled by ordinary rules of legal interpretation, this order controls.
2. This order and all orders, resolutions, or other enactments related or pursuant to this order shall be read in harmony with the Open Beaches Act, the Dune Protection Act, and General Land Office rules implementing them. If there is any conflict between them which cannot be reconciled by ordinary rules of legal interpretation state law provisions control.

B. Boundary Determinations.

The Texas General Land Office shall make determinations on issues related to the location of the boundary of the public beach and encroachments on the public beach pursuant to the requirements of the Open Beaches Act, Sec. 61.016 and Sec. 61.017. The county shall consult with the Texas General Land Office whenever questions of encroachment and boundaries arise with respect to the public beach.

C. Beaches Presumed to be Public.

The Commissioners Court shall presume that any beach fronting the Gulf of Mexico is a public beach unless the owner of the adjacent land obtains a declaratory judgment otherwise under the Open Beaches Act. § .61.019. That section provides that any person owning property fronting the Gulf of Mexico whose rights are determined or affected by this order may bring suit for a declaratory judgment against the state to try the issue or issues.

D. General Prohibition.

No person shall violate any provision of this order or any permit or the conditions contained therein.

E. Appeals.

The Dune Protection Act, § 63.151, and the Open Beaches Act, § 61.019, contain the provisions for appeals related to this order.

Nueces County Beach Management Plan
As Adopted by the Nueces County Commissioners Court on July 14, 2010

XIII. SIGNS INDICATING REGULATIONS

- A. Immediately after the passage of this order the County Engineer is authorized to design, construct and install, traffic regulation and speed limit signs, indicating the regulations prescribed in this order; such signs shall be in compliance with the current provisions of the Texas Manual on Traffic Control Devices for Streets and Highways, stating the applicable speed limits and motor vehicle traffic regulations or prohibitions, as the case may be.
- B. The General Land Office will, in conjunction with the State Department of Highways and Public Transportation, design and produce a uniform bilingual beach access sign to be used by Nueces County to designate access ways to and from public beaches.
Upon the receipt of such signs the County Engineer shall cause sufficient signs to be placed at each public beach access point within the jurisdiction of Nueces County to insure adequate public notice of such access point.
- C. Nueces County may provide, at the request of littoral landowners, appropriate signing allowing for the protection of the ecological function of barrier island features. These signs include, but are not limited to, dune reconstruction areas.

XIV. ENFORCEMENT

- A. Generally
 1. The General Land Office, in consultation with the Attorney General, individually or at the request of the Commissioner, or any county attorney, district attorney, or criminal district attorney shall file in a district court of Travis County, or in the county in which the property is located, a suit to obtain either a temporary or permanent court order or injunction, either prohibitory or mandatory, to remove or prevent any improvement, maintenance, obstruction, barrier, or other encroachment on a public beach, or to prohibit any unlawful restraint on the public's right of access to and use of a public beach or other activity that violates this plan.
 2. In the same suit the Attorney General, Texas General Land Office, the Commissioner, county attorney, district attorney, or criminal district attorney may recover penalties and the costs of removing any improvement, obstruction barrier or other encroachment if it is removed by public authorities pursuant to an order of the court.
 3. A person who violates this Plan, unless other penalties are herein specified, is liable for a civil penalty of not less than \$50 nor more than \$1,000. Each day the violation occurs or continues is a separate violation.
 4. The Attorney General, either individually or at the request of the Commissioner or any county attorney, may bring a suit for a declaratory judgment to try any issue affecting the public's right of access to or use of the public beach.
- B. The portions of this plan designated as an offense are enforceable by any authorized peace officer within Nueces County.

XV. REPEAL OF CONFLICTING ORDERS

All orders and resolutions of the Commissioners Court hereto enacted that are in conflict herewith, and specifically those portions of the Commissioners Court Orders entered March 13, 1973, recorded in volume 18, pages 326-328; entered August 12, 1980, recorded in volume 22, pages 98-99; entered April 3, 1979, recorded in volume 21, pages 334--336; entered August 12, 1980 Recorded in volume 22 pages, 96.-97; entered July 5, 1983 recorded in volume 23, pages 631--632; entered November 9, 1982 recorded in volume 23 pages 11-12; and entered March 25, 1992 Recorded on volume 25 pages 662-688; entered October 23, 1996 recorded in volume 29, page 327; and entered December 3, 1997, recorded in volume 30 page 162; entered March 6, 2005, document No. 20050032 that are in conflict herewith, are repealed.

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Nueces County Beach Management Plan
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XVI. DEFINITIONS.

The following words and terms when used in this order shall have the following meanings, unless the context clearly indicates otherwise.

Affect

As used this Section regarding dunes, dune vegetation, and the public beach, "affect" means to produce an effect upon dunes, dune vegetation, or public beach use and access.

Amenities

Any nonhabitable major structure including swimming pools, bathhouses, detached garages, cabanas, pipelines, piers, canals, lakes, ditches, artificial runoff channels and other water retention structures, roads, streets, highways, parking areas and other paved areas (exceeding 144 square feet in area), underground storage tanks and similar structures.

Applicant

Any person applying to Nueces County for a dune protection permit and/or certificate or master planned amendment and subsequent letters of compliance for any construction or development plan.

Backdunes

The dunes located landward of the foredune ridge which are usually well vegetated but may also be un- vegetated and migratory. These dunes supply sediment to the beach after the foredunes and the foredune ridge have been destroyed by natural or human activities.

Beach

By the term "beach" or "public beach" as used herein is meant that meaning assigned by Section 61.013@) of the Texas Natural Resources Code, as amended.

Beach access

The right to use and enjoy the public beach including the right of free and unrestricted ingress and egress to and from the public beach.

Beach/dune system

The land from the line of mean low tide of the Gulf of Mexico to the landward limit of dune formation.

Beachfront construction certificate or certificate

The document issued by either the City of Corpus Christi or the City of Port Aransas that certifies that the proposed construction either is consistent with that local government's Beach Management Plan or is in consistent with that plans. In the latter case, the local government will specify how the construction is inconsistent with the plan, as required by the Open Beaches Act, 61.015.

Beach maintenance

The cleaning or removal of natural and man-made debris from the beach by handpicking, raking, or mechanical means, as further defined in section VI.J page 31

Beach profile

The shape and elevation of the beach as determined by surveying a cross section of the beach.

Beach-related service

Reasonable and necessary services and facilities directly related to the public beach which are provided to the public to ensure safe use of and access to and from the public beach, such as vehicular controls, management, and parking (including acquisition and maintenance of off-beach parking and access ways); sanitation and litter control; life guarding and lifesaving; beach maintenance; law enforcement; beach nourishment projects; beach/dune system education; beach/dune protection and restoration projects; providing public facilities such as restrooms, showers, lockers, equipment rentals, and picnic areas; recreational and refreshment facilities; liability insurance; and staff and personnel necessary to provide beach-related services. Beach- related services and facilities shall serve only those areas on or immediately adjacent to the public beach.

Beach user fee

A fee collected by Nueces County in order to establish and maintain beach-related services and facilities for the preservation and enhancement of access to and from and safe and healthy use of public beaches by the public.

7.

Nueces County Beach Management Plan

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Blowout

A breach in the dunes caused by wind erosion.

Breach

A break or gap in the continuity of a dune caused by wind or water.

Bulkhead

A structure or partition built to retain or prevent the sliding of land. A secondary purpose is to protect the upland against damage from wave action.

Coastal and shore protection project

A project designed to slow shoreline erosion, enhance shoreline stabilization, or increase shoreline accretion, including, but not limited to, erosion response structures, beach nourishment, sediment bypassing, construction of man-made vegetated mounds, and dune re-vegetation.

Commercial facility

Any structure used for providing, distributing, and selling goods or services in commerce including, but not limited to, hotels, restaurants, bars, rental operations, and rental properties.

Commissioner

"Commissioner" means the Commissioner of the General Land Office.

Commissioners Court

The Commissioners Court of Nueces County, Texas.

Construction

Causing or carrying out any building, bulk heading, filling, clearing, excavation, or substantial improvement to land or the size of any structure. "Building" includes, but is not limited to, all related site work and placement of construction materials on the site. "Filling" includes, but is not limited to, disposal of dredged materials. "Excavation" includes, but is not limited to, removal or alteration of dunes and dunes vegetation and scraping, grading, or dredging a site. "Substantial improvements to land or the size of any structure" include, but are not limited to, creation of vehicular or pedestrian trails, landscape work (that adversely affects dunes or dune vegetation), and increasing the size of any structure.

Coppice mounds

The initial stages of dune growth formed as sand accumulates on the downwind side of plants and other obstructions on or immediately adjacent to the beach seaward of the foredunes. Coppice mounds may be un-vegetated.

Critical dune areas

Those portions of the beach/dune system that are located within 1,000 feet of mean high tide of the Gulf of Mexico that contain dunes and dune complexes that are essential to the protection of public beaches. submerged land, and state-owned land, such as public roads and coastal public lands, from nuisance, erosion, storm surge, and high wind and waves, as defined by the Commissioner of the General Land Office.

Cumulative impact

The effect on beach use and access, on a critical dune area, or an area seaward of the dune protection line which results from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Dedication

Includes, but is not limited to, a restrictive covenant, permanent easement, and fee simple donation.

Dune

An emergent mound, hill, or ridge of sand, either bare or vegetated, located on land bordering the waters of the Gulf of Mexico. Dunes are naturally formed by the windward transport of sediment, but can also be created via man-made vegetated mounds. Natural dunes are usually found adjacent to the uppermost limit of wave action and are marked by an abrupt change in slope landward of the dry beach. The term includes coppice mounds, foredunes, dunes comprising the foredune ridge, backdunes, and man-made vegetated mounds.

Nueces County Beach Management Plan
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Dune Area

By the term "dune area" this plan shall mean that portion of the barrier island immediately adjacent to the beach, as defined herein, on which there exist sand dunes. This dune area shall extend no less than the entire dune protection zone of the area in question.

Dune complex

Any emergent area adjacent to the waters of the Gulf of Mexico in which dunes are found or in which dunes have been established through human efforts. Dune complexes may contain depressions known as swales.

Dune Protection Act

Texas Natural Resources Code, section 63.001, et seq.

Dune protection and beach access plan or plan

The portions of the Nueces County Beach Management Plan which includes a legally enforceable program, policies, and procedures for protecting dunes and dune vegetation, and for preserving and enhancing use of and access to and from public beaches, as required by the Dune Protection Act and the Open Beaches Act.

Dune protection line

A line established by the County Commissioners' Court for the purpose of preserving, at a minimum, all critical dune areas identified by the Commissioner of the General Land Office pursuant to the Dune Protection Act, §63.011, Texas Natural Resources Code. No municipality within Nueces County is authorized to, establish a dune protection line unless the authority to do so has been specifically delegated to the municipality by the Nueces County Commissioners' Court. Such lines will be located no farther than 1,000 feet landward of the mean high tide of the Gulf of Mexico.

Dune Protection Zone

The "Dune Protection Zone" shall be defined as that portion of a barrier island located between the dune protection line, as defined herein, and the line of mean low tide.

Dune protection permit or permit

The document authorizing the applicant to perform construction or other regulated activities in a specified location seaward of a dune protection line, as provided in the Texas Natural Resources Code, §63.051. The Commissioners Court may include in a permit the terms and conditions it finds necessary to assure the protection of life, natural resources, and property.

Dune vegetation

Flora indigenous to natural dune complexes on the Texas coast and can include coastal grasses and herbaceous and woody plants.

Effect or effects

"Effects" include: direct effects - those impacts on public beach use and access, on critical dune areas, or on dunes and dune vegetation seaward of a dune protection line which are caused by the action and occur at the same time and place; and indirect effects- those impacts on beach use and access, on critical dune areas, or on dunes and dune vegetation seaward of a dune protection line which are caused by an action and are later in time or farther removed in distance than a direct effect, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems. "Effects" and "impacts as used in this Subchapter are synonymous. "Effects" may be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.

Emergency response activity

An action taken on a rapid response basis which is necessary to protect infrastructure, human health, or the environment, before review by the Commissioners Court and General Land Office is possible.

Eroding area

A portion of the shoreline which is experiencing an historical erosion rate of greater than two foot per year based on published data of the University of Texas at Austin, Bureau of Economic Geology.

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Nueces County Beach Management Plan
As Adopted by the Nueces County Commissioners Court on July 14, 2010

Erosion

The wearing away of land or the removal of beach and/or dune sediments by wave action, tidal currents, wave currents, drainage, or wind. Erosion includes, but is not limited to, horizontal recession and scour and can be induced or aggravated by human activities.

Erosion response structure

A hard or rigid structure built for shoreline stabilization which includes, but is not limited to, a jetty, retaining wall, groin, breakwater, bulkhead, seawall, rip-rap, rubble mound I revetment, or the foundation of a structure which is the functional equivalent of these specified structures.

FEMA

The United States Federal Emergency Management Agency. This agency administers the National Flood Insurance Program and publishes the official flood insurance rate maps.

Foredunes

The first clearly distinguishable, usually vegetated, stabilized large dunes encountered landward of the Gulf of Mexico. Foredues may also be large, un-vegetated, and un-stabilized. Although they may be large and continuous, foredues are typically hummocky and discontinuous and may be interrupted by breaks and washover areas. Foredues offer the first significant means of dissipating storm generated wave and current energy issuing from the Gulf of Mexico. Because various heights and configurations of dunes may perform this function, no standardized physical description applies. Foredues are distinguishable from surrounding dune types by their relative location and physical appearance.

Foredune ridge

The high continuous line of dunes which are usually well vegetated and rise sharply landward of the foredune area but may also rise directly from a flat, wave-cut beach immediately after a storm.

Habitable structures

Structures suitable for human habitation including, but not limited to, single, or multi-family residences, Hotels, condominium buildings, and buildings for commercial purposes. Each building of a condominium regime is considered a separate habitable structure, but if a building is divided into apartments, then the entire building, not the individual apartments, is considered a single habitable structure. Additionally, a habitable structure includes porches, gazebos, and other attached improvements.

Industrial facilities

Includes, but are not limited to, those establishments Listed in Part 1, Division D, Major Groups 20-39 and Part 1, Division E, Major Group 49 of the standard Industrial Classification Manual as adopted by the Executive Office, of the President, Office of Management and Budget (1987 ed.). However, for the purposes of this subchapter, the establishments listed in Part 1, Division D, Major Group 20, Industry Group Number 209, Industry Numbers 2091 and 2092 are not considered "industrial facilities."

Land Office

"Land office" means the General Land Office.

Large-scale construction

Construction activity greater than 5,000 square feet or habitable structures greater than two stories in height. Both the area beneath the lowest habitable level of an elevated structure and a cupola (i.e. "widow's walk") with an area of 400 feet or less on the top of the second habitable story are not considered stories for the purpose of this section. Multiple-family habitable structures are typical of this type of construction.

Line of vegetation

The extreme seaward boundary of natural vegetation which spreads continuously inland. The line of vegetation is typically used to determine the landward extent of the public beach. "Line of vegetation is further defined in §61.001(5), 61.016 and 61.017 of the Texas Natural Resources Code.

Litter

The term "litter" as used herein means the following: metal containers of any type; paper materials in any form; plastic materials in any form; trash, debris of any type or character including, but not limited to, broken toys, and wood, metal, or any type of box, container, .or receptacle; glass in any form, whether in use or not in use; food or any remnant or residue thereof.

9.

Nueces County Beach Management Plan
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Littering

The term "littering," as used herein shall mean the following: Any act of placing on the ground scattering, or leaving unattended upon any beach in Nueces County, any substance which constitutes litter under this order, or possession of glass containers, whether in use or not in use, upon any public beach in Nueces County.

Littoral owner

"Littoral owner" means the owner of land adjacent to the shore and includes a lessee, licensee, or anyone acting under the littoral owner's authority.

Local government

The county government of Nueces County, Texas. As represented by the majority action of the Commissioners' Court of Nueces County

Main traveled roadway

That portion of the beach, between a point fifty (50) feet from the water's edge and the line of vegetation, as herein defined, ordinarily used by the majority of vehicles for vehicular traffic at the time and place in question, unless otherwise defined by traffic control devices. The main traveled roadway shall be at all times greater than twenty five feet in width.

Man-made vegetated mound

A mound, hill, or ridge of sand created by the deliberate placement of sand or sand trapping devices including sand fences, trees, or brush and planted with dune vegetation.

Master planned development

A document containing maps, drawings, narrative, tables, and other forms of communication that provides information about the proposed use of specific land and/or water that includes, but is not limited to, as appropriate, descriptions of land and/or water uses, land and/or water use intensities, building and/or site improvement Locations and sizes, relationships between buildings and improvements, vehicular and pedestrian access and circulation systems, parking, utility systems, storm water management and treatment systems, geography, geology, impact assessments, regulatory-approved checklist, and phasing. Information in the master plan may be conceptual or detailed depending on the status of its regulatory approval.

Material Change

"Material change" includes human or natural conditions which have adversely affected dunes, dune Vegetation, or beach access and use that either did not exist at the time of the original, application, or were not considered by the Commissioners Court in making the permitting decision because the permittee did not provide information regarding the site condition in the original application.

Mean High Tide

An elevation that is located 1.70 feet above the 1983 National Geodetic Vertical Datum. The maps adopted by the Nueces County Commissioners Court, as defined in Section II.D.2., displaying the Dune Protection line will reflect the location of Mean High Tide.

Mitigation sequence

The series of steps which must be taken if dunes and dune vegetation will be adversely affected. First, such adverse effects shall be avoided. Second, adverse effects shall be minimized. Third, the dunes and dune vegetation adversely affected shall be repaired, restored, or replaced. Fourth, the dunes and dune vegetation adversely affected shall be replaced or substituted to compensate for the adverse effects.

National Flood Insurance Act

42 United States Code, §4001, et seq.

Natural resources

Land, fish, wildlife, insects, biota, air, surface water, groundwater, plants, trees, habitat of flora and Fauna and other such resources.

Open Beaches Act

Texas Natural Resources Code, §61.001, at seq.

Owner or operator

Any person owning, operating, or responsible for operating commercial or industrial facilities.

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Padre Balli Park beach Roadway

That portion of Gulf beach in Nueces County situated between Beach Access Road Number 4 and beyond in a southerly direction to Padre Balli Park Main Entrance Road, and being a tract of land in Nueces County, Texas.

Permit condition

A requirement or restriction in permit necessary to assure protection of life, natural resources, property and adequate beach use and access rights (consistent with the Dune Protection Act) which a permittee must satisfy in order to be in compliance with the permit.

Permittee

Any person authorized to act under a permit or a certificate issued by a local government.

Person

An individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States Government, state, municipality, commission, political subdivision, or any international or interstate body or any other governmental entity.

Pipeline

A tube Or system of tubes used for the transportation of oil, gas, chemicals, fuels, water, sewerage, or other liquid, semi-liquid, or gaseous substances, except as exempted in section II.F., page 9 of this order.

Practicable

In determining what is practicable, local governments shall consider the effectiveness, scientific feasibility and commercial availability of the technology or technique. Local-governments shall also consider the cost of the technology or technique.

Production and gathering facilities

The equipment used to recover and move oil or gas from a well to a main pipeline, or other point of delivery such as a tank battery, and to place such oil or gas into marketable condition. Included are pipelines used as gathering lines, pumps, tanks, separators, compressors, and associated equipment and roads.

Public beach

As used in this subchapter, "public beach" is defined in the Texas Natural Resources, Code, §61.013(c).

Recreational activity

Includes, but is not limited to, hiking, sunbathing, and camping for less than 14 days. As used in this document recreational activities are limited to the private activities of the person owning the Land and the social guests of the owner. Operation of recreational vehicles is not considered a recreational activity, whether private or public.

Recreational vehicle

A dune buggy, marsh buggy, minibike, trail bike, jeep or any other mechanized vehicle used for recreational purposes.

Restoration

Repair or replacement of dunes or dune vegetation.

Retaining wall

A structure designed primarily to contain material and to prevent the sliding of land.

Roadway

The Commissioners Court herein specifically accepts and dedicates the beach as a roadway.

Sand budget

The amount of all sources of sediment, sediment traps, and transport of sediment within a defined area. From the sand budget, it is possible to determine whether sediment gains and losses are in balance.

Seawall

An erosion response structure that is specifically designed to withstand wave forces.

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Seawall area

That area situated immediately seaward of the seawall erected by the Padre Island Investment Corporation, and being a tract of land in Nueces County, Texas.

Seaward of a dune protection line

The area between a dune protection line and the line of mean high tide.

Small scale construction

Construction activity less than or equal to 5,000 square feet or habitable structures less than or equal to two stories in height. Both the area beneath the lowest habitable level of an elevated structure and a cupola (i.e. "widow's walk") with an area of 400 square feet or less on the top of the second habitable story are not considered stories for the purpose of this section. Single-family habitable structures are typical of this type of construction.

Structure

Includes, without limitation, any building or combination of related components constructed in an ordered scheme that constitutes a work or improvement constructed on or affixed to land.

Swales

Low areas within a dune complex located in some portions of the Texas coast which function as natural rainwater collection areas and are an integral part of the dune complex.

Washover areas

Low areas that are adjacent to beaches and are inundated by waves and storm tides from the Gulf of Mexico. Washovers maybe found in abandoned tidal channels or where foredunes are poorly developed or breached by storm tides and wind erosion.

Water's edge

A line from the point of the gulf water, most landward from and parallel to the gulf water and being the landward limit of wave run up at the time and place in question.

Vehicle

Vehicle or motor vehicle as used herein, shall have the meaning assigned to the terms by the Texas Uniform Traffic Act, V. C. S. §6701d.

Nueces County Beach Management

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A Joint Erosion Response Plan for Nueces County and the City of Corpus Christi 2012



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Executive Summary

The purpose of the Erosion Response Plan is to reduce storm damage along the City and County gulf coastlines. The 81st Legislature amended Chapter 33 of the Natural Resources Code provided authority to the Texas General Land Office to formulate rules for local governments with gulf coast lines in their jurisdictions to create Erosion Response Plans.

The Erosion Response Plan will be used by the General Land Office to qualify local governments for certain GLO grants. The Plan will be used by the City and the County to justify submission of grants for GLO funding for beach renourishment, dune system enhancements and improvements for public beach access.

A draft City Erosion Response Plan was presented to City Council in June 2011. The City Council recommended the draft plan, with changes, to be submitted to the Texas General Land Office. (GLO) Part of City Council direction to staff was to develop a final plan that is as similar to the County's as possible. The GLO provided comments on the draft plan by October 2011. The Planning Department then formed an informal group of County officials and City officials to develop the final plan document. The informal group included representatives from the City Beach Dune Committee, the County Beach Management and Dune Protection Advisory Committee, the Water Shore Advisory Committee, and the Island Strategic Action Advisory Committee.

The Erosion Response Plan Addresses:

- Assessment of the foredune ridge in the Corpus Christi and Nueces County jurisdictions.
- Review of scientific studies concerning storm surge, coastal erosion, and sea level rise.
- Review of FEMA velocity zones on Mustang and Padre Islands.
- The plan identifies the beach as the first line of defense to storm surge and the foredune ridge as the second line of defense.
- The plan defines the minimum width of the public beach for provision of public beach access as 100 feet wide from the Line of Vegetation to the wet/dry line on the beach.
- The goal for enhancing the foredune ridge is to establish a dune system of at least 14 feet high, 350 foot deep, and containing at least 50% vegetative coverage.
- Mitigation sites for enhancing the foredune ridge are identified and prioritized.
- Establishment of a 350 foot building setback line located 350 feet landward of the Line of Vegetation along the gulf beach. The building setback line will prevent new construction of residential or commercial buildings within the foredune ridge.
- Land that is landward of the seawall is exempt from the Building Setback.
- Existing structures are exempt from the building setback prohibition, provided there is no practicable alternatives, that the foot print of the building is not increased and that the new structure meets new construction guidelines.
- The plan addresses enhancements to public beach access. Generally, these enhancements to public access focus on designs to reduce damage to the public access ways after storm events.
- The criteria for potential acquisition of property seaward of the Building Setback Line.

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I. Introduction

The 81st Legislature amended Chapter 33 of the Natural Resources Code to require local governments with jurisdiction over Gulf of Mexico Shorelines to adopt an Erosion Response Plan (ERP). The changes to Chapter 33 of the Code also requires the Land Commissioner to consider whether a jurisdiction has completed an ERP before awarding Coastal Erosion Planning and Response Account funds for projects within the local jurisdiction. The Texas General Land Office (GLO) adopted rules specifying the requirements that may be considered when developing an Erosion Response Plan. In addition, the rules establish the dates for submittal of the ERP to the GLO in order for it to be considered for each Coastal Erosion Planning and Response Act (CEPRA) biennium. The rules require the plans to be submitted by July 1, 2011 for the current grant cycle. The ultimate purpose of the plan is to minimize future storm damage to public and private property along the Gulf Coast within the local government's jurisdiction.

During the course of developing an Erosion Response Plan the County and the City have worked closely to gather to create plans that are compatible. As the two plans neared completion, by direction of the Commissioner's Court and the City Council, to make the plans as similar as possible, the two separate plans have been merged into this joint Erosion Response Plan.

Nueces County's jurisdiction, with respect to this plan, includes that portion of Mustang Island that is not inside the Corpus Christi City limits and that portion of North Padre Island that is north of Kleberg County. Within this area, Nueces County maintains Dune Permitting authority through its Beach Management Plan. The Dune Permitting area is located 1,000 feet landward of mean high tide except for two exceptions: Mustang Island State Park; and land that is landward of the toe of the seawall on North Padre Island. This Erosion Response Plan will become an addendum to Nueces County's Beach Management Plan.

The City of Corpus Christi's jurisdiction, including inside city limits and the Extraterritorial Jurisdiction (ETJ), contain 25 miles of public beach. There are currently 20 miles of public gulf beach inside city limits and 5 miles of gulf beach in the City's five mile extraterritorial jurisdiction. Of the 25 miles of public beach only 6 miles or 24% of the City's beach frontage abuts private lands.

This plan is an addendum to the City of Corpus Christi Code of Ordinances, Chapter 10: Beachfront Management and Construction.. Chapter 10 addresses Beachfront Construction Certificates which are required by state statute for construction activities to protect the public's right of access to and along Gulf of Mexico Beaches. The Beachfront Construction area is generally located between mean high tide and the first paralleling public road or 1,000 feet landward of mean high tide, whichever is greater. There are two exceptions where a Beachfront Construction Certificate is not required: Mustang Island State Park; and the Padre Island National Seashore.

Chapter 10 also addresses protection of the beach dune system through the Dune Protection Permit. The City has been granted the authority to issue Dune Protection Permits in Kleberg County but Nueces County has not granted Dune Protection Permit authority to the City within Nueces County. However, Chapter 10 is constructed to automatically accommodate Dune Protection Permit authority should Nueces County authorize the City of Corpus Christi to issue Dune Protection Permits in Nueces County. The Dune Protection Permit area is an area that is 1,000 feet landward of mean high tide, except for the area adjacent to the North Padre Island sea wall. Adjacent to the seawall, the Dune Permit area is between mean high tide and the "toe" of the seawall. A Dune Protection Permit is not required for either Mustang Island State Park or the Padre Island National Seashore.

In order to develop the Erosion Response Plan, the Texas General Land Office (GLO), Nueces County and City Staff compiled a work plan and subsequently obtained a GLO grant. The City provided an in-kind match consisting of mapping, research, formulating the ERP and other tasks necessary for developing the ERP.

The primary reason for completing an Erosion Response Plan (ERP) is to reduce future storm damage and to protect public access to the Gulf Beach for future generations.

An important secondary reason for completing a local ERP is so that the City and County will continue to be eligible for Texas General Land Office CEPRAs grants. A criterion for the award of future grants is that the city must have an Erosion Response Plan approved by the Texas General Land Office. Texas Administrative Code 15.41 contains a two stage evaluation process for Coastal Erosion Studies and Projects with the second stage establishing whether a "...local government has implemented an Erosion Response Plan for reducing public expenditures due to erosion and storm damage losses."

The essential elements that are included in this Erosion Response Plan (ERP), per the work plan developed by the GLO and the City, include the following:

- A construction setback line landward of the Line of Vegetation (LOV);
- Criteria for establishing the setback line;
- Criteria for construction within the setback area;
- Allowances for exemptions to the setback criteria for existing structures or where there is no practicable alternative;
- Conditions for construction of exempt structures;
- An inventory of all existing and proposed public beach access amenities and access ways;
- Procedures for preserving and enhancing the public's right of access to and use of the public beach after a storm event;
- Post storm damage assessment and requirements for rehabilitation;

- Procedures for preserving, restoring and enhancing critical sand dunes for natural storm protection;
- Requirement for public input and public meetings prior to City Council action;
- Criteria for voluntary acquisition of property seaward of the building setback line; and
- Ensuring the City's Chapter 10 Beachfront Management and Construction code or any other City codes are changed for consistency with the Erosion Response Plan.

Creation of this plan required the City and the County to review the Bureau of Economic Geology's (BEG) 2007 erosion rates for consistency with the most recent natural or manmade beach erosion trends. The BEG's Erosion Rates for the area used by the GLO are based on data collected since 1937, a study period of 70 years. As part of this review staff obtained scientific assistance from local, state and national experts and or studies of sea level rise and coastal erosion.

Historical Conversion of Agriculture Island Usage to Urbanization and the Impact on Island Erosion

Land use on North Padre and Mustang Island prior to 1950 was for livestock grazing. From 1950 to 1971 land use went to development and recreation, first with the Nueces County portion of Padre Island in 1950, Mustang Island in 1968 and Kleberg County in 1971.¹ With this change of use the area of un-vegetated (active) dunes went from 6,732 acres to 614 acres.² Significant primary and foredune ridges were established on North Padre Island between Bob Hall Pier and White Cap Blvd and on Mustang Island between the current Packery Channel and the Mustang Island State Park Fish Pass.

¹ Small scale grazing still exists on Mustang Island

² Land and Water resources, historical changes, and dune criticality: Mustang & North Padre Islands. White et al 1978 University of Texas BEG

Figure 1: Bob Hall Pier to White Cap 1948, sand flats with coppice dunes

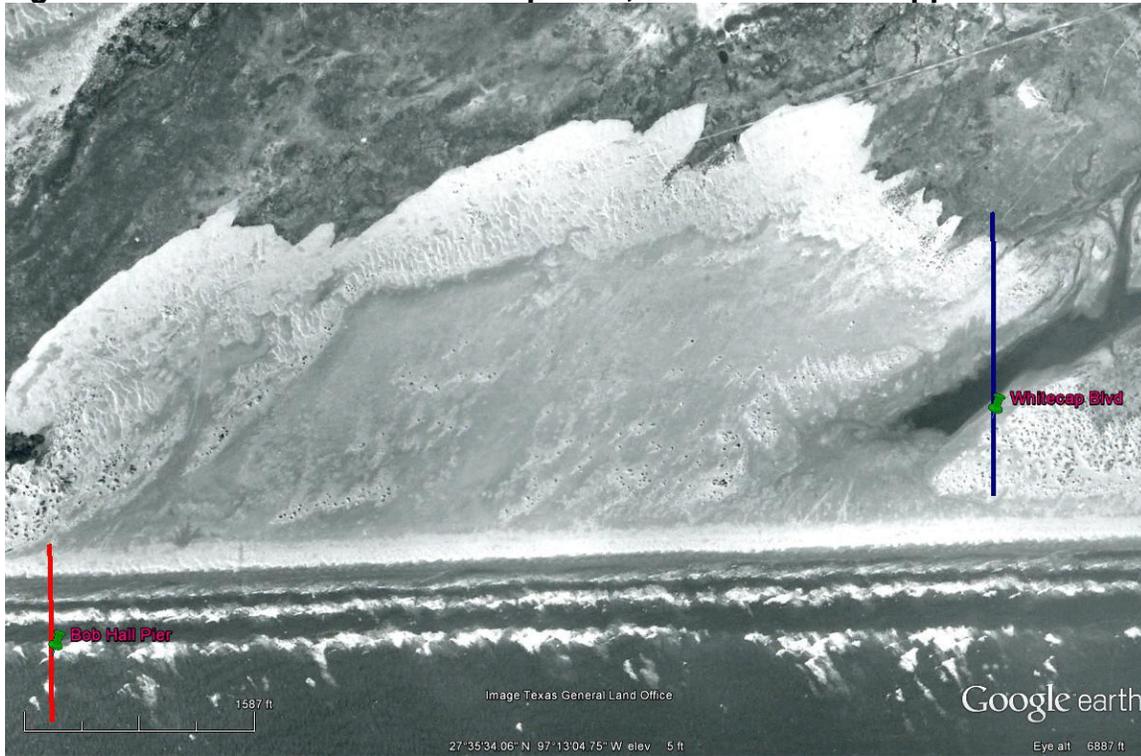


Figure 2: Bob Hall Pier to Whitecap Blvd. 2009 Aerial with 2005 Lidar Topography



Light green line 12' contour, green line 15' contour, yellow line 18' contour

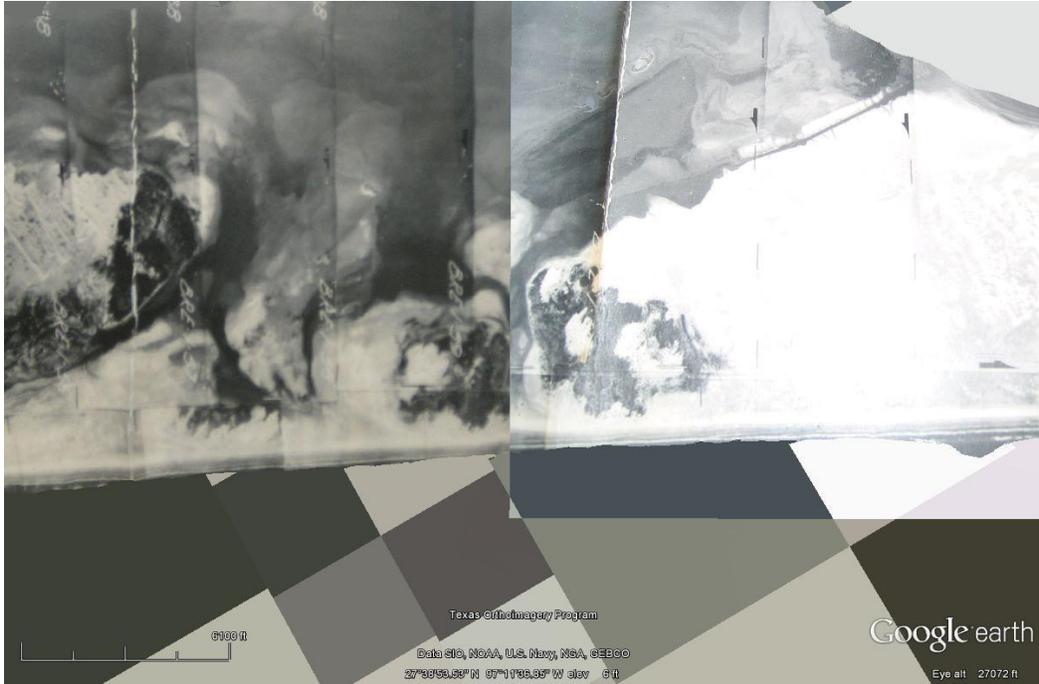


Figure 3: Mustang Island Packery Channel to Fish Pass 1938, Primarily San Flats



Figure 4: Mustang Island, Packery Channel to the Fish Pass 2009, Primarily Dunes

II. Setback Line Determination

A key finding of this plan is the determination of the setback line. The setback line is measured from the line of vegetation on the beach landward to a specified point which will become known as the Erosion Response Plan Setback Line. The purpose of the setback line is to minimize storm damage to structures on the island by preserving the area seaward of the Setback Line and minimizing the number of structures in the area. The plan is also intended to target for improvement, those foredune areas where the dune system is narrow or contains the lowest elevation of dunes, providing little protection against storm surge.

II.A. Setback Line Goals

- Minimize future erosion, storm and flood losses;
- Allow development to occur while providing sufficient seaward lands to accommodate public access along the gulf beach;
- Preserve dune system width to sustain the existing and future critical dune system;
- Identify criteria, uses and structures where no practicable alternative exists for construction seaward of the setback line.

II.B. Assessment of Erosion Rates

The criteria for establishing the setback line is based on scientific studies of the shoreline erosion along the Texas Coastline based during the last 70 years (Bureau of Economic Geology). State law provides that a determination of erosion rates shall be based on the University of Texas at Austin, Bureau of Economic Geology (BEG) or other sources approved by the Texas General Land Office. Along the Texas Coast the highest erosion rate by county is -2.80 meters or -9.19 feet per year in Jefferson County . The lowest average rate on the Texas Coast is-.28 meters or -0.92 feet per year for Nueces County. In Kleberg County the erosion rate is -0.54 meters or -1.77 feet per year.

Figure 5: Erosion Rates Comparison

Shoreline Trend	Mean Shoreline Change (average of all transects in ft/yr)	% of Coast Eroding	Erosion Rates (Ft/Yr)		Accretion Rates (Ft/Yr)		
			Max	Mean	% of Coast Accreting	Max	Mean
Texas Shoreline (1850's 2000)	-2.3	64	-30.2	-5.9	36	48.8	3
Mustang Island (Inside Corpus Christi City Limits)	-0.4	96.7	-4.4	-0.4	3.3	1.8	0.3
North Padre Island (ICL / OCL)	-2.6	96.7	-4.6	-3	3.3	1.9	0.9

Note: Erosion rate information for Mustang and North Padre Island is from the Bureau of Economic Geology, 2007 Erosion Rates. Mustang Is. is the area north of Packery Channel. North Padre Is. includes Nueces County and Kleberg County Areas in the City and ETJ.

Figure 5 is an adaptation from the State Erosion Response Plan modified to include a summary of Mustang Island and North Padre Island erosion and accretion rates.

An analysis of the shoreline erosion rates (BEG 2007) indicates that over 90% of the gulf shoreline in the City and its Extraterritorial Jurisdiction is eroding compared with 64% of the Texas Gulf Coast. However, the average erosion rate on Mustang Island at -0.4 is significantly less than the average rate of -2.3 feet per year for the Texas Coast. The following is a brief summary of the Bureau of Economic Geology's erosion rates depicted on 20 map exhibits in Appendix 2: Dune Assessment and Mitigation Maps.

II.B.1. Exhibits 1 thru 7:

Starting with the southern portion of the study area, Exhibits 1 thru 7 are located in Kleberg County with Exhibits 1 thru 4 encompassing a portion of the Padre Island National Seashore. Overall, Exhibits 1 thru 7 show a gradually increasing erosion rate in a south to north direction along the public beach. The most southerly point in Exhibit 1 shows the highest accretion rate in the first seven Exhibits with a change rate of +0.71 feet per year. Exhibit 1 also is the only exhibit in the study area with more accretion change rates than erosion change rates. However, erosion begins to dominate change rates starting with Exhibit 2 and continuing to Exhibit 7. Erosion rates gradually increase proceeding northward to a point in Exhibit 7 where erosion is over -4 feet per year.

II.B.2. Exhibits 8 and 9:

Exhibits 8 and 9 are located immediately south of the Kleberg and Nueces County Line. Erosion rates quickly increase to the -5 and -6.5 foot plus range. However, erosion rates begin to creep back downward at the northern end of Exhibit 9, where rates fall under -6 feet per year.

II.B.3. Exhibits 10 thru 12:

Exhibits 10 thru 12 encompass beaches abutting Padre Balli Park (Exhibit 10), the Padre Island Sea Wall (Exhibit 11 and 12), and Packery Channel / State land leased to the City (Exhibit 12). Erosion rates are generally in the -4 and -5 foot range with a few exceptions. The Erosion Rates published by the Bureau of Economic Geology for the areas on either side of Packery Channel do not take into account the 2003 construction of Packery Channel jetties. Recent studies of the area suggest that erosion south and north of the jetty has been reduced or even changed to an accreting beach. The City is monitoring beach erosion in the area and recent aerial photos of the jetties also depict accumulation of beach sand.

II.B.4. Exhibits 13 thru 17:

County park land is located in Exhibit 13 and Mustang Island State Park beaches appear in Exhibits 14 thru 17. Except for 0.25 miles on either side of the Fish Pass in Exhibit 16 showing accretion rates, the beaches in this area are eroding. Erosion rates north of the Fish Pass increase significantly from a low near the

Fish Pass of -0.17 feet per year to -1.94 feet per year at the north end of Mustang Island State Park.

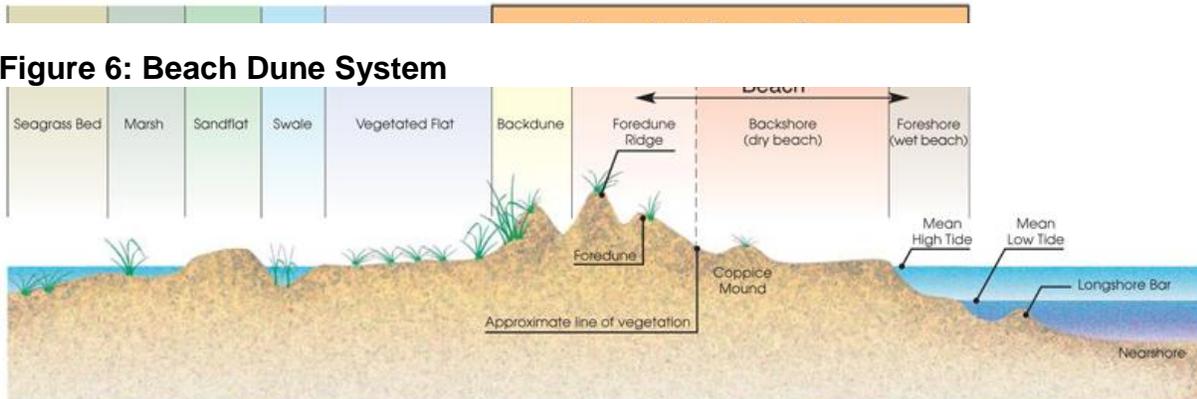
II.B.5. Exhibits 18 thru 20:

For Exhibits 18 thru 20 on Mustang Island, the erosion /accretion rates fluctuate from -1.0 to 1.5 feet per year. However, there are a few exceptions located on the northern edge of the study area (Exhibit 20) which exceed -1.5 feet with a maximum rate of -2.32 feet per year.

II.C. Projected Shoreline

The map exhibits in Appendix 2, contain the Bureau of Economic Geology's projected 2060 shoreline that incorporates predicted erosion rates and sea level rise data. Each of these data items provides an indicator of future change along the shoreline based on scientific data and begins to paint a picture of the future of the shoreline in terms of factual, measurable and quantitative data. For additional information, see the Texas Erosion Response Plan located on the Texas General Land Office website: <http://www.glo.texas.gov/what-we-do/caring-for-the-coast/documents/coastal-erosion/response-plans>.

II.D. Foredune Ridge Assessment



Typical cross section of a Texas barrier island. Actual conditions may vary.

While many factors impact the viability and strength of the dune system, this study addresses the minimum desired height, width and vegetative cover of the foredune ridge in the dune system and the minimum desired beach width. Studies have shown that a foredune ridge of approximately ten feet in height offers significant protection to beachfront construction.³ In a study prepared in 2009 for the Texas General Land Office (TGLO), one of the conclusions was that damage to beachfront construction will be minimal where there is a ten foot high foredune ridge with a

³ "Defining and Mapping Foredues, the Line of Vegetation, and Shorelines along the Texas Gulf Coast", James C. Gibeaut, Harte Research Institute for Gulf of Mexico Studies, Texas A & M University-Corpus Christi and Tiffany L. Caudle, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin.

width of approximately 200 feet. Figure 6, taken from the TGLO⁴ Dune Protection and Improvement Manual, illustrates a typical cross section of the dune system on the Texas coast. The barrier island, and in particular the near shore beach is the first line of defense and the foredune ridge is the second line of defense from the impact of a hurricane and associated storm surge.

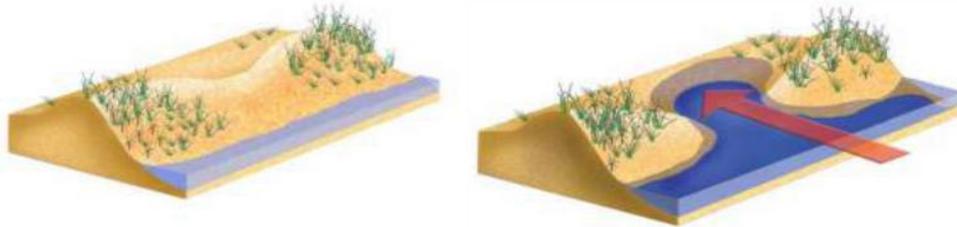


Figure 7: Washover Damage to the Dune System



Regarding beach width, a wide beach can keep the storm waters or storm surge from cutting away the base of the dune system. After Hurricane Ike in 2008, there was a clear shearing away of coppice mounds to the Line of Vegetation (LOV).

Figure 8: Hurricane Ike Dune Erosion

⁴ Texas General Land Office Dune Protection and Improvement Manual for the Texas Gulf Coast, Fifth Ed., page 4.

The beach typically will act as a buffer where sediment can be deposited and the wind can then transport the sediment toward the dune system. Where the beach has eroded away and is very narrow, normal wave action can erode away the base of the foredune ridge much like a sand castle on the beach is washed away with an incoming tide.

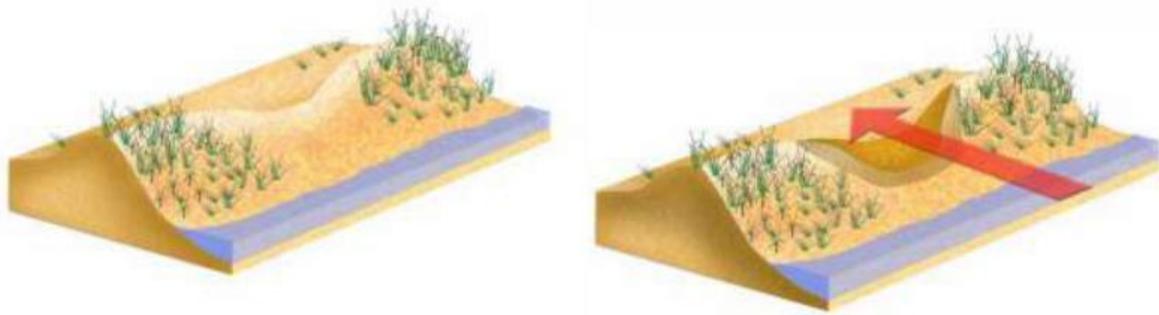


Figure 9: Blowing Wind Eroding the Dune System

Vegetative cover holds the dune system in place. Where the dune system contains less than 75% coverage, the dune system is much more susceptible to creation of a “blow out” from high winds. Figure 9, from the GLO Dune Protection and Improvement Manual helps to illustrate how a sparsely vegetated dune is eroding by coastal winds. Healthy dune vegetation helps to protect dunes, by catching blowing sand and creates biological diversity.

The following is a brief description of the height, width and vegetative coverage characteristics of the foredune ridge illustrated on Exhibits 1 thru 20. Aerial photos or field surveys were used to assess dune vegetative coverage.⁵

II.D.1. Exhibits 1 thru 7:

Exhibits 1 thru 7 show a nearly continuous line of dunes of 15 to 20 foot in height exist. The width of the dune system varies widely but is generally at least 200 to 400 feet or more in width.

II.D.2. Exhibits 8 and 9:

Dunes in Exhibits 8 and 9 are characterized by dune heights of 8 to 15 feet with an occasional dune of 20 feet in height. The width of the foredune ridge is approximately 200 to 300 feet in width and vegetative cover is over 75% or more based on 2009 aerial photos.

⁵Aerial photos were not available for Exhibits 1 and 2. 2003 aerial photos were used to evaluate vegetative cover for Exhibits 3-9. 2009 Aerial photos were used to evaluate vegetative cover in the dune system for Exhibits 10-20.

II.D.3. Exhibits 10 thru 12:

Except for the area behind the Padre Island Sea Wall, the dune system is approximately 15 feet in height with a trend toward a taller and wider dune system in Exhibit 12. The width of the foredune ridge is in the 200 to 350 foot width range. Vegetative cover appears to be over 75% except in the dune mitigation area on the north side of Zahn Road. The dune mitigation area is part of a Dune Protection Permit for the Preserve at Mustang Island subdivision. Currently, the vegetative cover is approximately 50% and expected to fill in over the next year as part of the compliance for the existing Dune Protection Permit.

II.D.4. Exhibits 13 thru 17:

Exhibits 13 - 17 encompass County Park land and Mustang Island State Park (Exhibits 14-17). Two historical washout areas also exist, Newport Pass (Exhibit 13) and Corpus Christi Pass (Exhibit 14). The foredune ridge in these exhibits is not as continuously parallel with the line of vegetation as in Exhibits 1-12. Exhibits 13 and 14 show a combination of dune heights from 8 to 20 feet in height with a foredune ridge of approximately 350 feet wide. A varying pattern in the foredune ridge can be observed in Exhibits 14 thru 17 with isolated 15 and 20 foot high dunes. In several areas a line of 15 to 20 foot high dunes have migrating in a finger like pattern to the west. North of the Fish Pass in Exhibits 16 and 17 the foredune ridge appears to grow in height with a slightly more defined 200 to 250 wide foredune ridge parallel with the Line of Vegetation. Vegetative cover appears to be nearly continuous at 75% coverage or more.

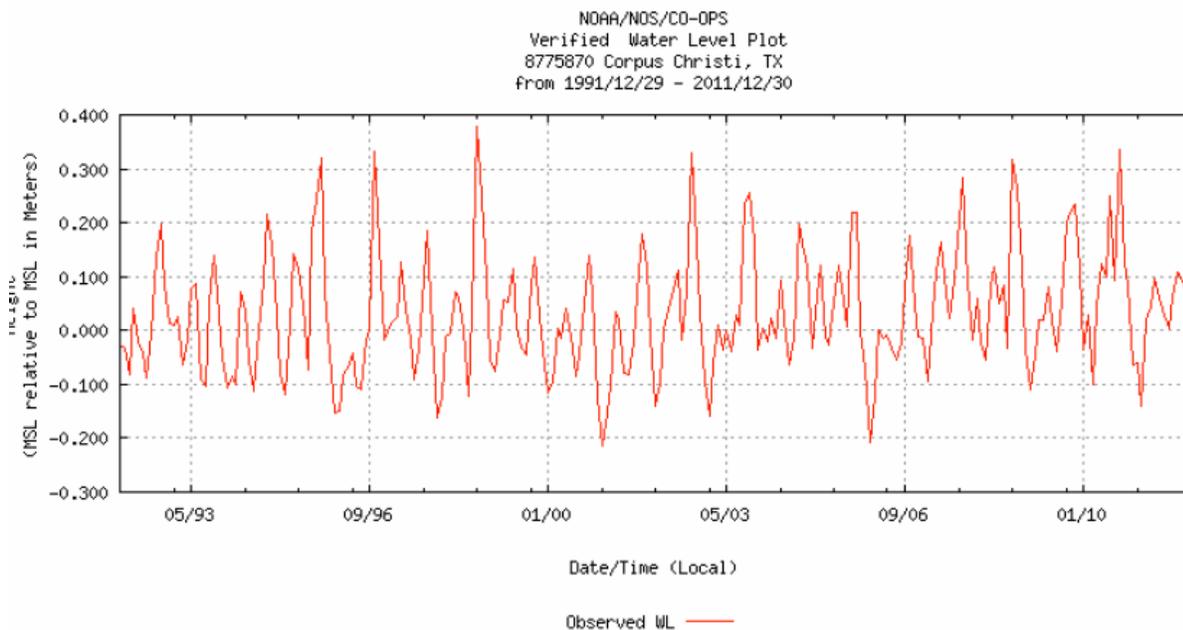
II.D.5. Exhibits 18 thru 20:

Exhibits 18 through 20 encompass private lands north of Mustang Island State Park. The foredune ridge is characterized by a shorter dune system in the south half of Exhibit 18 with dunes of about 8 to 10 feet in height with several isolated taller 15 to 20 foot dunes. About mid-point in Exhibit 18 the dune heights increase to 15 to 20 feet in height and continue thru Exhibits 19 and 20. The width of the Foredune Ridge appears less defined but ranging from 200 feet to 400 feet in width. The Foredune Ridge is not continuous, but contains several gaps or breaks with shorter dune heights. Vegetative cover appears to be 90 to 100% excluding areas of development.

II.E. Federal Emergency Management Agency (FEMA) and the National Oceanic and Atmospheric Administration (NOAA)

The Federal Emergency Management Agency (FEMA) flood zone determination maps indicate that the foredune ridge is located in a Velocity Zone 14 (Elevation 14 feet). A velocity zone is an area predicted by FEMA, to contain high velocity flowing flood water during a major storm event. Within a V-Zone along the Gulf Beach the minimum designated structural height, measured from the lowest horizontal structural member, is 14 feet above mean sea level.

Other factors to consider when assessing the risk to development in island areas are the potential impact from hurricane storm surge and sea level rise. Studies of storm surge by NOAA show that predicting storm surge is a complex series of factors dependent on a particular location. The wave height of a hurricane storm surge is sensitive to the “slightest changes in storm intensity, forward speed, size (radius of maximum winds-RMW), angle of approach to the coast, central pressure (minimal contribution in comparison to the wind), and the shape and characteristics of coastal features such as bays and estuaries.” However, one key factor is the width and slope of the continental shelf, which can double the size of a storm surge depending on the location. For example, an 8 or 9 foot storm surge where the continental shelf drops off quickly like Miami Beach, Florida could translate to a 20 feet high storm surge along the Louisiana coastline where there is a very wide and shallow continental shelf. One of the characteristics of Mustang and North Padre Island is a moderately sloping drop off that could magnify the storm surge height.⁶



Bob Hall 1993 - 2012

Figure 10: Water Levels at Bob Hall Pier 1992 - 2012

⁶NOAA, National Hurricane Center, Storm Surge Overview: <http://www.nhc.noaa.gov/surge/>

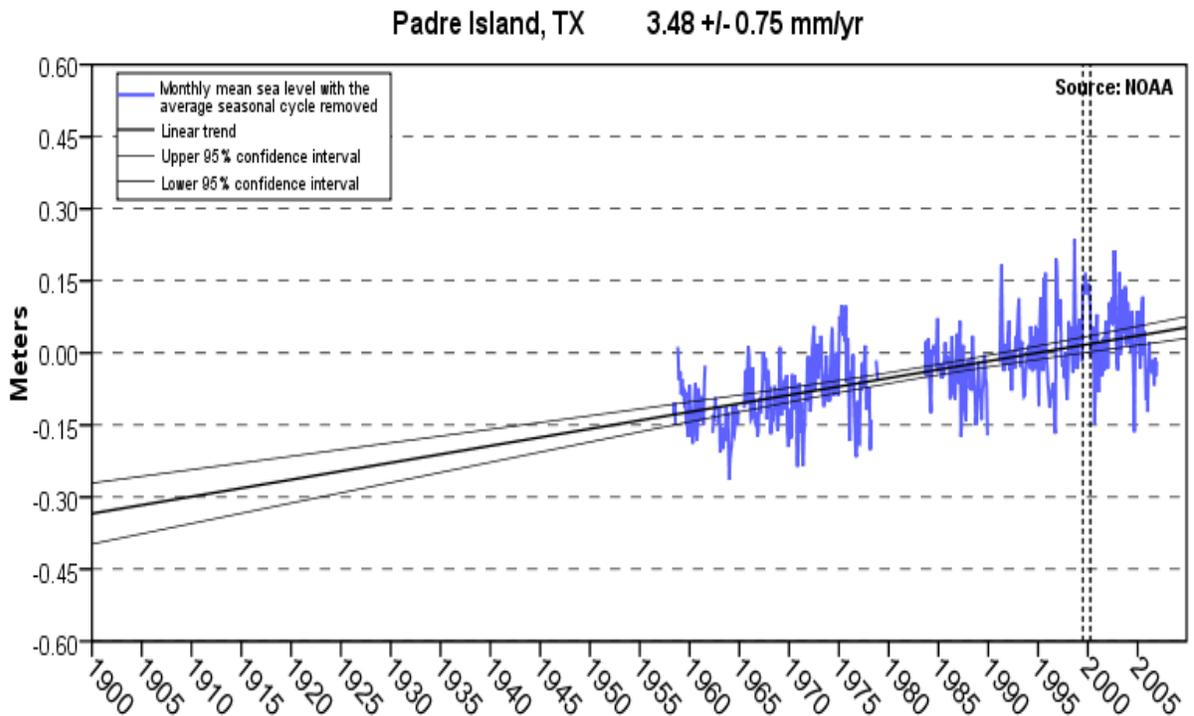


Figure 11: Bob Hall Pier Sea Level 1958 - 2006

The major findings of this study concerning the foredune ridge are:

- That a foredune ridge of at least 10 feet in height and 200 feet in width offers substantial protection from storm losses;
- That FEMA requires a minimum base flood elevation for structures of 13 to 14 feet in the V-Zones within the foredune ridge on Mustang and North Padre Island;
- That a moderately sloping continental shelf contributes to storm surge height; and
- That there is a 47 year historical trend of sea level rise of approximately 1.14 feet per 100 years.

Based on these findings, this plan establishes the minimum design criteria for a dune system as a dune system with a foredune ridge height of 14 feet mean sea level (msl) and a minimum desirable width of the dune system of 350 feet with at least 50% vegetative coverage. This criteria is defined as having been achieved if within any 100 foot segment, measured linearly along the public beach, there are dunes of the prescribed height, the dune system contains the required width, and the dune system is at least 50% vegetated.

Studies have shown that natural washouts provide a valuable function to allow flood waters to flow past the dune system or to allow flood waters to recede back out to the ocean. Where it can be demonstrated that an area's lack of a dune system meeting minimums for height, width and vegetative cover are due to the area being part of a natural washout, the area will not be targeted for mitigation.⁷

Primary historical washouts were located between the north Jetty and the current Packery channel. A 3,000' washover area existed from the beginning at the north Jetty of the Fish Path and running south 9,000' from the Packery Channel north and a 900' wash beginning 12,500' north of the Packery Channel. (See Figure 14)



Figure 12: 2007 Aerial Photo Overlaid with a 1948 Aerial Photo

II.F. Line of Vegetation (LOV)

The beach setback line in Nueces and Kleberg Counties within the Corpus Christi jurisdiction shall use the Line of Vegetation (LOV) obtained from the most current available registered aerial photos. For purposes of this study, 2003 and 2009 aerial

⁷ Mapping and Characterization of Significant Washover Features: Texas Gulf Shoreline, Kimberly K. McKenna, P.G., Final Report of the Texas General Land Office, August 2007.

photos have been used to delineate the Line of Vegetation for planning purposes. The LOV used in the ERP cannot be used for permit applications for construction.

II.G. Building Setback Line (SBL)

A 350 foot Building Setback is established by this plan to reduce future storm damage to public and private properties. The 350 foot Building Setback Line shall be measured landward of the Line of Vegetation but shall not extend beyond the 1,000 foot Dune Protection Line. In addition, the setback line shall not apply to exempted areas or landward of the toe of the seawall on North Padre Island.

II.H. Useable Public Beach

Sea level rise on the Gulf Mexico over the last 20 years has been estimated to be 1.6 millimeters per year for a total sea level rise of 32 millimeters or 1.2598 inches.

⁸Given the prediction of continued sea level rise and erosion of the public gulf beach, a minimum desired standard for public beach width is also established by this plan. Establishing the criteria for what is the public beach is also addressed in Gibeaut and Caudle's study⁹. According to the study, the useable portion of the public beach can generally be defined as that area between the Line of Vegetation¹⁰ and the wet/dry line of the aerial photography. Many studies¹¹ note that a wide beach in addition to a healthy dune system provides protection from erosion caused by seasonal high tide and storm surge events.

Using 2009 aerial photos for Nueces County and 2003 aerial photos for Kleberg County, a visual determination of the Line of Vegetation and the wet/dry line has been used to establish the area of useable beach on North Padre Island and Mustang Island. This determination is for planning purposes only and shall not be used for issuance of Beachfront Construction Certificates or Dune Permits.

In the study area the average width of the public beach, measured between the line of vegetation and wet/dry line, on Mustang Island is 126 feet wide (North of State Park 89 feet) and on North Padre Island is 117 feet wide (Nueces County only). For purposes of assessment of the beach, a minimum desirable beach width to protect the foredune ridge shall be at least 100 feet in width measured from the wet/dry line to the line of vegetation. It is noted however, that the minimum width established by this plan will not be used as a standard to allow mitigation and

⁸ Sea level history of the northern Gulf of Mexico coast and sea level rise scenarios for the near future, Department of Earth, Ocean and Atmospheric Science, Florida State University, Tallahassee, FL 32306, USA, Joseph F. Donoghue

⁹ Defining and Mapping Foredunes, the Line of Vegetation, and Shorelines along the Texas Gulf Coast James C. Gibeaut, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi, Tiffany L. Caudle, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, 2009.

¹⁰ Line of Vegetation - The extreme seaward boundary of natural vegetation which spreads continuously inland. The line of vegetation is typically used to determine the landward extent of the public beach.

Title 31. Natural Resources and Conservation Part 1.Chapter 15.Subchapter A.15.2(41)

¹¹ Shore Protection Manual Volume 1, Engineering Research Center, USACE 1984.

placement of beach maintenance materials in a method that will minimize the public beach easement. The minimum width standard will be used to assess areas where the beach has narrowed due to erosion and will assist the City in prioritizing areas where beach renourishment may be needed to widen the beach.

III. New Construction Guidelines

To the maximum extent practicable, all structures should be constructed landward of the building setback line.

Construction of structures landward of the building setback line must comply with mitigation sequence requirements for avoidance and minimization of effects on dunes and dune vegetation as specified in Texas Administrative Code (TAC) §15.4(f) Mitigation. The permittee is not exempt from compliance with compensatory mitigation requirements for unavoidable adverse effects on dunes and dune vegetation.

III.A. New Residential or Commercial Structures. Require new residential dwellings or commercial structures to be located at least 350 feet landward from the Line of Vegetation unless no practicable development alternatives are possible;

III.B. Restrict New Development Landward 200 feet to 350 feet. Restrict new development in the area between 350 and 200 feet landward of the Line of Vegetation to recreational amenities such as pools and picnic areas. In any case, applicants must demonstrate that every attempt has been made to minimize the use of impervious surfaces in this zone.

III.C. Community Benefit Projects. Application of these guidelines shall not prohibit public community benefit projects, including, but not limited to, water exchange passes, beach renourishment projects, recreational structures, or other projects in the public interest.

III.D. Exempt Projects and Properties. Dune walkovers, beach access roadways, public parking and associated public facilities shall be constructed in accordance with the GLO construction guidelines, to the extent applicable.

The City of Corpus Christi and Nueces County shall consider exemptions from the prohibition of residential and commercial construction seaward of the setback line for:

III.D.1. Properties Where There Is No Practicable Alternative

Properties for which the owner has demonstrated to the satisfaction of the City and County that no practicable alternatives to construction seaward of the building setback line exist. For purposes of this section, practicable means available and capable of being done after taking into consideration existing building practices, site alternatives, and the footprint of the structure in relation to the area of the buildable portion of the lot, and considering the overall development scheme for the property.

III.D.2.Pre-existing Permits, Certificates or Master Plan Developments

Projects for which construction is permitted, in the area seaward of the 350' Building Setback, under a Dune Permit, Beachfront Construction Certificate or Master Plan Development prior to the effective date of this Erosion Response Plan are exempt if there are no material changes to the site and provided the permit, certificate or Master Plan has not expired.

III.D.3 Existing Structures

Structures located seaward of the building setback line prior to the effective date of this section for which modifications are sought that do not increase the footprint of the structure. However, structures seaward of the building setback line that are damaged more than 50% or abandoned for a period of more than 12 months should be subject to Section III.E. Construction Requirements for Exempt Properties.

III.E. Construction Requirements for Exempt Properties

Where the City allows an exemption from the prohibition for building seaward of the building setback line, the City will require the following conditions of construction or provide a reasoned justification for a variance from the minimal standards that will demonstrate that the provisions will reduce public expenditures due to erosion and storm damage.

III.E.1. Sealed Plans. Plans and certifications for the structure shall be sealed by a registered professional engineer licensed in the State of Texas, providing evidence of the following:

III.E.1.i. Freeboard. A minimum of two-foot freeboard above FEMA's BFE to the finished floor elevation of the lowest habitable floor;

III.E.1.ii. Enclosures. No enclosures exceeding 300 square feet below BFE;

III.E.1.iii.Design Standards. Consistency with the latest edition of specifications outlined in American Society of Civil Engineers, Structural Engineering Institute, Flood Resistant Design and Construction, ASCE 24-05;

III.E.1.iv. Relocateable Structures. That habitable structures will be feasible to relocate; and

III.E.1.v. Hydrology. All construction shall be designed to minimize impacts to natural hydrology.

III.E.2. Location of Construction. Location of all construction should be landward of the landward toe of the foredune ridge and as far landward as practicable.

IV. Goals for Enhancement of the Dune System and Beach

IV.A. Dune Goals

Promote the formation of a continuous foredune ridge of at least 14 feet in height, with a minimum width of 350 feet wide measured perpendicular to the gulf beach and which contains at least 50% of vegetative cover. The methods used to achieve this goal will be determined by City and County beach maintenance operations on a case by case basis depending on various factors, including but not limited to, the current width of the dune system, access to the dune system (beach only or back access), beach width, and other appropriate on site criteria. The current methods of disposing of seaweed include: front stacking, back stacking and placement of seaweed in beach maintenance material storage areas. As new techniques for addressing seaweed maintenance evolve the City and County shall evaluate their potential use, benefits and limitations and incorporated these new techniques as appropriate.

IV.B. Beach Goals

Recognizing that the public beach is the first line of defense against storm surge, any efforts to widen the public beach should be promoted to reduce storm damage and to enhance public beach access. The minimum desirable width of the public beach should be at least 100 feet in width from the Line of Vegetation seaward to mean high tide.

IV.B.1. Minimum Two-Way Travel

Motor vehicles are not allowed to operate within 50 of the waters edge of any gulf beach and the minimum two-way travel width for motor vehicles is 24 feet provided that the two-way travel lanes are not within 20 feet of the Line of Vegetation.

IV.B.2. Corp of Engineers Permit.

Beach cleaning methods shall be in accordance with a Corp of Engineers Permit and use the least impactful method for removal of seaweed in order to prevent the grading down of the public beach and or narrowing of the public beach. Wherever possible, the City and County will seek permits that are as similar as possible. In addition, the ability to place sand below mean high tide, to widen the beach, should be pursued by the City and County in their respective permits.

IV.B.3. Low Beach Usage Areas.

Maintaining the public beach in a natural state without mechanized beach cleaning is encouraged in areas of low usage. The public goal for these areas should be to keep two travel lanes open for beach access.

IV.B.4. Periodic Beach Width Assessment.

The City should conduct an assessment of the public beach width at least every five years unless there is evidence of significant erosion then annual assessment maybe necessary. Portions of the public beach that currently warrant an annual assessment include the beach in front of the seawall and the beach between the Packery Channel and the State Park.

IV.C. Vegetation Goals (Seaward of the Setback Line)

Mowing / cutting of vegetation within the setback area will not be allowed except for exempt areas. For mitigation projects requiring revegetation appropriate dune vegetation includes:

IV.C.1. Seaward Face of Dunes: Bitter Panicum (grass), Sea Oats (grass), Marsh Hay Cordgrass (grass), beach morning glory (vine) and seagrapes (vine).

IV.C.2. Landward side of dunes: Low-growing plants and shrubs found on the back side of the dunes include seacoast bluestem, cucumber leaf sunflower, rose ring gallardia, partridge pea, prickly pear, and lantana. Many of these are flowering plants, an attractive alternative to dune grasses though less effective as dune stabilizers.¹²

IV.C.3. Native Hay: A sometimes more effective technique is to place a layer of native hay, composed of the above listed dune vegetation, on bare sand areas. This technique provides immediate protection from blowing sand and will start the natural process of re-seeding from the seeds in the hay. The best time to cut the hay and place the layer of hay is in the fall and winter. This technique is generally less costly and more effective than traditional methods since the grass is readily available on the island and due to the large quantity of seeds compared to individual hand plantings.

IV.D. Sand Fencing

Encourage the use of sand fencing, in limited applications, to build up the dunes were revegetation alone is unlikely to be sufficient to create the appropriate height and width of the dune system. Sand fencing should be used as a first step toward building up low areas and creating coppice dunes, prior to revegetation.

V. Mitigation

V.A. Definition of Mitigation

Mitigation may be any construction project which either enhances the dune system or beach access, consistent with this plan.

¹² Coastal Dunes: Dune Protection and Improvement Manual for the Texas Gulf Coast.

V.B. Scope of Mitigation

Mitigation construction projects will usually result in the enhancement or building up of the dune system. However, a mitigation project may also be for enhancement of public beach access or to provide public education benefits concerning proper care of the public beach, i.e., litter pick-up, proper disposal of fishing bait, information on protecting wildlife and native habitats contained in the beach/dune system or other beneficial projects which meet to goals of the Erosion Response Plan.

V.C. Mitigation Location

A mitigation construction project shall be located within the 1,000 foot Dune Protection Area except where a mitigation project will enhance public access, then the limits of the project may extend to the first paralleling public road.

V.D. Dune System - Mitigation Prioritization

An assessment of the beach / dune system was based on on-site inspections, local historical knowledge, and the data contained on the Exhibits in this plan (contours, 2009 aerial photos, etc.).

V.D.1. Mitigation Prioritization.

Opportunities for mitigation to enhance the dune system or public beach are prioritized based on the following criteria.

Priority 1: Protection of existing development seaward of the erosion area line.

Priority 2. Protection of existing vacant platted lots located seaward of the erosion area line.

Priority 3. Protection of existing development landward of the erosion area line.

Priority 4. Protection of existing vacant lots platted landward of the erosion area line.

V.D.2. Beach / Dune System Criteria.

Under these four priorities the dune system has been evaluated to look for portions of the dune system where the foredune ridge is:

- Is less than 14 feet in height¹³;
- Is less than 350 feet wide;
- Contains less than 50% vegetated coverage;
- Is not a historical washover area.

In addition, a primary concern is where the Gulf beach is narrower than 100 feet measured from the mean high tide to the Line of Vegetation.

Appendix 2 identifies areas for dune enhancement based on the above criteria.

¹³ Fourteen feet exceeds 75% of the FEMA Base Floor Elevation

V.E. Funding for Dune Mitigation Projects

The City will seek funding in partnership with Nueces County or other agencies to promote protection of or enhancement of the dune system within the City's area of jurisdiction. (Nueces County inside city limits and Kleberg County inside city limits and in the Five Mile Extraterritorial Jurisdiction)

The City will pursue grants for Dune Mitigation Projects from the GLO or other state and federal agencies if local matching funds can be identified.

VI. Enhancement of Public Beach Access

VI.A. Existing Public Beach Access Inventory

Within Corpus Christi's Beachfront Construction Certificate authority and the Nueces County's Dune Permitting authority there are 12 existing public beach access roads and three (3) beach parking lots. (See Appendix 3) These beach access points are composed of:

VI.A. 1. City Owned Public Beach Access

Four (4) City owned/maintained public beach access roads and, one (1) beach parking lot on the Padre Island Seawall

- **Beach Access Road 2** is located 7.3 miles south of City of Port Aransas Beach Access Road 1A on Mustang Island
- **Zahn Road**, is located 1.2 miles south of Newport Pass Road on the north side of Packery Channel
- **Beach Access Road 3-A** is located on the south side of Packery Channel via Windward Drive
- **Whitecap Boulevard** is located 0.8 miles south of Beach Access Road #3-A at the south end of the concrete seawall on North Padre Island
- **The Sea Wall Beach Parking Lot** is located between Beach Access Road #3-A and Whitecap Boulevard on North Padre Island

VI.A.2. County Owned Public Beach Access.

Five (5) County owned/maintained public beach access roads and, one (1) beach parking lot at Padre Balli Park

- Newport Pass Beach Access Road is located 1 mile south of Mustang Island State Park Beach Access Road 3 on Mustang Island
- Beach Access Road 4 is located 0.3 miles south of Whitecap Boulevard on North Padre Island, within Padre Balli Park
- Beach Access Road 5 is located 0.4 miles south of Beach Access Road #4 on North Padre Island, within Padre Balli Park
- Padre Balli Park entrance road is located 0.3 miles south of Beach Access Road Five on North Padre Island
- Beach Access Road 6 is located 0.4 miles south of the Padre Balli Park entrance road on North Padre Island, within Padre Balli Park

- Padre Balli Beach Parking Lot is located between the Padre Balli Park entrance road and Beach Access Road #6 on North Padre Island

VI.A.3. State Owned Public Beach Access.

Two (2) State owned/ maintained public beach access roads and one beach parking lot are located on Mustang Island State Park

- Mustang Island State Park Entrance Road is located 206 miles south of Beach Access Road 2 on Mustang Island and terminates at beach parking lot.
- Beach Access Road 3 is located 2.2 miles south of the Mustang Island State Park entrance on Mustang Island

VI.A.4. Federally Owned Public Beach Access.

One (1) Federally owned/maintained beach access road is located on North Padre Island and is located 7.5 miles south of Beach Access Road #6 in Padre Balli Park.

VI.B. Existing Standard for Access along the Public Beach

For the foreseeable future the County and the City have no intention of closing any public beach access roadways. However, temporary closure of public beach access is allowed for the purpose of protecting the public during times of seasonal high tides, proceeding landfall of a tropical storm or during times of any other public emergency where travel on the public beach presents a public risk.

By Chapter 10 of the City Code the public beach is safely passable if there is sufficient room for two travel lanes and provided that the travel lanes cannot be closer to mean high tide than 50 feet and not closer to the Line of Vegetation than 25 feet.

VI.C. Beach Access Road Assessment

VI.C.1. Beach Access Road #2

Beach Access Road #2 is located approximately 7.2 miles south of Beach Access Road 1A in the City of Port Aransas. Beach Access Road #2 connects directly with State Highway 361 and the gulf beach for a total length of approximately 1,450 feet. The road contains asphalt pavement with a width of 20-24 feet and 5 foot to 8 foot wide gravel shoulders. There is a slight rise in elevation of the roadway cresting approximately 300 feet landward of the public beach. The roadway then gradually slopes to its terminus at the Gulf Beach. The slight elevation of Beach Access Road #2 at its approach to the beach provides protection to inland properties during a storm surge.



Figure 13: Beach Access Road 2 on Mustang Island



Figure 14: Beach Access Road 2, Seaward View Near State Highway 361

Beach Access Road 2 does not contain a GLO recommended “switch back” that turns away from the prevailing winds at the approach to the beach. If the roadway were improved with the necessary turn away from prevailing winds, the

accumulation of sand in the roadway would be reduced. Vacant privately owned properties are located on either side of Beach Access Road #2, which when platted may allow the realignment of the roadway to include a small switchback. The construction of the switch back may require public grant funding with a local match.

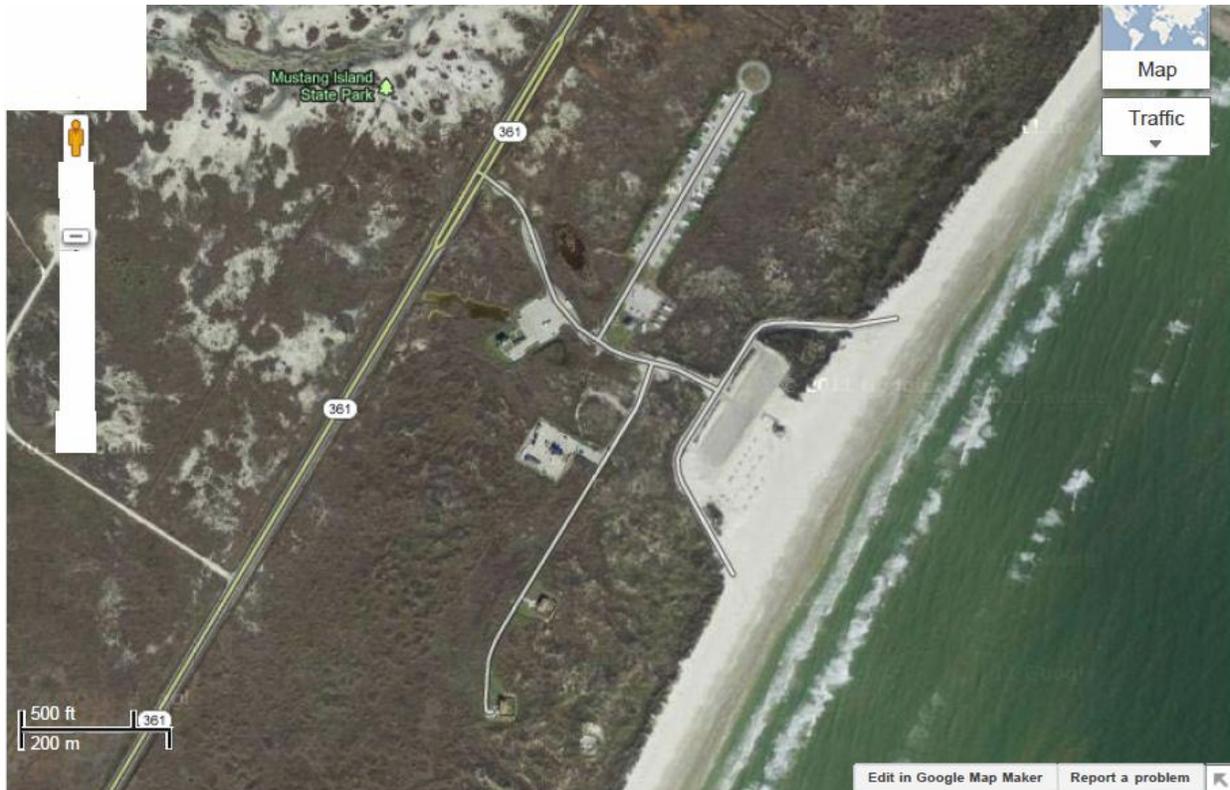


Figure 15: Mustang Island State Park Entrance, Google Aerial

VI.C.2 Mustang Island Park Entrance Road

Mustang Island Park Entrance Road connects State Highway 361 with a beach parking lot. The entrance road has a length of approximately 0.30 miles and a width of 22 feet with several pull out parking areas along its length. The roadway also connects with an Recreation Vehicle Park. The roadways contains a switch back but does not have a raised speed hump elevation for storm surge protection at the approach to the beach. The entrance roadway is owned and maintained by the state and is exempt from the Erosion Reponses Plan.



Figure 16: Beach Access Road 3, Mustang Island State Park

VI.C.3 Beach Access Road 3

Beach Access Road 3 is located on Mustang Island State Park and connects State Highway 361 with the gulf beach. Beach Access Road #3 is not subject to the Erosion Response Plan. The approximate length of the Beach Access Road #3 is 0.50 miles. The roadway consists of two travel asphalt lanes with a width of 20 to 24 feet, 5 to 8 foot wide gravel shoulders and roadside drainage. The roadway does not have the GLO recommended switch back alignment away from prevailing winds and does not have an “elevated hump” at the approach to the beach. Beach Access Road 3 is owned by the State of Texas and is exempt from the Erosion Response Plan.

VI.C.4 Newport Pass Road

Newport Pass Road connects with State Highway 361 and the gulf beach and is located approximately 1 mile south of Beach Access Road #3. The total length of the roadway is approximately 0.50 miles. The roadway is composed of asphalt pavement with a width of 20 feet for two travel lanes. The roadway contains two switch-backs consistent with GLO design guidelines.



Figure 17: Newport Beach Access Road, Photos and Google Aerial

While the roadway does not contain the GLO recommended roadway hump at the approach to the beach, there is a moderate elevation grade leveling off roughly 100 feet before connecting with the beach. Damage to the roadway from previous hurricanes and tropical storms has been minimal. The possibility of future damage to commercial or residential property adjacent to the roadway is negligible as the County owns all adjacent property. However, if the roadway sustains major storm damage in the future, the County would address a more prominent elevation similar to that of an exaggerated speed hump if funding were available.

VI.C.5 Zahn Road



Figure 18: Zahn Road at Packery Channel, Google Aerial



Figure 19: Zahn Road at Packery Channel

Zahn Road is located approximately 1 mile south of Newport Pass Road and connects State Highway 361 to the beach. Roadway length is 950 feet with a right-of-way of 85 feet and two travel lanes. A five foot sidewalk is located on the northern edge of the right-of-way. The roadway does not have a GLO

recommended switchback or an elevated section near the approach to the beach. In the future, if the roadway is substantially damaged then an elevated section would be pursued if funds are available. Due to the adjacent residential subdivision and dune system, a realignment to include a switch back may not be feasible.

VI.C.6 Beach Access Road 3A



Figure 20: Beach Access Road 3A, Google Aerial

Beach Access Road #3A on North Padre Island is located immediately south of the Packer Channel and connects with the gulf beach via Park Road 22, Whitecap Boulevard and Windward Drive. The approximate length of the Beach Access Road #3A is 0.14 miles or 750 feet. The roadway consists of two asphalt travel lanes with a width of 20 feet. The roadway alignment is generally consistent with GLO standards with a steep drop off within 100 feet of the beach. In addition, there is at least 10 feet of elevation from the beach landward to Beach Access Road 3A's connection with Windward Drive.



Figure 21: Beach Access Road 3A, Seaward View

VI.C.7 Seawall Parking Lot



The seawall parking lot was constructed in 2006 and contains approximately 300 parking spaces. Since construction the parking lot has been improved with several enhancements that include public restrooms, landscaping and an ADA beach access ramp from the seawall to the beach.

Figure 22: Seawall Parking Lot

VI.C.8 Whitecap Boulevard

Whitecap Boulevard on North Padre Island is located 0.85 miles south of the Beach Access Road 3A and connects the gulf beach with Windward Drive. The approximate length of the Whitecap Boulevard between the beach and Windward Drive is 1,100 feet. The roadway pavement consists of two asphalt travel lanes, parallel on street parking with a width of approximately 44 feet. The roadway contains curb and gutters with sidewalks on both sides of the street, ranging in width from 10 feet to five feet at the approach to the beach. The roadways length and alignment are generally consistent with GLO standards. The msl elevation at Windward Drive is 7 feet with a gradual slope to the sea level at the beach. In the event of storm damage, if funds are available, the City would reconstruct the roadway with an exaggerated speed hump at the approach to the beach per GLO design guidelines.



Figure 23: Whitecap Boulevard, Google Aerial



Figure 24: Whitecap Boulevard, Seaward View

VI.C.9 Beach Access Roads 4, 5, 6 and Padre Balli Park Entrance/Exit Road

These access roads connect directly to State Highway Park Road 22, providing public access within the park along North Padre Island. (Figure 27)

Figure 25: Beach Access Roads 4, 5, 6 and Padre Balli Park Entrance / Exit Road



Beach Access Road 4 is located approximately 0.20 miles south of Whitecap Road and connects the beach with Park Road 22. Beach Access Road 4 is 0.5 miles in length and 24 feet in width and contains two travel lanes. Elif Road

intersects Beach Access Road 4 approximately 950 landward of the Gulf Beach to form a T-intersection. Beach Access Road 4 has a straight alignment without switchbacks but is oriented at an angle to the prevailing winds.

Due to Beach Access Road 4's relatively flat grade and low elevation, if the roadway sustained major storm damage, then Nueces County would seek funding to address construction of a more prominent elevation and possibly a switchback consistent with GLO design guidelines.



Figure 26: Beach Access Road 4, Seaward View at the Intersection of Elif Road

VI.C.10 Beach Access Road 5

Beach Access Road 5 is located approximately 0.5 miles south of Beach Access Road 4 and also connects the beach with Park Road 22. The total length of the roadway is 0.4 miles and contains a width of 24 feet. The roadway is not consistent with GLO design guidelines for a switchback and an elevated hump at the approach to the beach. If

Beach Access Road 5 sustained major storm damage, the county would seek funding to address construction of a more prominent elevation similar to that of

the exaggerated speed hump and some road realignment to ensure that its culminating point onto the beach was at more prominent angle to the prevailing wind direction. Because Beach Access Road 5 is within the Park, there are no impacts to private property.

Figure 27: Beach Access Road 5, Seaward View



VI.C.11 Padre Balli Park Entrance/Exit

The Padre Balli Park Entrance/Exit is located approximately 0.28 miles south of Beach Access Road 5 and also connects the beach with Park Road 22. The total length of the roadway is 0.38 miles. The entrance and exists along this roadway are divided by a large median. The entrance and exit roadways are each 24 feet in width.

As the park entrance, the roadways connects to the beach, beach parking facilities, RV Camping facilities, County Park Offices, and Bob Hall Pier. Reorientation of the access road would require major redesign of the park.



Figure 28: Padre Balli Park Entrance/Existing Road, Seaward View

In order to deflect a direct storm surge a large grassy area has been highlighted in Figure 31 with the recommendation to create a large dune on this site. The unused grassy surface is 51,340 or about 1.1 acres. Dunes could be built on the area by placing sargassum seaweed from nearby beach areas.



Figure 29: Padre Balli Park Entrance - Potential 1.1 Acre Dune Construction Site

VI.C.12 Beach Access Road 6

Beach Access Road 6 is located 0.45 miles south of the Padre Balli Park Entrance/Exit Road and is very near the southern most boundary of Padre Ballie Park. The roadway connects with Park Road 22 and has a total length of 0.4 miles and contains a switchback alignment but at its approach to the beach faces into the prevailing wind. While there is a gentle rise in elevation as the roadway approaches the beach, there is not the pronounced rise in road elevation suggested by GLO guidelines.



Figure 30: Beach Access Road 6, Google Aerial



Figure 31: Beach Access Road 6, Seaward View

VI.C.13 Padre Island National Sea Shore North Beach Access Road

Padre Island National Sea Shore North Beach Access Road located 7.5 miles south of Beach Access Road 6. The roadway connects with Park Road 22 and has a total length of 0.42 miles and contains a switchback alignment but at its approach to the beach faces into the prevailing wind. The orientation of the roadway at the beach is facing into the wind and not consistent with GLO Guidelines. There is a gradual elevation up to the foredune ridge with a sloping drop off to the beach. The roadway is owned and maintained by the U.S. Park Service.



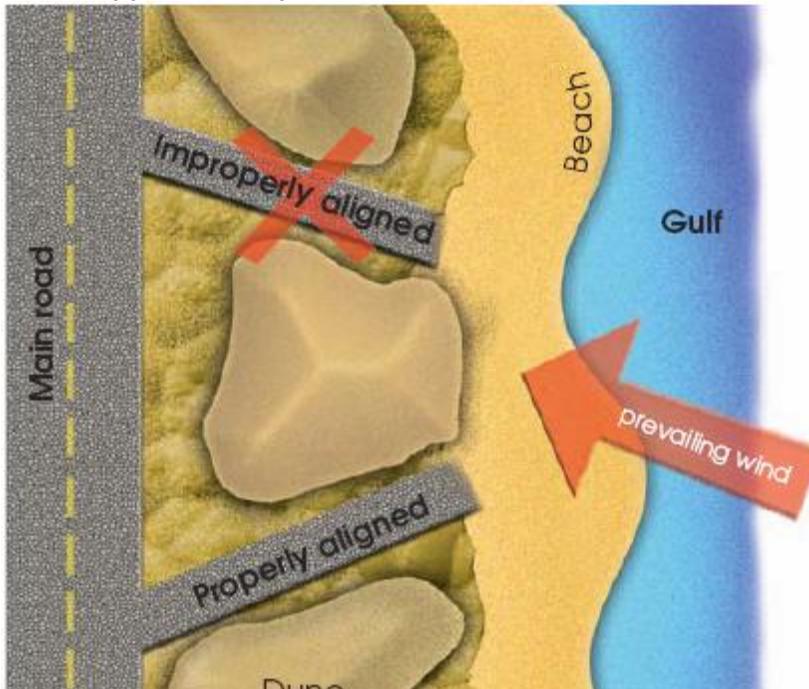
Figure 32: Padre Island National Sea Shore North Beach Access Road

VI.D. Recent Enhancements to Public Beach Access

Recent city improvements to enhanced beach access include reconstruction of a portion of Zahn Road, beach renourishment in front of the seawall, the Padre Island Sea Wall Parking lot, resurfacing /sidewalk improvements to Whitecap Boulevard and Packery Channel recreational improvements.

VI.D.1 Zahn Road Improvements

Zahn Road, located immediately north of Packery Channel, was reconstructed in 2009 as part of a development agreement between the developer of Tortuga Dunes Subdivision and the City. Total project costs for the City were approximately \$1,291,538 and \$523,837 for the developer. Improvements made



to the street included: a gravel sidewalk along the northern edge of the roadway, resurfacing, etc.

VI.D.2 Beach Renourishment / Padre Island Seawall

As part of the Packery Channel Project, the beach in front of the Padre Island Sea Wall was renourished with a grant from the Texas General Land Office in 2003. The cost of the renourishment was \$1.3 million.

VI.D.3 Seawall Parking Lot

A 300 space seawall parking lot was constructed

Figure 33: Beach Access Road Alignment

in 2006. The parking lot is landscaped, contains an ADA access ramp from the sea wall to the beach and in 2008 public restrooms and outdoor showers were added to the facility. The cost of the parking lot, ADA access ramp and the restrooms was \$1.2 million.

VI.D.4 Whitecap Boulevard Resurfacing and Sidewalk Improvements

In 2010, Whitecap Boulevard was resurfaced and curbs were repaired. The project also included a new 10 foot wide stamped concrete sidewalk from Windward Drive to the 200 foot Erosion Area Line Boundary. Seaward of the Erosion Area Boundary the existing five foot wide brick paver sidewalk was repaired and refurbished. The cost of the project was approximately \$540,000.

VI.D.5 Packery Channel Recreational Improvements

The Packery Channel was constructed in 2002-2005. The Packery Channel project was a 21.4 million dollar project to dredge a channel between the Laguna Madre and the Gulf of Mexico and to construct two 1,400 foot jetties.

In addition, 1.1 million was spent to provide an access road, large car and trailer parking and two boat ramps.

Parking, overlooks, restroom facilities, ADA access ramps and a pavilion are planned for construction by 2014. Costs for these improvements are estimated to be approximately \$4.8 million dollars.

The City of Corpus Christi also has other significant costs associated with the beach including beach cleaning at an annual cost of over \$700,000 per year, fire protection costs include the city newest Fire Station at the north end of Mustang Island State Park and police patrol for the beach area.

VI.E. Priority for Beach Access Road Improvements

The prioritization for beach access improvements should be based on:

VI.E.1 Enhancing Public safety.

VI.E.1.i Beach Access Road Spacing. Spacing of beach access roadways to allow quicker access to on beach emergencies – where beach access roadways are spaced at intervals of greater than 1 mile

Signage at beach access points to warn the public of natural hazards, rip tides, etc.

VI.E.1.ii Beach Access Road Realignment and Raised Humps.

Improvements to protect the access and surrounding developed property from storm surge damage By realignment of the beach access in accord with GLO Guidelines; and by placing a raised hump in the roadway landward of the beach per GLO Guidelines.

VI.E.1.iii Beach Renourishment. Beach Renourishment where the narrow width of the beach becomes a safety hazard and/or is less than 100 feet wide.

VI.E.1.iv Beach Amenities.

Amenities to benefit the general public's beach access experience at high use areas including public showers and restrooms landward of the public beachPackery Channel improvements for access to the channel walkway, outlooks, channel fishing amenities, etc.

Based on the criteria above the following is a list of beach access improvements.

VI.E.2. Short Term Goals (Three years or less)

VI.E.1.i. New Beach Access Road on Mustang Island. Obtain right-of-way for a new beach access roadway north of Mustang Island State Park.

Currently there is a 7.3 mile distance between Beach Access Road 1 in City of Port Aransas and the Beach Access Road 2 in the City of Corpus Christi.

VI.E.1.ii New Beach Access Road on North Padre Island. Obtain right-of-way for a new beach access roadway south of Access Road 6. Currently, there is 7.5 mile spacing between Beach Access Road 6 and the National Sea Shore Beach Access Roadway.

VI.E.1.iii. Beach Monitoring. Continue monitoring of the beach at Packery Channel.

VI.E.1.iv. Packery Channel. Packery Channel Improvements – parking, outlooks, restrooms, ADA access improvements, etc.

VI.E.1.v. Corp of Engineers Permit for Beach Cleaning. Propose revisions to the existing Corp of Engineers permit for beach cleaning which allows widening of the beach by placement of beach sand seaward of mean high tide.

VI.E.1.vi. Beach Bollards. Install beach bollards in front of the seawall to delineate vehicular and non-vehicular beach access areas.

VI.E.3. Long Term Goals (greater than two years)

VI.E.3.i. Construct New Beach Access Road on Mustang Island. Construct a new beach access roadway north of Beach Access Road 2 to reduce emergency response times to beach emergencies at the northern end of Mustang Island inside the City of Corpus Christi.

VI.E.3.ii. Construct New Beach Access Road on North Padre Island. Construct a new beach access roadway south of Beach Access Road 6 to reduce emergency response times to beach emergencies between Beach Access Road 6 and the National Sea Shore Beach Access Roadway.

VI.E.3.iii. Seawall Beach Renourishment. Renourishment of the beach in front of the Padre Island Seawall.

VI.E.3.iv. Monitoring Mustang Island Beaches. Monitoring and renourishment of the beach north of Mustang Island State Park.

VI.E.3.v. Packery Channel Improvements. Packery Channel fishing and outlook amenities.

VII. Acquisition of Property Seaward of Setback Line

The City of Corpus Christi and Nueces County have developed criteria for identifying properties for voluntary acquisition of fee simple title or a lesser interest acquisition by donation or potential purchase. These properties, which may have structures located entirely seaward of the building setback line, experience severe damage during storms,

impede the development of a natural dune system and restrict the use of the public beach. To be considered for acquisition, a structure must:

- be entirely seaward of the building setback line,
- impede beach access,
- be more than 25% on the public beach,
- affect hydrology as determined by a registered professional geologist/engineer licensed in the State of Texas,
- deemed to be a hazard to health and safety, or
- cause erosion of adjacent property.

Property to be acquired will be prioritized based on the severity and amount of criteria met. Acquisition strategy will consist of:

- acquisition by voluntary donation to the City or County,
- identification of potential property,
- negotiation of acquisition,
- available funding including potential grants,
- agreement execution, and
- removal or relocation of structure.

VIII. Post Storm Recovery

Following the land fall of a hurricane, City staff will conduct the following measures to ensure public access to and use of the public beach.

VIII.A. Inspections

Conduct inspections of all designated beach access points to determine whether the public is able to access the beach.

VIII.B. List Required Repairs

Compile a list of required repairs and replacements, including but not limited to parking areas, pedestrian pathways, vehicular access ways, and signage.

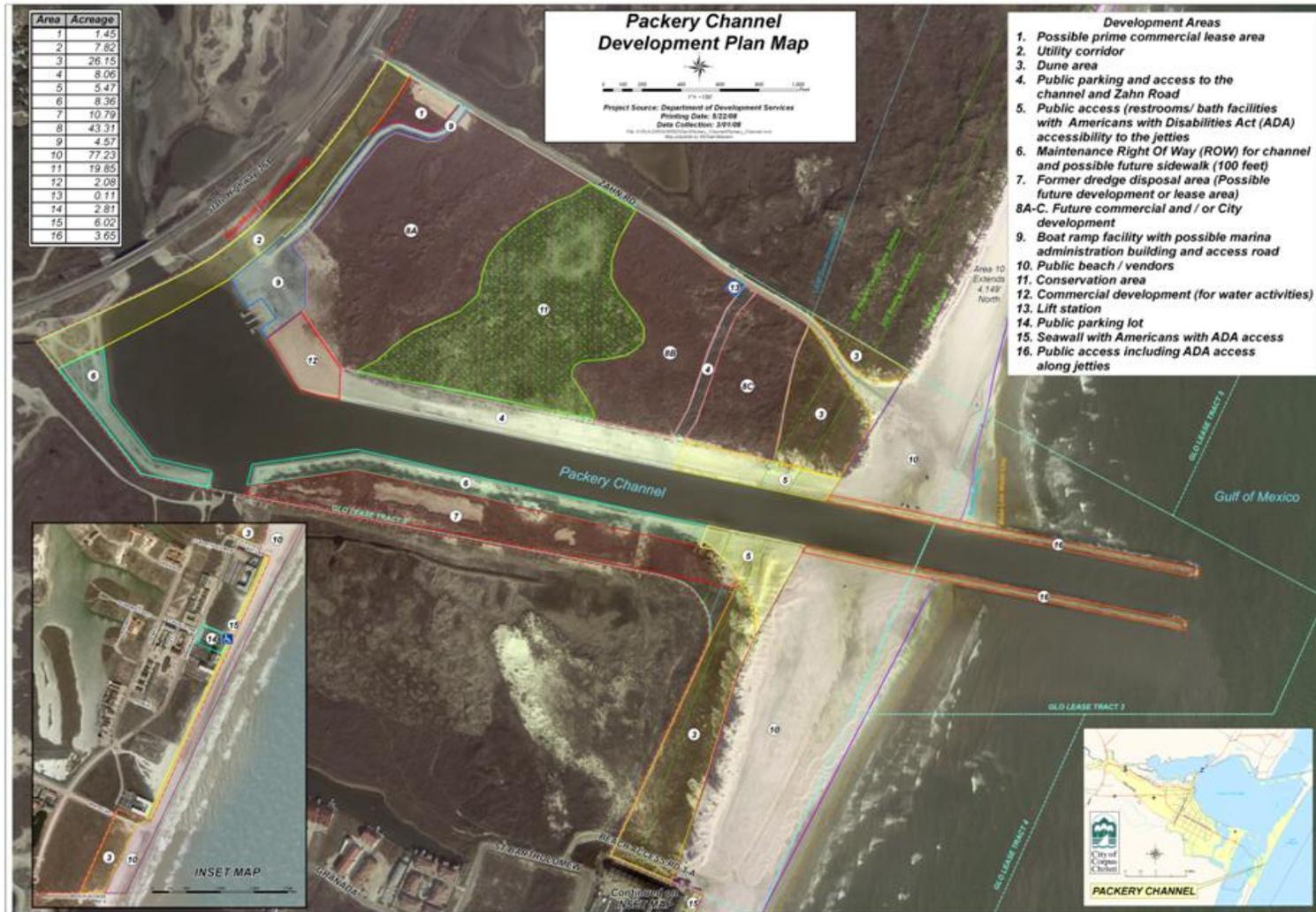
VIII.C. Repair Schedule

Create schedules for public access area repairs and replacements based on local funding and grant requests.

Appendix 1: Packery Channel Development Plan

Packery Channel Development Goal - to facilitate development of a world-class recreational destination on the Texas Gulf Coast.

Development of the area will provide a significant economic stimulus to the island, the city, the region and the State of Texas.



Development of the Packery Channel area (Packery Channel Development Plan, will be in a manner that is consistent with this Erosion Response Plan, Nueces County Dune Protection and Beach Access Regulations and all other applicable city, state and federal requirements.

Appendix 2: Dune Assessment and Mitigation Map Exhibits 1-20

Appendix 3: Beach Access Assessment and Mitigation Map Exhibit 21



