

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA
SOUTHERN DIVISION
IN ADMIRALTY
CASE NO. 97-2510-CIV-DAVIS/BROWN
CASE NO. 97-10075-CIV-DAVIS/BROWN

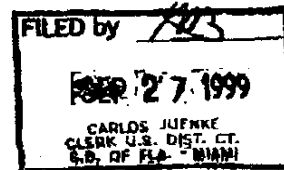
UNITED STATES OF AMERICA,

Plaintiff,

v.

GREAT LAKES DREDGE & DOCK CO.,

Defendant.



BOARD OF TRUSTEES OF THE INTERNATIONAL
IMPROVEMENT TRUST FUND OF THE STATE OF
FLORIDA and FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION,

Plaintiffs,

v.

GREAT LAKES DREDGE & DOCK CO.,

Defendant.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

THIS CAUSE came before the Court on claims by the United States of America and the State of Florida against Great Lakes Dredge & Dock Company ("Great Lakes") and Coastal Marine and Towing ("Coastal") for damage caused by a grounded tugboat and dredge pipe to the Florida Keys National Marine Sanctuary. Plaintiffs sought damage and response costs pursuant to the National Marine Sanctuaries Act, 16 U.S.C. §§ 1431, *et seq.*

On the first day of trial, both the United States and the State of Florida entered into a

settlement agreement with Coastal, whereby all claims against Coastal were dismissed. The terms of the settlement agreement were set forth and approved by this Court on April 15, 1999. Under the agreement, the State of Florida's claims against Great Lakes were also satisfied. Thus, the United States proceeded to trial solely against Great Lakes.

The matter was tried before the Court from April 5, 1999 through April 14, 1999. The Court enters the following Findings of Fact and Conclusions of Law pursuant to Rule 52(a) of the Federal Rules of Civil Procedure. To the extent that the Findings of Fact may be considered Conclusions of Law, they shall be so considered. Similarly, to the extent that the Conclusions of Law may be considered Findings of Fact, they shall be so considered.

I. FINDINGS OF FACT

A. Background

In May of 1993, Great Lakes was demobilizing a dredge project in the Boca Grande Channel off the west coast of Florida. Great Lakes orally hired Coastal to tow the dredge pipe and other equipment from Boca Grande to Green Cove on the east coast of Florida. Under the agreement, Coastal was to supply two tugs, the Captain Joe and the Miss Necie, plus crews. Great Lakes was to provide two assist tugs, the Cavalier State and Volunteer State, to accompany Coastal's vessels to Green Cove. During the voyage, the Great Lakes' assist tugs would be responsible for helping Coastal's vessels maneuver the tows, provide an extra set of eyes to monitor the pipe rafts, and to assist in the event of unanticipated problems.

Coastal's lead tug, the Miss Necie, was towing two rafts made up of several five hundred foot dredge pipes. The Miss Necie was assisted by Great Lakes' assist tug, the Volunteer State. At all times during the trip, the Volunteer State was to receive its instructions from the Miss Necie. Coastal's second tug, the Captain Joe, was towing a derrick barge with a crane and other dredging

equipment and one raft of 500 foot dredge pipe. The Captain Joe was assisted by Great Lakes' assist tug, the Cavalier State. At all times during the trip, the Cavalier State was to receive its instructions from the Captain Joe.

Great Lakes was responsible for the preparation of the pipe rafts and ensuring that the rafts were watertight, safe and seaworthy. Great Lakes used its own crane, welding equipment, and crews to prepare the tows. Great Lakes, however, failed to test the pipes to confirm that they were airtight, despite being asked to do so by Coastal's operations manager.

On May 26, 1993, the Great Lakes-Coastal flotilla departed from Boca Grande en route to Green Cove. Great Lakes instructed Coastal to keep the derrick barge with the crane close to the Ms. Nessie pipe raft in case something went wrong. Great Lakes, however, failed to send a welder or crane operator with the flotilla who could have made any required repairs.

Coastal initially contemplated that the tugs would take their tows south along the west coast of Florida to Key West, and then proceed up the east coast of Florida to Green Cove. One day out of Boca Grande, however, it was discovered that some of the pipes in the Miss Necie pipe raft were lower than normal in the water. The crew of the Volunteer State inspected the pipe raft and determined that the pipes were low, but that they had not sunk to the bottom.

A Great Lakes employee aboard the Volunteer State reported the sinking pipes to the lead captain of the Miss Necie. The captain of the Ms. Nessie then notified various officials at Great Lakes and Coastal about the sinking pipes and inquired as to the appropriate course of action. What followed were a series of conversations with officials at both companies, whereby no one in charge would render a decision. Officials at Coastal maintained that only Great Lakes could grant permission to stop the flotilla, while Great Lakes referred all questions back to Coastal officials.

Instead of providing Coastal crews any specific direction, Great Lakes arranged for a crane

operator and welder to go to Marathon to meet up with the flotilla and fix Ms. Necie's tow. Having failed to attain permission from Great Lakes to stop the flotilla and out of concern for approaching bad weather, the Miss Necie elected to proceed through the Florida Keys National Marine Sanctuary ("Sanctuary") to Marathon where the Great Lakes repair crew would be waiting.

B. Seagrass Damage

1. Pipe Scar

At this point, the Miss Necie, Captain Joe, and their respective assist tugs all changed course to proceed through the Sanctuary. The Volunteer State, acting as an extra set of eyes for the Miss Necie, continued to report that the tow was holding together and that it could safely continue its course. As was later discovered, however, at least one pipe on the Miss Necie was so low that it dragged along the sea bottom as the flotilla entered the Sanctuary.

The dragging dredge pipe created a pipe scar approximately 13 miles long (the "Pipe Scar") and destroyed 18,280 square meters of sea bottom. The affected area consisted primarily of sea grasses and other sanctuary resources, including *Thalassia* (23%), *Syringodium* (76%), and small amounts of sand, sediment and algae (1%).¹ Both the government and Great Lakes have agreed that the Pipe Scar recovered on its own in three years and that no restoration at the site is necessary.

2. Grounding Site

While proceeding through the Sanctuary, the Miss Necie began to slow due to the dragging of the dredge pipe. The Captain Joe, following immediately behind the Miss Necie, failed to notice how much the Miss Necie had slowed until it was almost on top of her. Captain Trice, in charge of

¹In arriving at this figure, the Court relied almost entirely on the United States' estimates of the composition of the sea bottom prior to the creation of the Pipe Scar. The Court found that the government's expert studies of the damaged areas were more thorough and precise than were Great Lakes'.

the Captain Joe at the time, ordered the Cavalier State (which was attached to the rear of the tow) to "back her down"; i.e., to help slow the Captain Joe. Captain Trice then tried to pass the Miss Necie on the right. Realizing, however, that he would not be able to successfully execute that maneuver, Captain Trice brought the vessel back hard to the left. In executing the move to the left, he avoided a collision with the Miss Necie but momentarily ran aground on a bank in the Sanctuary.

Again, Captain Trice asked the Cavalier State to back up the Captain Joe and its tow. Captain Trice then swung the Captain Joe to the left or port side of the Miss Necie. As the Captain Joe came alongside of the Miss Necie this time, it ran hard aground. Captain Trice tried to get the Captain Joe off the bank to no avail. The Miss Necie, on the other hand, was able to continue forward and eventually brought itself to a stop outside of Marathon without further incident.

On the following morning, the Captain Joe was still hard aground. Some combination of the Captain Joe's own engines and the Cavalier State's pulling during failed attempts to extricate the tug had actually dragged the Captain Joe further along the bank. The local sanctuary authorities arrived on the scene later that afternoon to assess the situation. Working together with Coastal and Great Lakes, the authorities devised a plan to extricate the Captain Joe from the bank. Finally, at around 2:00 a.m. on the morning of May 27, during the highest tide, the Captain Joe was removed from the bank.

The grounding of the Captain Joe destroyed 7,495 square meters of the sea bottom and bank (the "Grounding Site"). The Grounding Site, prior to the incident, primarily consisted of *Thalassia* (69%), *Syringodium* (30%), and porites coral, sand and other sediment (1%).² Natural

²In arriving at this figure, the Court relied almost entirely on the United States' estimates of the composition of the sea bottom prior to the creation of the Grounding Site. See Hudson Report, Exhibit 18. The Court found that the government's expert studies of the damaged areas were more thorough and precise than were defendant's.

recolonization at the Grounding Site has been very slow, and a full recovery of the seagrasses at the Site is likely to take many years.

C. Seagrass Restoration

In accordance with federal regulations, the government has developed a plan to address injuries at the Grounding Site and Pipe Scar that involves two components-- 1) primary restoration; and 2) compensatory restoration. See 60 Fed Reg. 39804, *39805 (August 3, 1995) (codified at 15 C.F.R. Part 990). The primary restoration plan addresses restorative actions taken at the actual injury sites that attempt to return the injured resources back to their baseline condition. See *id.* The compensatory restoration component addresses restorative or replacement actions at other sites within the Sanctuary to compensate for lost interim services of the destroyed resources.

1. Primary Restoration Proposal

The government's primary restoration plan seeks only to redress injuries at the Grounding Site since the parties and the Court agree that the Pipe Scar has recovered naturally and that no on-site restoration there is necessary. Although experts for both Great Lakes and the government are in accord that the Grounding Site has also begun to recover naturally, each disputes the extent of such recovery. The government maintains that the Grounding Site is highly unstable and will not recover to pre-grounding morphology for a number of years without on-site intervention.

As part of its primary restoration plan development, the government evaluated several restoration alternatives to address the injury at the Grounding Site. Of the several restoration plans it initially considered, the government identified what it considered to be the three most viable alternatives, the 1) imported fill plan; 2) no action plan; and the 3) site regrading plan.³ The

³The Court does not address the site regrading alternative in detail because it is just a variation of the imported fill alternative. The concept behind it and the risks associated with it

government then selected the imported fill plan as its recommended alternative to restore the Grounding Site.

a. Imported Fill Plan

Under the imported fill plan, the government proposes filling the Grounding Site with imported limestone rock, sediment, and reinforcement boulders, in attempt to restore the site to pre-grounding morphology and provide a stable substrate for vegetative recovery. In addition, the plan calls for the installation of more than thirty stainless steel stakes at the site that will assist the government in visually monitoring sediment movement within the area.

Implementation of the imported fill approach would require substantial construction and work activity over the Grounding Site, and any natural recovery of the site would likely be destroyed by filling the area. Nevertheless, the government maintains that the imported fill plan is the best alternative because it provides the greatest chance of returning the Grounding Site to its pre-grounding morphology, stabilizing the area, and creating the best potential for seagrass recruitment. The cost of physically restoring and monitoring the Grounding Site under the imported fill plan is approximately \$894,690.00.⁴

b. No Action Plan

The second alternative the government considered in developing a primary restoration proposal is referred to as the no-action plan. Under the no-action plan, no action would be taken at

are similar. Like the imported fill option, regrading the site requires moving sediments into the Grounding Site trench area. Rather than using imported fill, however, the government would use sediments graded from the south berm area of the Grounding Site.

⁴Specifically, the government has asked for \$480,257.00 for the actual physical restoration of the Grounding Site. In addition, the government asked for \$308,041.00 for physical monitoring of the site and \$106,392.00 for biological monitoring.

the Grounding Site other than periodic monitoring to ensure that recovery continues. The injury would be left alone to adjust and evolve toward a natural equilibrium or stable condition over time. Any natural restoration or regrowth that has occurred would be left intact. Although the recovery period cannot be determined with precision, the evidence presented suggests that the Grounding Site would recover naturally in roughly seventy years. The government maintains that this is not the best alternative for primary restoration because it does not achieve the objective of restoring the site to its original condition.

2. Compensatory Restoration Proposal

As compensation for lost interim services provided by the resources destroyed at the Pipe Scar and Grounding Site, the government intends to implement compensatory restoration projects at other sites within the Sanctuary. In 1998, the government conducted a survey to identify potential seagrass restoration projects in the Sanctuary that would be similar in scale and nature to the 6.36 acres of seagrass destroyed at the Pipe Scar and Grounding Site.

The government determined that the most viable off-site compensatory restoration project would be to transplant seagrasses into boat-impacted areas that have subsequently been designated no-motor zones ("Prop Scar Restoration Project"). The Prop Scar Restoration Project contemplates restoring sea grasses into prop scars by introducing *Halodule* grass and bird stakes to initiate compressed succession of sea grass regrowth in the damaged areas. Compressed succession is a planting technique intended to achieve a more rapid rate of seagrass recovery by temporarily substituting faster growing *Halodule* grasses for the slower growing *Thalassia*. This sequence promotes suitable conditions for *Thalassia* to recolonize, in addition to stabilizing the sediment and establishing a functional seagrass habitat.

The government determined the appropriate scale of the Prop Scar Restoration Project using

an assessment methodology known as the Habitat Equivalency Analysis ("HEA").⁵ The HEA determines the quantity of equivalent habitat necessary to be restored and/or created, so that total resource services gained through restoration equals total resource services lost due to the injury. See Fisher, 977 F. Supp. at 1198. The government concluded using the HEA that 2.19 acres of seagrass habitat must be restored under the Prop Scar Restoration Project to compensate for the interim loss of seagrass at the Pipe Scar and Grounding Site.

II. CONCLUSIONS OF LAW

A. Statutory Scheme

Remedies for damage to the Sanctuary are governed by the National Marine Sanctuaries Act ("NMSA") of 1972, as amended, 16 U.S.C. § 1431, *et seq.* Congress enacted the NMSA in response to "a growing concern about the increasing degradation of marine habitats." S.Rep. No. 595, 100th Cong., 2d Sess. 1 (1938), reprinted in 1988 U.S.C.C.A.N. 4387. The NMSA protects important and sensitive marine areas through the establishment of marine sanctuaries. See Fisher, 977 F. Supp. at 1199. The purpose of the sanctuaries is to preserve sensitive areas for conservation, recreational, aesthetic and ecological value.

B. Liability under the NMSA

The NMSA provides for strict liability to the United States for damage to any "sanctuary resource." See, e.g., U.S. v. M/V Jacquelyn L., 100 F.3d 1520, 1521 (11th Cir. 1996); 16 U.S.C. § 1443(a)(1). The only available defense under the NMSA is that "the destruction or loss of, or injury

⁵The HEA is appropriate to determine the scale of compensatory restoration projects when 1) the primary category of lost on-site services pertains to the ecological/biological function of an area; 2) feasible restoration projects are available that provide services of the same type, quality, and comparable value to those that were lost; and 3) sufficient data on the required HEA input parameters exist and are cost effective to collect. See Fisher, 977 F. Supp. at 1198.

to, the sanctuary resource was caused solely by an act of God, an act of war, or an act or omission of a third party, and the person acted with due care." 16 U.S.C. § 1443(a)(3)(A)(emphasis added).

Accordingly, Great Lakes argues that under the NMSA, it is absolved of liability because it was Coastal's acts and/or omissions that actually caused the Pipe Scar and Grounding Site. This argument fails, however, under the reasoning set forth in United States v. LeBoeuf Brothers Towing Co., 621 F.2d 787 (5th Cir. 1980).⁶ In LeBoeuf, the Fifth Circuit, under a similar strict liability statute, rejected the argument that an independent contractor acting for and under the control of a defendant employer is a "third party" for the purpose of absolving the defendant employer of liability under the statute.

In LeBoeuf, the defendant employer hired an independent contractor tug crew to load and unload cargo at places and times designated by the defendant. See id. at 788. The independent tug crew accidentally discharged oil into the Mississippi River, and the United States brought suit against the defendant employer under the Federal Water Pollution Control Act ("FWPCA") to recover the costs of cleaning up the oil spill. See id. The FWPCA, in language strikingly similar to the NMSA, provides that the owner or operator of a discharging vessel is strictly liable to the government for the costs of cleaning up spills unless the discharge was caused solely by an act of God, an act of war, or an act or omission of a third party. See id. Under this provision, the defendant employer argued that it was not liable because it was the acts or omissions of the third party independent tug crew that caused the spill.

The Court rejected the defendant's argument and held that an employer of an independent

⁶The Eleventh Circuit, in Bonner v. City of Prichard, 661 F.2d 1206, 1209 (11th Cir. 1981), adopted as binding precedent decisions of the former Fifth Circuit rendered prior to October 1, 1981.

contractor cannot avoid strict liability under the FWPCA for an oil spill caused by the contractor because the employer "held ultimate control over [the contractor] by hiring it in the first place, specifying its itinerary, and retaining it throughout the job." See id. at 790. The court reasoned that the third-party defense was not intended to protect a party from the acts or omissions of those acting under its control or on its behalf. See id.

In reaching this conclusion, the Fifth Circuit relied, in part, on the fact that the FWPCA is a remedial statute that should be interpreted in a way such that liability can be easily imposed for environmental damage.⁷ See id. at 789. The court reasoned that the statute's comprehensive scheme for preventing and cleaning up oil spills would be undermined if barge owners could escape strict liability merely by hiring out their operations to independent contractors. See id. Furthermore, the court concluded that a broad interpretation of the third party defense would be entirely inconsistent with the statute's other defenses that include only very narrow exceptions, such as acts of God, acts of war, and instances in which the government's own negligence is the sole cause of a spill. See id.

This Court finds that the NMSA, like the FWPCA, is a remedial statute that should be interpreted in a way that will effectuate its remedial purposes. The FWPCA and NMSA have very similar provisions for remedial action and limited categories of defenses that were intended to provide a straightforward means to impose liability for environmental damage. Therefore, the narrow interpretation of the third party defense set forth in LeBoeuf applies equally in actions under the NMSA, and Great Lakes cannot rely on the defense to avoid liability.⁸ Precluding Great Lakes

⁷This rationale was later ratified by another Fifth Circuit opinion, which the Supreme Court declined to review. See United States v. Hollywood Marine, 625 F.2d 524 (5th Cir. 1980), cert. denied 451 U.S. 994 (1981).

⁸Although there is some limited meaningful argument from the parties as to Coastal's status, it is clear from the facts, and by comparison to the facts in LeBoeuf, that Coastal was an

from asserting the defense for the actions of those acting on its behalf and under its control “promotes the goals of the statute and of traditional tort policy because it will encourage [owner-operators] to select [independent contractors] carefully and to insure against potential losses.” See *id.*

Accordingly, Great Lakes is strictly liable under the NMSA for damage to the Sanctuary, whether caused by itself or Coastal, because Great Lakes “held ultimate control over [Coastal] by hiring it in the first place, specifying its itinerary, and retaining it throughout the job.”

C. Damages

Title 16 U.S.C. §1432(6) and related case law set forth the parameters for compensation for injury to Sanctuary resources. See, e.g. United States v. Fisher, 22 F.3d 262 (11th Cir. 1994); Fisher, 977 F.Supp at 1201. Under the NMSA, the government is entitled to compensation for implementation of both its primary restoration plan and its compensatory restoration plan approved by the Court. See *id.*

1. *Primary Restoration*

Under the primary restoration component of damages, the government is entitled to recover the cost of implementing its plan that restores or replaces the injured resource, or the cost of acquiring the equivalent of the sanctuary resource if it cannot be restored or replaced. See 16 U.S.C. §1432(6)(A); Fisher, 977 F. Supp. at 1201. In determining whether the government’s proposed primary restoration plan is feasible and whether its costs are justified, a court must “make a complete examination of both the environmental factors involved and the practicalities of the situation.” See United States v. Joseph Morcetti, Inc., 526 F.2d 1306, 1310 (5th Cir. 1976)

independent contractor.

It is inherently difficult for courts to measure the full effect and impact of any environmental disturbance. Attempts to reverse the effects of a disturbance or injury and to restore the environment to its natural state carry no guarantee of success. See United States v. Sexton Cove Estates, Inc. 526 F.2d 1293 (5th Cir. 1976). A court must consider the cost of the plan in relation to its prospects for success. See United States v. M.C.C. of Florida, Inc., 772 F.2d 1501 (11th Cir. 1985). A court should not order a restoration plan when its contemplated results prove too speculative and its implementation too costly. See id. Any restoration plan must be carefully designed to confer maximum environmental benefits. At the same time, however, the law should be tempered with a touch of equity. See Sexton Cove, 526 F.2 at 1301. A defendant should not be assessed damages for a restorative program when the site is naturally recovering on its own, or the impracticality of implementing a restorative program and the unlikelihood of the program's success warrant against it.

The Court has carefully considered the government's recommended primary restoration plan, its costs, and its benefits. For the reasons set forth below, the Court rejects the government's determination that the imported fill plan is the best alternative for primary restoration of the Grounding Site. Rather, the Court concludes that the no-action plan evaluated by the government provides a more suitable alternative for primary restoration of the site.⁹

⁹Courts have considerable latitude in determining the appropriate remedy in environmental damage cases, and the Court is not bound by the government's recommendation as to the best plan for restoration. See United States v. Board of Trustees of Florida Keys Community College, 531 F. Supp. 267, 275 (S.D. Fla. 1981)(determining that development of an alternative remedial plan was preferable to the government's plan for total restoration). Although a court cannot order a remedy or compensation for environmental injury without a specific plan for restoration having been suggested or submitted before it, there is a specific plan before the court in the instant case. See United States v. M.C.C. of Florida, Inc., 772 F.2d 1501, 1507 (11th Cir. 1985)(court may not award damages without a specific restoration plan before it). The Court is adopting the no-action plan that the government has already evaluated and

The government's proposed plan to use imported sediment to fill and restore the Grounding Site contemplates results too speculative to justify its significant fiscal and ecological costs. First, the Court is not persuaded that placing sediment and stabilization boulders at the Grounding Site will restore the bank to its original morphology (even if this could be precisely determined). Although the government maintains that restoring the site to its original morphology is the primary benefit of the imported fill plan, its own experts have concluded that no restoration plan will ever restore the Grounding Site to pre-injury condition. The morphological signature of the injury will be visible for many years to come irrespective of what plan is implemented.¹⁰

Furthermore, by almost all government expert accounts, the Grounding Site is expected to fully recover on its own within roughly seventy years.¹¹ The government has failed to present any convincing evidence that the imported fill plan will significantly reduce this natural recovery period. Nor is there concrete evidence that the restoration plan will promote longer-term stabilization at the Grounding Site or better recruitment of seagrasses than natural recovery would provide. In fact, evidence suggests that in-filling the Grounding Site trench will destroy all natural recovery that has occurred up to this point and cause harm to previously undamaged biota.¹²

It also appears from the government's expert reports that the proposed restoration project entails a considerable risk of further disrupting or damaging the site. Filling the site with imported rocks and reinforcement boulders would require extensive construction and personnel directly over

determined to be a viable option for primary restoration.

¹⁰See Bodge Report, Exhibit 97

¹¹See Hudson Report, Exhibit 18; Zicman Report, Exhibit 79; Kenworthy Report, Exhibits 49, 51, 58, 60.

¹²See Bodge Report, Exhibit 97.

the site.¹³ The necessary use of barges, tugs, and other large machinery during the restoration project raises the potential for further impacts in the swift, shallow waters surrounding the Grounding Site.¹⁴

The Court is also concerned that filling the Grounding Site with rocks, boulders, and steel rods may create additional navigational and environmental hazards in the shallow waters of the Sanctuary. Evidence presented at this trial demonstrated that boats strike bottom and run aground in the waters off Florida's coast on an alarmingly regular basis. Generally, such groundings have not resulted in hull breaches or pollution spills. However, placing boulders and steel rods in the already shallow Sanctuary waters may increase the potential for significant hull damage and pollution leaks should another vessel strike the site in the future. Given the regularity of groundings in this area, further collisions are not an altogether unlikely scenario.

For all of the foregoing reasons, the Court will not approve the government's imported fill plan for primary restoration of the Grounding Site. Instead, the Court concludes that the no-action plan evaluated by the government is the best plan for primary restoration. The no-action plan is non-intrusive and requires no on-site construction. Thus, the potential for further groundings associated with construction equipment and vessels is avoided. Furthermore, several years have passed since the grounding incident, and considerable natural recovery has occurred up to this point. The no-action plan will allow existing regrowth and unaffected areas to remain intact. The Court believes that it would be counterproductive at this date to in-fill the trench and destroy all natural regrowth, as well as risking adversely impacting previously undisturbed adjacent areas. Nevertheless, because full recovery cannot be assured at this point, the government shall continue surveying and

¹³See Environmental Development Report, Exhibit 70.

¹⁴See *id.*: Bodge Report, Exhibit 97 (invasive action requiring large volumes of material and/or large vessels would significantly increase risk of additional damage to site).

monitoring the site under the no-action plan to establish baseline data and assess potential instabilities.

The Court concedes that this is not an entirely satisfactory result. Great Lakes is responsible for significant environmental damage and should be required to pay the price for its actions. Nevertheless, the government has failed to demonstrate to the Court that the speculative results contemplated by in-filling the Grounding Site trench are worth engaging in extensive construction at the already ecologically sensitive site and destroying years of natural regrowth. This court will not order a primary restoration plan at significant fiscal and ecological cost without some measure to ensure the plan will work and not cause greater environmental damage. In the struggle to repair damage already done, the Court is wary of doing greater harm.

2. Compensatory Restoration

In addition to recovering primary restoration compensation for restoring or replacing the injured resources, the government is also entitled to compensation for the interim lost use of the resources at the Pipe Scar and Grounding Site during the period from destruction to recovery. See 16 U.S.C. §1432(6)(A); Fisher, 977 F. Supp. at 1201. Recovery for lost interim services will be in the form of seagrass restoration projects at other suitable locations within the Sanctuary. The Court concludes that the Prop Scar Restoration Program developed by the government is an appropriate compensatory restoration project and will provide seagrass services equivalent to those lost due to the injuries caused by Great Lakes at the Grounding Site and Pipe Scar.

The United States' reliance on the Habitat Equivalency Analysis ("HEA") to scale the appropriate compensatory seagrass restoration projects for both the Pipe Scar and the Grounding Site was appropriate, including the use of a 3% discount rate to calculate damages. The Court concludes, however, that the government's HEA calculation for the Grounding Site is incorrect only to the

extent that it fails to reflect its own experts' conclusions with respect to the composition of the sea bottom. The HEA input parameters used by the government assume that the entire area consisted only of Thalassia, rather than the combination of Thalassia (69%), Syringodium (30%), and other sanctuary resources (1%) that is reflected in the government's expert report accepted as correct by this Court.¹⁵ The failure to include the appropriate ratios of Syringodium in the parameters artificially inflated the value of the HEA. Accordingly, the HEA figure must be recalculated using the appropriate Thalassia/Syringodium ratio as described by the Court above and in the Hudson Report.

To the extent that it is changed by the newly-figured HEA, the government's \$357,556.00 damage estimation must be recalculated using the same criteria and formula that the government applied in its original damage determination. When recalculating this figure, the Court does not intend that the parties review new evidence or revisit the government's methodology or process by which it arrived at its compensatory restoration cost estimation. Rather, the Court envisions that the parties will engage in a purely mathematical recalculation of compensatory restoration costs taking into account the corrected HEA value.

3. Response and Assessment Costs

The United States is also entitled to recover its response and damage assessment costs and interest pursuant to 16 U.S.C §1432(6)(C) & (7). Damage assessment costs, however, do not properly include attorney's fees. See Gen. Elec. Co. v. U.S. Dep't. of Commerce, 128 F.3d 767, 779 (D.C. Cir. 1997). The government's proposed \$343,622.00 response and damage assessment estimation is correct in all respects, except to the extent that it includes attorney's fees.

¹⁵See Hudson Report, Exhibit 18.

The Court is unable to ascertain what portion of the government's \$343,622.00 figure is attributable to attorney's fees. From the evidence already presented before this Court, the government shall determine the amount of attorney's fees it included in the \$343,622.00 response and damage assessment figure and deduct that amount. In addition, the government must recalculate the interest on the new response and damage assessment calculation after attorney's fees have been subtracted.

CONCLUSION

Accordingly, upon due consideration of the evidence, the arguments of counsel and the record, it is

ORDERED AND ADJUDGED that:

1. Judgment is entered in favor of the United States against Great Lakes for the damage caused at the Pipe Scar and Grounding Site;
2. The government's claim for \$480,257.00 to implement its recommended primary restoration plan at the Grounding Site is DENIED.
3. The government is entitled to compensation for the cost of physical and biological monitoring of the Grounding Site. From the evidence already presented before the Court, the government shall recalculate its proposed physical and biological monitoring costs to reflect the Court's conclusion that the no-action alternative is the appropriate plan for primary restoration.
4. The government is entitled to recover its response and assessment costs. The government must recalculate its response and assessment cost estimation to reflect the Court's conclusion that attorney's fees are not awardable.
5. The government is entitled to recover its compensatory restoration and monitoring costs. The government shall provide the Court with a revised statement of the compensatory restoration

and monitoring costs after it recalculates the HEA for the Grounding Site to include the proper ratios of *Syringodium* and *Thalassia*.

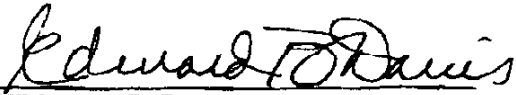
6. The government may also recover its NEPA and NOAA permitting and supervision costs. The Court is unable to determine from the record what portion of the estimated costs relate to the government's proposed on-site physical restoration activities that this Court has rejected. From the evidence already presented before this Court, the government shall recalculate its NEPA and NOAA cost estimation figures and exclude any amount attributable to on-site construction at the Grounding Site.

7. In accordance with the government's agreement on the issue, the total damages assessed against Great Lakes shall be offset by \$ 618,484.86, the amount of the government's settlement with Coastal.

8. The United States shall have until twenty days from the date of entry of this order to provide the Court with the recalculated HEA and cost statements. Great Lakes' rebuttal to the same is due no later than ten days from the date the government resubmits its recalculated HEA and cost statements.

FURTHER ORDERED AND ADJUDGED that all pending motions are **DENIED** as **MOOT**.

DONE AND ORDERED in Chambers at Miami, Florida, this 27th day of Sept.
1999.


EDWARD B. DAVIS
CHIEF UNITED STATES DISTRICT JUDGE

copies furnished:
Magistrate Judge Brown

Robert Birthiel
John M. Woods
Allan R. Kelley
Jon Mueller
Maureen Donlan
Maureen Malvern