General Principles for Seaweed Relocation Activities

Statement of Purpose

This document has been prepared to help enhance the beach experience and improve environmental stewardship for the benefit of all beach visitors. The beaches of Galveston provide many unique and diverse recreational opportunities while serving as one of the Island's primary economic engines that provide fully a third of all jobs within the city and are a major factor in Galveston's future economic development. Given the critical importance of beaches, this document is intended to establish a framework to promote the use of a common terminology, environmentally responsible beach maintenance practices, and to provide a safe and aesthetically pleasing beach environment.

These recommendations seek to foster the use of sustainable beach maintenance practices that provide the greatest public benefit, enacted in consideration for local beach dynamics, while using the least intrusive method possible. Many considerations factor into the decision process including: necessity, seasonal and species windows, potential impacts of activity, avoidance of native vegetation, and proximity to visitors. It can often be appropriate to take no action dependent on the location, volume of seaweed and time of year. The most common beach maintenance practices include seaweed relocation, litter control, and debris removal.

A summary listing of potential seaweed relocation considerations include:

- **A.** Consider necessity of proposed action.
- **B.** Consider seasonal and species impacts of proposed actions.
- **C.** Use least intrusive method possible.
- **D.** Avoid seaweed relocation practices that negatively impact native vegetation.
- **E.** To enhance public safety do not operate equipment in populated areas whenever possible.

Best Management Practice Recommendations For Seaweed Relocation Activities

Beach Cleaning:

- I. Scope of Activities / Area of Activities
 - **1. Best Practice:** For uniform understanding, utilize TAMUG sargassum Wrack scale and terminology delineating the severity of the seaweed landing; see attachment.
 - **2. Best Practice:** Undertake seaweed cleaning based on necessity.
 - **3. Best Practice:** Discourage grooming of the wet beach for regular maintenance or aesthetic enhancements.

Beach Maintenance:

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II. Scope of Activities / Area of Activities

- **1. Best Practice:** Allow grooming of dry beach with mechanized beach rake only, prohibit the use of heavy construction equipment for grooming purposes.
- **2. Best Practice:** Evenly distribute relocated seaweed along beach frontage area to reduce beach narrowing. Collected seaweed can be distributed along the seaward toe of the dune.
- **3. Best Practice:** Do not remove or relocate sand from the permitted area.
- **4. Best Practice:** Consider vegetating seaweed stacking areas.

III. Surveys and Monitoring

- **1. Best Practice:** Current survey information should be included with information presented for a City of Galveston permit.
- **2. Best Practice:** Utilize uniform and standardized survey control points as specified by the City of Galveston.

City of Galveston Erosion Response Plan Maps

Link: Pending update and availability by the City of Galveston

IV. Technology/Equipment

- **1. Best Practice:** Prohibit the use of Road Grader/Maintainer, Skid Steer, or other heavy tracked equipment for seaweed cleaning.
- **2. Best Practice:** Provide evidence of operator training and competency.
- **3. Best Practice:** Front Loader type equipment must utilize a bucket level control indicator to prevent scour or gouging of the beach (also known as a float mechanism).

V. Environmental Review/Compliance

(See Statement of Purpose and Summary A-E Considerations at beginning of document)

- **1. Best Practice:** Public entities should provide regular, seasonal training for all beach staff including Beach Cleaning, Parks Department, and Beach Patrol.
- **2. Best Practice:** Permittees should report evidence of turtle nesting upon discovery to NOAA at 866.887.8535.
- **3. Best Practice:** Coordinate with resource agencies and institutions of higher education to provide ongoing training for species awareness.
- **4. Best Practice:** Contact NOAA before each cleaning activity to give notice of the scheduled cleaning activity.

Items to Consider Including on Cover Page to the City of Galveston

- City of Galveston permit requires a "Certified Monitor". At this point a training course for a monitor certification does not exist.
- Create a permit application that only applies to sargassum re-location, cleaning the beachfront and sand maintenance.
- City of Galveston should consider pre-qualifying seaweed removal service providers or creating a registration process to approve service providers.

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- City of Galveston should request current topographic survey information be submitted with each Beach Maintenance permit application due to the dynamic nature of the coastal environment; information utilized from the annual City surveys should meet this requirement.
- The City of Galveston permit includes a requirement to notify NOAA at 866.887.8535 for beach maintenance activities. This number is a voice message system; it is a concern the system may become overloaded with daily messages from multiple permit holders making it difficult for NOAA to receive genuine stranding emergency notifications. The City should consider including weekly rather than daily updates for reporting scheduled services.
- City of Galveston should request a photographic report to be provided by each Beach Maintenance permitee holder to the City on or before November 30th; that includes photographs of the permitted area at the end of the season from the same perspective as included in the permit application.