IN THE UNITED STATES COURT OF APPEALS

FOR THE ELEVENTH CIRCUIT	FILED U.S. COURT OF APPEALS ELEVENTH CIRCUIT JULY 30, 2001
No. 00-12002	THOMAS K. KAHN CLERK
D. C. Docket No. 97-02510-CV-EB	D
UNITED STATES OF AMERICA,	
	Plaintiff-Appellee- Cross-Appellant,
INTERNAL IMPROVEMENT TRUST FUND, et al,	
	Plaintiffs-Appellees,
versus	
GREAT LAKES DREDGE & DOCK COMPANY,	
	Defendant-Appellant- Cross-Appellee.
Appeals from the United States District Court for the Southern District of Florida	
(July 30, 2001)	

Before ANDERSON, Chief Judge, RONEY and FAY, Circuit Judges.

RONEY, Circuit Judge:

Defendant Great Lakes appeals the judgment against it in a suit for damages brought by the United States under the National Marine Sanctuaries Act for damage to the Florida Keys Marine Sanctuary caused by a grounded tugboat and dredge pipe. The government's cross-appeal concerns the district court's ruling that no primary restoration is required for the grounding site. We affirm the district court's decision on liability, but we vacate a portion of the damages award, specifically that no action is the best alternative for addressing damage at the grounding site. We remand for further factual findings regarding this question.

I. Facts

In May 1993, Great Lakes Dredge & Dock Company (Great Lakes) hired Coastal Marine Towing (Coastal) to tow 500-foot lengths of dredge pipe and other equipment from Boca Grande to Green Cove on the East Coast of Florida. Coastal supplied two tugs, Captain Joe and Miss Necie and their crews. Great Lakes supplied two assist tugs, Volunteer State and Cavalier State.

While proceeding through the Florida Keys National Marine Sanctuary, one of the pipes in a raft towed by Miss Necie dragged the sea bottom creating a pipe scar approximately 13 miles long. The following facts caused grounding site damage which is the subject of this appeal. Due to a navigational error by Miss Necie, the flotillas got off course and Captain Joe ran aground in seven feet of water trying to pass Miss Necie. Great Lakes' assist tug, Cavalier State, was tied to the Captain Joe. Sanctuary and state officials helped devise a plan to extricate Captain Joe. At high tide, Captain Joe was powered off the bank by a combination of its own motor and the Cavalier State. The grounding left behind a channel 120 meters long, eight to ten meters wide and two meters deep. The grounding destroyed 7,495 square meters of sea bottom, consisting of turtle grass, manatee grass and finger coral. The boats also created a large hole, or "blowhole," 120 meters long by nine meters wide.

The United States brought this action on behalf of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) under the National Marine Sanctuaries Act (NMSA) of 1972, as amended, 16 U.S.C. § 1431-1445, for the destruction caused by the grounding of the sanctuary resources, primarily seagrasses, in the marine sanctuary. The State of Florida also filed a complaint against defendants, which was consolidated with the federal case. The first day of trial, Coastal settled its claims with the United States and the State of Florida for \$618,484. The settlement satisfied Florida's claims against Great Lakes as well, and Florida is not a party to this appeal. The State of Florida did file an amicus brief

in support of the United States' positions concerning liability and damages, but argues only liability.

After an eight-day bench trial in April 1999, the district court granted in part and denied in part the relief sought by the government. The court ruled in favor of the United States on liability, finding that Great Lakes was strictly liable under the NMSA for all damages to the sanctuary. Regarding damages, the government sought compensation for implementation of both its primary restoration plan and its compensatory plan.

Under the primary restoration component of damages, the government is entitled to recover the cost of implementing its plan to restore or replace 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). Both the government and Great Lakes agreed that the pipe scar recovered on its own in three years, so the damage caused is not a part of this appeal. As for the grounding site, the government proposed a plan to use imported sediment to fill and restore the grounding site, one of three alternative primary restoration plans considered by the government. The district court determined that another plan, the "no action" plan for the primary restoration of the grounding site was appropriate, but that the U.S. should recover the cost of physical and biological monitoring of the site.

The district court also held that the government was entitled to damages for compensatory restoration, which is 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). Recovery for lost interim services is in the form of seagrass restoration projects at other suitable locations within the Sanctuary. The district court determined that the Prop Scar Restoration Program developed by the government is an appropriate compensatory restoration project that would provide seagrass services equivalent to those lost due to the injuries caused by Great Lakes at both the grounding site and the pipe scar. The court also held that the government's reliance on the Habitat Equivalency Analysis (HEA) was appropriate to scale the compensatory seagrass restoration project. Based on these determinations, the district court awarded to the government, its response and assessment costs; compensatory and monitoring costs; and permitting and supervision costs. The district judge required the government to recalculate the appropriate damages by simple mathematical computations based on its findings of fact. On March 1, 2000, the district court entered final judgment against Great Lakes in the amount of \$368,796. 97, the figure after setting off the settlement amount paid by Coastal.

On appeal, Great Lakes argues the district court erred in finding Great lakes liable to the United States because (1) suit by the United States not authorized under

common law; (2) Great Lakes was not vicariously liable for Coastal's actions, and (3) the method used to assess restoration was faulty. On cross-appeal, the United States argues the district court erred in approving "no action" as the primary restoration plan for the grounding site.

II. Applicable Statutory Provisions.

The National Marine Sanctuaries Act governs the designation and management of federally protected marine areas of special significance. Congress enacted the NMSA in response to the increasing degradation of marine habitats and in recognition of the need to protect marine ecosystems. *See* S. Rep. No. 100-595,2d Sess. 1 (1998), *reprinted in* 1988 U.S.C.C.A.N. 4387. The NMSA confers authority for the designation and management of marine sanctuaries on the Secretary of Commerce, 16 U.S.C. § 1433,1434, who has delegated these responsibilities to the NOAA.

The NMSA imposes civil liability on "any person who destroys, causes the loss of or injures any sanctuary resource. 16 U.S.C. § 1443.

The Attorney General, at the request of the Secretary, may commence an action against any person or vessel who is liable for response costs and damages. 16 U.S.C. § 1443(c). "Response costs" include costs of actions taken to minimize the destruction of sanctuary resources. § 1432(7). "Damages" include compensation for (1) the cost of restoring, replacing, or acquiring the equivalent of a sanctuary resource

and the interim loss value of the resource pending restoration; (2) damage assessment costs, and (3) reasonable monitoring costs. 16 U.S.C. § 1432(6).

- III. Discussion.
- 1. Whether the National Marine Sanctuaries Act Authorizes Damages to the United States Government for Injuries to Sanctuary Resources.

At the outset, we reject Great Lakes' argument that the government has no claim for damages in this case because the property at issue is state-owned and the United States therefore has no proprietary interest. See Robins Drydock & Repair Co. v. Flint, 275 U.S. 303,308(1927). This argument belies the express language and scheme of the relevant statutes. On November 6, 1990, Congress enacted the Florida Keys National Marine Sanctuary Act (the "Sanctuary Act"), Pub. L. No. 101-605, 104 Stat. 3089 (1990), which designated 2800 nautical miles of coastal water in the Florida Keys as the Florida Keys National Marine Sanctuary. The Sanctuary Act provides that "[t]he Sanctuary shall be managed and regulations enforced under all applicable provisions of [the NMSA] as if the Sanctuary had been designated" there under. Sanctuary Act, § 5(a). In this case, the United States seeks damages from defendants for a violation of § 1443 of the NMSA, which imposes strict liability for damage or injury to any sanctuary resource. See, e.g., United States v. M/V Jacquelyn L., 100 F.3d 1520,1521 (11th Cir. `1996); 16 U.S.C. § 1443(a)(1). The NMSA plainly authorized the United States to recover the damages it seeks for injuries to seagrass

resources. The NMSA explicitly provides, "Any person who destroys, causes the loss of, or injures any sanctuary resources is liable to the United States for an amount equal to the sum of ...the amount of response costs and damages resulting from the destruction, loss, or injury...."42 U.S.C. § 1443(a)(1)(A).

2. Whether the District Court Erred in Awarding Damages Based on the Habitat Equivalency Analysis.

The United States sought damages under § 1432 of the NMSA for "the cost of ... acquiring the equivalent of a sanctuary resource," and for the value of lost use of the resource "pending acquisition of an equivalent" resource. In other words, to compensate for damages sustained and for lost interim services at the blow hole and pipe scar sites, equivalent sites were selected for restorative or replacement actions. The Habitat Equivalency Analysis ("HEA") was used to scale (quantify the size of) the equivalent area to be restored, and therefore, to quantify the damages for lost interim services and the acquisition of equivalent resources.

Great Lakes argues that the district court erred in accepting the HEA for two reasons: *first*, use of an HEA is not appropriate under *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 590 (1993) as a methodology for determining damages in this case; and *second*, the underlying "scientific data" plugged into the mathematical equations as input parameters could not pass muster under *Daubert*.

The Supreme Court has interpreted the Federal Rules of Evidence to require scientific evidence to be both relevant and reliable. *See Daubert*, 509 U.S. at 795. In *Daubert*, the Supreme Court set forth four factors, among others, that a trial judge may consider in determining the reliability of scientific testimony: (1) whether a theory or technique can be and has been tested; (2) whether a theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error of a particular scientific technique; and (4) whether a theory or technique has been generally accepted. *See Daubert*, 509 us at 592-593. These factors do not constitute a definitive checklist, and courts have ample discretion to assess "whether the reasoning or methodology underlying the testimony is scientifically valid, and whether that reasoning or methodology properly can be applied to the facts at issue. *See Daubert*, 509 U.S. at 592-93.

The district court did not abuse its discretion when it determined that use of the HEA was appropriate and that the underlying scientific data satisfied *Daubert*.

Our review of the evidence indicates, contrary to Great Lakes assertions, that the HEA was peer reviewed and accepted for publication prior to trial. See e.g. R13-151,185-87, in which Dr. Brian Julius, who introduced the HEA, discussed the peer review and publication of the HEA.

Great Lakes remaining arguments address the quality of the data that went into the HEA and differing interpretations of the underlying data, all of which were adequately addressed by the district court. Specifically, Great Lakes challenges (1) the calculation of compensatory restoration, that is the validity of the data used to determine the recovery rates of the injured sites; (2) the feasibility of the compensatory sites as equivalent sites; the "compressed succession" technique, which is a planting technique that achieves a more rapid rate of seagrass recovery by temporarily substituting a faster growing species, Halodule, for the slower growing Thalassia, and then allows Thalassia to recolonize the stabilized area; and (3) the HEA's sensitivity to major changes in fundamental input parameters. The district court addressed these objections in its July 28, 1999 Order, stating that evaluation of the data put into the HEA and the arguments relating to data interpretation are relevant when the court, as fact finder, weighs the evidence and determines how much weight to give each experts' opinion. Our thorough review of the record reveals no error in the district court's acceptance of the HEA. We note that necessary modifications to the HEA were ordered by the court and complied with by the United States, arguably rendering the HEA more reliable.

3. Whether the District Court Erred in Finding Great Lakes Vicariously Liable for the Actions of Coastal.

Great Lakes argues it was held vicariously liable for damage when "[t]here was no proof at trial that Great Lakes' conduct violated this statute with respect to the blow hole," and " the trial court did not address whether the U.S. proved a *prima facie* case."

We hold that the district court's factual findings support the determination that Great Lakes' conduct gave rise to strict liability under the NMSA. Specifically, the court found Great Lakes was responsible for helping Coastal's vessels maneuver the tows, maneuver the 500-foot long pipe rafts, and assist with unanticipated problems. Great Lakes was responsible for preparing the pipe rafts and ensuring they were safe and seaworthy, and it failed to test the pipes before the trip. Great Lakes failed to send a welder or crane operator with the flotilla who could have made any needed repairs. Great Lakes failed to provide Coastal crews with any direction once notified about the sinking pipes and instead arranged for a welder and crane operator to meet the flotilla at Marathon. Great Lakes failed to notify the lead tugs that any pipes were dragging. The dragging pipes caused a 13-mile pipe scar. The dragging pipes slowed down the Miss Necie, which caused the Captain Joe to maneuver sharply to avoid a collision, resulting in running aground. Some combination of the Captain Joe's engines and the efforts of Great Lakes' tug, the Cavalier State, dragged the Captain Joe farther along the bank. The grounding and attempts to extricate the Captain Joe from the site resulted in injuries to sanctuary resources.

Contrary to Great Lakes assertions, these factual findings are supported by the record evidence and are not clearly erroneous. These facts are sufficient to demonstrate causation sufficient to impose liability under the NMSA.

Great Lakes argues that the district court improperly denied it the affirmative third-party defense under § 1443. The Act provides three defenses, only one of which is applicable to this case. Under the statute, a person is not liable if that person establishes that the injury to sanctuary resources was "caused solely by...an act or omission of a third party, and the person acted with due care." § 1443(a)(3)(A). This provision is substantively identical to those statutes upon which the NMSA was modeled, the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act) § 311(f)(1), 33 U.S.C. § 1321(f)(2); and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), § 101 et seq., 42 U.S.C.A. § 9607(b)(3). The district court correctly determined that under no view of the evidence could Great Lakes satisfy either of these elements of the defense.

The district court held Great Lakes was strictly liable, relying upon *United States v. LeBoeuf Brothers Towing Co.*, 621 F.2d 787 (5th Cir. 1980), a case in which the Fifth Circuit, under a similar strict liability provision in the Clean Water Act,

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 that case, the Fifth Circuit rejected a vessel owner's argument that it was not liable under the third-party defense provisions of the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act) § 311(f)(1), 33 U.S.C. § 132, for the accidental discharge of oil by an independent contractor tug crew hired by the defendant. The court concluded that the defendant held ultimate control over hiring the contractor, specifying its itinerary, and retaining the contractor throughout the job. LeBoeuf, 621 F.2d at 789-90. The court also concluded 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. 621 F.2d at 790. Otherwise, "the statute's comprehensive scheme for preventing and cleaning up oil spills would be undermined if barge owners like [defendant] could escape strict liability merely by hiring out their operations to tugs." 621 F.2d at 789. In this case, the district court correctly reasoned that the remedial purpose of the NMSA and the need to encourage oversight with independent contractors requires an equally strict reading of the NMSA's third-party defense.

Great Lakes has simply failed to prove that the injury was solely the result of Coastal's actions and that Great Lakes acted with due care. Great Lakes contends that

even if it is liable, it should only pay for a proportional share of damages. Where, as in this case, however, each defendant is a legal cause of the damage and the damage is indivisible between the two, the district court correctly held that liability under the NMSA is joint and several. This holding is consistent with cases finding joint and several liability under the CWA and CERCLA. See e.g., United States v. M/V Big Sam, 681 F.2d 432,438-39(5th Cir. 1982)(CWA); Redwing Carriers v. Saraland Apartment, 94 F.3d 1489,1512,1513(11th Cir. 1996)(CERCLA). The evidence supports the district court's findings of facts regarding joint and several liability. The court's factual findings indicate that Great Lakes caused damage at both the pipe scar and the blowhole. Although the district court did not expressly address the divisibility of the injuries, it is clear from the evidence Great Lakes' actions during the entire incident were inextricably tied with Coastal's actions. The resulting injuries cannot be attributed to any one defendant. Although the district court concluded that Great Lakes was jointly and severally liable, it did in fact reduce Great Lakes' liability by \$618,484,86, or approximately two-thirds of the judgment, in recognition of Coastal's payment of that amount.

A review of Great Lakes challenges to the court's evidentiary rulings regarding the admission of affidavits with attached summaries and supporting documentation

of two experts, Wiley Wright and Michelle McQuillan, reveal there to be no abuse of discretion in the various rulings.

4. The United States' Cross Appeal.

The United States' cross-appeal concerns the district court's ruling that "no action" is the appropriate plan for the grounding site. The government alleges that the district court erred in relying on the hearsay report of a non-testifying government consultant and clearly erred in certain factual determinations, including that natural recovery would occur in 70 years. It argues that approval of a "no action" plan is contrary to the NMSA and the agency's expert judgment.

As contemplated by the NMSA, the NOAA developed a restoration plan for the injured resources and the grounding site and the pipe scar. Under the NMSA, damages include: (1) the cost of replacing, restoring, or acquiring the equivalent of an injured sanctuary resource ("primary restoration"); (2) compensation for the interim loss of resources and services from the time of injury until resources recover to baseline ("compensatory restoration"); (3) damage assessment costs; and (4) reasonable monitoring costs. 16 U.S.C. § 1432(6). The agency recommended compensatory restoration for both the pipe scar and the grounding site. The agency did not recommend primary restoration for the pipe scar because it was recovering

naturally in a timely manner, but it did recommend primary restoration for the grounding site.

The agency narrowed down to three the viable alternative plans for primary restoration of the grounding site: (1) a "no action" plan; (2) a site regrading plan; and (3) the "imported fill" plan. The government recommended the third option, the imported fill plan, but the district chose the no action alternative.

The court made the following findings: (1) it was not convinced the plan would restore the bank to its original condition; (2) it concluded the grounding site would be expected to fully recover on its own in roughly 70 years and (3) it raised concerns about potential construction risks. In reaching this conclusion, the court misinterpreted the evidence and testimony before it, and certain of these findings are not based on the evidence.

One of the more significant factual errors was the court's finding that natural recovery without any interference would take approximately 70 years. The evidence clearly indicated that this seventy-year period upon which the district court relies is in fact the amount of time the grounding site is expected to achieve full biological recovery *after* implementing the United States' primary restoration plan. The Report from J. Harold Hudson, Regional Biologist, Key Largo National Marine Sanctuary, Exh. 18 states in the "PROGNOSIS FOR RECOVERY":

Complete recovery of this site to pregrounding conditions is not expected to occur without human intervention...Infilling of channelized areas of the grounding site is an essential first step toward site recovery. If no other remedial action is taken it is anticipated that complete overgrowth of the site by seagrasses and corals to pregrounding levels could occur in 75 to 100 years.

The government's biologist, Judson Kenworthy, testified that the recovery horizon for the slower growing Thalassia grass was seventy-one years for an area the size of the injury at the grounding site. R-12-79,81. Government expert Brian Julius, elaborated that the seventy-one-year recovery rate was based on the assumption that the government's primary restoration plan would be completed. R13-155-156,170.

There is evidence in the record that natural recovery *without human intervention* would take much longer, as much as hundreds of years. Government expert Dr. Joseph Zieman testified that if the bank were left alone, recovery "would take a long, long time. Many, many decades to possibly hundreds of years." R-13-116.

Thus, the court's finding that the government's primary restoration plan will not decrease the recovery period is clearly erroneous.

The court also relies on report of Dr. Kevin R. Bodge, to support its statement that "the morphological signature of the injury will be visible for many years to come irrespective of what plan is implemented." As an initial matter, the government

challenges the district court's reliance on the Bodge report at all, because Bodge was a non-testifying government consultant and his report was admitted into evidence for the limited purpose of explaining other experts' testimony. Assuming for purposes of this argument that the Bodge report was properly considered, the district court relied on it for evidence unsupported in either the report itself or other record evidence. The report only compared the no action alternative to a berm-transfer alternative, not the government's infill plan. The report therefore provided no opinion on the government's plan's potential effect on the sited morphology.

We must also note that the Bodge report's recommendation of "no action" was a qualified one based on several critical assumptions: that the banks are stable, the sediment is not chronically disturbed and the rubble is not susceptible to erosion. The court made no findings as to whether these underlying assumptions were met.

The evidence in the record indicates that biological recovery of the site's resources would eventually occur only after the site had been stabilized. Kenworthy testified that the site would remain unstable "[u]ntil the physical topography of that site is brought back to as near as it was prior to the grounding event." R-12-113. *See also* McCabe's testimony, R-13-57-58("[i]f you do not fill it you are still going to be continually subject to hurricane wave impact...It is never going to stabilize."); and Zieman's testimony regarding the infill R-13-114("[M]y paramount recommendation

is no matter what happened that [it tried] to fill in that crater in there and get it back to some type of near conforming bank top surface.")

The statutory scheme under the NMSA explicitly authorized the Secretary of Commerce, acting as trustee for sanctuary resources, to take "all necessary actions" to prevent or minimize the destruction or loss of, or injury to, the resources. 16 U.S.C. § 1443(b)(1). Under these circumstances, where several key findings made by the district court were based on misinterpretations of the record, we deem it necessary to remand for further consideration, with particular attention paid to the question whether the fact that it is the government's plan rather than the "no action" plan that provides for recovery in approximately seventy years, and how the other factors weigh in against that element. Recognizing that part of the court's order assumes the government will continue to monitor the effects of the no-action alternative, we assume the government will take this opportunity to update the court on any new information that would aid in the district court's decision.

By this decision, we do not intend to indicate that a "no-action" plan would not ultimately be the option of choice. But the choice, in which some discretionary judgment may be involved, should rest on correct findings of fact supported by evidence in the record.

AFFIRMED IN PART, VACATED IN PART AND REMANDED.