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# PLOWING YOUR WAY INTO ENVIRONMENTAL LIABILITIES IN SOUTH FLORIDA

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# **SPEAKER: KEITH S. BRAIS, ESQ.**

Florida Bar Board Certified Admiralty & Maritime Lawyer

AUTHORS: KEITH S. BRAIS, ESQ. & RICHARD D. RUSAK, ESQ.\*

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BRAIS & ASSOCIATES, P.A. 100 N. Biscayne Blvd., Suite 800 MIAMI, FL 33130 Office: (305) 416-2901 Fax: (305) 416-2902

<sup>&</sup>lt;sup>\*</sup> The authors wish to acknowledge the valuable assistance of Sharon Shutler of the National Oceanic and Atmospheric Administration whose input greatly contributed to the final preparation of this paper.

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# I. INTRODUCTION

Each year millions of dollars in damage is caused to the Nation's marine resources by human activities in and around the National Marine Sanctuaries and National Parks. The Florida Keys National Marine Sanctuary alone annually suffers approximately 500 to 600 vessel groundings.<sup>1</sup> Such groundings have devastating effects on coral, seagrass and other natural marine resources. Over the past three decades, the United States has enacted comprehensive legislation addressing marine environmental issues designed to protect, preserve and restore the Nation's natural marine resources. This environmental legislation combined with the popularity of recreational boating has significant impact upon boaters and their insurers. This paper will examine the application of the Clean Water Act, National Marine Sanctuaries Act and the Park System Resource Protection Act on vessel groundings in National Parks and National Marine Sanctuaries.

# II. OVERVIEW OF THE APPLICABLE LAW

#### A. Clean Water Act

Growing public awareness and concern for controlling water pollution led to the Federal Water Pollution Control Act of 1972 ("FWPCA"). As amended in 1977, the FWPCA became regularly referred to as the Clean Water Act ("CWA"). The CWA's purpose is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.<sup>2</sup> This legislation broadened the Army Corps of Engineers' ("Corps") mission to protect the quality of the Nation's waters for esthetic, health, recreational, and environmental uses of "the waters of the United States, including the territorial seas."

# **B.** National Marine Sanctuaries Act

Congress enacted the National Marine Sanctuaries Act ("NMSA") in response to "a growing concern about the increasing degradation of marine habitats."<sup>3</sup> The NMSA authorizes the Secretary of Commerce, through the National Oceanic and Atmospheric Administration ("NOAA"), to designate and manage areas of the marine environment which have special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or esthetic qualities. Today, there are 13 National Marine Sanctuaries which are: Channel Islands (CA); Cordell Bank (CA); Fagatele Bay (AS) Florida Keys (FL); Flower Garden Banks (TX); Gray's Reef (GA); Gulf of the Farallones (CA); Hawaiian Islands Humpback Whale (HI); Monitor (NC); Monterrey Bay (CA); Olympic Coast (WA); Stellwagen Bank (MA); and, Thunder Bay (MI).<sup>4</sup>

The primary objective of the NMSA is to protect marine resources, such as coral reefs, sunken historical vessels or unique habitats.<sup>5</sup> As such, the NMSA makes it illegal to destroy, cause the loss of, or injure a sanctuary resource as well as possess, sell, deliver, carry, transport, or ship a marine sanctuary resource.<sup>6</sup> Included as "sanctuary resources" are ship wrecks, coral, seagrass<sup>7</sup> and other flora and fauna

which contribute to the conservation, recreational, ecological, historical, educational, cultural, archeological, scientific, or aesthetic value of the sanctuary.<sup>8</sup>

Violators of the NMSA are subject to a civil penalty of up to US\$120,000<sup>2</sup> for each violation, with each day of continuing violation constituting a separate violation. Vessels and sanctuary resources taken or retained in connection with a violation of the NMSA are subject to governmental forfeiture. The NMSA establishes a rebuttable presumption that sanctuary resources found on board a vessel used or seized in connection with violation of the Act were unlawfully taken or retained. Anyone who destroys, causes the loss of, or injures a sanctuary resource is also liable for the resulting response costs and damages, including interest. Damages include the following categories of costs: (1) the cost of replacing, restoring, or acquiring the equivalent of a sanctuary resource, (2) the value of the lost use of a sanctuary resource pending its restoration or replacement, or the acquisition of an equivalent sanctuary resource, (3) assessment costs incurred by NOAA, and (4) the costs for monitoring the success of the restoration.<sup>9</sup> Further, the NMSA has been interpreted to impose strict liability against its violators.<sup>10</sup> As with the CWA and CERCLA, liability under the NMSA is joint and several.<sup>11</sup> Monies recovered for response costs and damages are to be used to finance response actions and damage assessments, and to restore, manage and improve national marine sanctuaries.

<sup>&</sup>lt;sup>2</sup> This figure is periodically adjusted by the Federal Government.

# **B.** Park System Resource Protection Act

Companion legislation to the NMSA is the Park System Resource Protection Act ("PSRPA"). Enacted in 1990 and amended in 1996, the PSRPA enables the National Park Service to seek compensation for damage to Park System resources such as damage to coral, mangrove and sea grass caused by vessel groundings. Any person who destroys, causes the loss of, or injuries to any park system resource is liable for response costs and damages.<sup>12</sup> Further, any vessel that destroys, causes the loss of or injures to any park system resources or any marine or aquatic park resources shall be liable *in rem* for response costs and damages.<sup>13</sup> Response costs are costs for actions taken by the Secretary of the Interior to prevent or minimize destruction or loss of or injury to park systems resources or to abate or minimize the imminent risk of such destruction, loss, or injury or to monitor ongoing effects of incidents causing such destruction, loss or injury.

The PSRPA provides for only civil damages which are compensatory and not punitive in nature. Monies recovered for response costs and damages are used to restore, replace or acquire equivalent resources and to monitor and study such resources.<sup>14</sup>

# C. Oil Pollution Act of 1990

The Oil Pollution Act of 1990 ("OPA") is the primary statute for oil pollution damages. This statute imposes liability for removal costs and damages resulting from an incident in which oil is discharged into navigable waters or adjoining shorelines or the exclusive economic zone. The statute further establishes liability and limitations on liability for damages resulting from oil pollution, and establishes a fund for the payment of compensation for such damages. Each responsible party for a vessel or facility from which oil is discharged into the water, or which poses the substantial threat of a discharge of oil, is liable for removal costs and damages resulting from the incident. Recoverable damages under OPA include:

- a. Damages occasioned by the loss of natural resources, including the reasonable costs of assessing damage which shall be recoverable by the United States trustee, a state trustee, and Indian tribe trustee or a foreign trustee;
- b. Damage for injury to or economic losses resulting from destruction of real or personal property;
- c. Damages for loss of subsistence use of natural resources by a claimant who so uses the natural resources;
- d. Damages equivalent to the net loss of taxes, royalties, rents, fees or net profit shares due to the injury, destruction or loss of real property, personal property or natural resources which shall be recoverable by the United States, a state or a political subdivision thereof;
- e. Damages resulting from the loss of profits or impairments or earning capacity due to the injury,

destruction or loss of real or personal property or natural resources, which shall be recoverable by any private party;

f. Damages for the net cost of providing increased or additional public services during or after removal activities recoverable by a state or political subdivision thereof. <sup>15</sup>

The measure of damages includes:

- (1)Cost in restoring, rehabilitating, replacing or acquiring the equivalent of the damages resources;
- (2) Diminution in the value of those natural resources pending restoration; and,
- (3) Reasonable costs in assessing those damages.<sup>16</sup>

OPA imposes joint and several strict liability upon each responsible party for the discharge of oily substances.

# **D. CERCLA**

Enacted on December 11, 1980 in response to the Love Canal disaster, CERCLA provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, and imposes liability on persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party could be identified. CERCLA authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and,
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening.

The magnitude of the pollutant discharges will trigger an action under CERCLA.

# III. ASSESSING DAMAGES

Injuries to resources protected by NOAA in the National Marine Sanctuaries and the NPS in the National Parks are ever increasing. The impacts to corals and other natural resources can be devastating. While oil spills, urban runoff and sewage outfalls can injure protected resources, one of the most persistent and visible forms of injure come from hundreds of vessel groundings annually. Accordingly, the focus of this damage assessment discussion will be on physical injuries (i.e., claims brought under the NMSA and PSRPA) rather than those stemming from oil or other injury sources (i.e., claims brought under CWA, OPA and CERCLA). While NOAA and the NPS differ to some degree in their approaches to natural resource damage assessment and restoration, the approaches are sufficiently similar to warrant discussion together. In general, there are 6 phases to a damage assessment related to vessel groundings: (A) Emergency Response, (B) Case Classification, (C) Injury Determination, (D) Restoration Determination, (E) Claim Resolution, and (E) Restoration Implementation.<sup>17</sup> Within these phases, there are steps which include contacting the responsible party to determine the degree of cooperation and participation in the damage assessment and restoration.

## A. Emergency Response

Upon notification of an incident, agency staff responds to the incident in order to prevent, abate, or minimize an injury (or imminent risk or injury) to sanctuary or park resources. Such response actions may include closing the area to the public, stabilization of the area and constructions of structures to prevent additional loss.<sup>18</sup> When an incident occurs and the agency has taken initial response actions, it will contact its headquarters and request the assignment of an attorney.

# **B.** Case Classification

The purpose of the case classification is to assist the agency in allocating the appropriate levels of resources to a particular case. Further, an incident's case classification identifies potential litigation costs which are generally not recoverable. There are three case classifications which are listed below in order of complexity and resource need beginning with the most straightforward and ending with the most involved.

- Quick Claim: Criteria that indicate this type of classification include (1) simple resource injuries that do not require compensatory restoration, (2) assessments and determinations that involve straightforward investigations and analyses, and (3) primary restoration measures that can be readily identified and implemented.<sup>19</sup> Examples of cases that may receive a Quick Claim classification include incidents involving destruction of navigational aids and soft groundings within the national parks that do not damage coral and cause minimal damage to seagrass.
- **Expedited Assessment**: Criteria that indicate this classification of case include (1) injuries to resources that are not otherwise threatened or critical, (2) assessments and determinations that involve moderate investigation and analyses, and (3) primary and compensatory restoration measures that can be readily identified and implemented.<sup>20</sup> Examples of cases that may receive Expedited Assessment classifications include incidents involving prop scars, groundings over seagrass and some coral.
- **Comprehensive Assessment**: Criteria that indicate this type of classification include (1) injuries to resources that are extensive and may involve multiple governmental agencies like NOAA to pursue claims under the CWA, CERCLA and/or OPA, (2) injuries to resources that are unusually sensitive or critical, (3) assessments or determinations that require extensive investigations or analyses, (4) primary or compensatory restoration measures that require significant research to identify or implement, and (5) the involvement of novel or precedent-setting policy issues.<sup>21</sup> Examples of cases that may receive a Comprehensive Assessment classification involve incidents

where oil is discharged in navigable waters and hard groundings on live coral.

The agency will consider several criteria in determining the proper classification of an incident. Such criteria include:

- **Sufficiency of the fact base**: How much is known about the basic circumstance surrounding the case? Is the nature and extent of the injury clear? Is the responsible party known with certainty? How clearly linked are the injury and the responsible party's actions? If the injury involves hazardous substances or pollutants, are the contaminations known with certainty? The better the fact base is, the more confident the agency can be in planning restoration and pursuing the case.<sup>22</sup>
- The financial viability of the responsible party: Like all litigation, a key factor in determining how to pursue a claim is whether the responsible party is likely to have the resources to pay for the response, restoration and other costs associated with the case.<sup>23</sup>
- The readiness of the NPS to assess injuries and determine restoration measures: This mostly involves the inquiry of whether feasible and cost-effective methods of assessing injuries and determine if restoration measures exist?<sup>24</sup>

# C. Injury Assessment

Injuries are assessed in two stages, (1) Injury Determination Stage and (2)

Quantification Stage.

# a. Injury Determination Stage

The agency considers a number of fundamental issues in assessing and determining the injury. First the agency determines whether the injured resources are located within the boundaries of a Marine Sanctuary or National Park and not owned by a non-Federal entity.<sup>25</sup> Second, the agency will consider purpose and value of the injured resources as well as its post-loss condition and determine whether the injury interferes with the ability of the park to conserve and manage its resources.<sup>26</sup>

The agency then prepares a written determination of the injury. This document should be qualitative and address how the condition of the injured resource had changed relative to the pre-incident baseline condition. Further, the document should outline a causal relationship between the incident and the adverse change in the sanctuary or park resource.

# b. **Quantification Stage**

Injury quantification is the process by which agencies determine the severity, extent and duration of the adverse effect on the park system resource. Several guidelines are considered when gathering data and characterizing injuries. This stage is performed with an eye towards the restoration determination phase.

First, the injury is characterized in descriptive terms.<sup>27</sup> For example, if a patch of seagrass is destroyed, the agency must specify whether the seagrass was lost due to a vessel grounding or anchor dragging. This helps to determine not only the type of 11

resource impacted, but also the percent of lost services provided. Characterization of the injury is required to determine appropriate restoration measures.

Second, the injury is characterized in quantitative terms.<sup>28</sup> For example, area of destroyed seagrass will be measured. Further, if the incident is so great such that a park closure is required (i.e, catastrophic oil discharge), the numeric change in visitation is used as a metric for assessing quantitative impact.

Third, data such as photographs, interview of eyewitnesses, measurements of the affected area, and other information, will be gathered to ensure an accurate record of the incident and its immediate effects.<sup>29</sup>

Fourth, a quantitative injury description will be performed addressing the reduction in the quality, function or abundance of the resource from its baseline condition (the condition of the resource had the incident not occurred) to its injured condition.<sup>30</sup> The baseline condition of an injured resource may already be documented in previous studies or in routinely collected data. If a baseline condition is not already documented, it must be established through the use of reference sites or other means.

#### Injury Assessment Methods

Appropriate injury assessment methods for NMSA and PSRPA cases vary greatly depending on the nature and severity of the injury. Assessment methods must be generally accepted and scientifically sound. While many NMSA and PSRPA cases entail simple injury assessments, some case will be more complex and require advanced assessment methods. The more advanced studies may be made upon any or

all of the following components.

- Literature Reviews: The ecological science and damage assessment literature may provide useful information for assessing injuries. In particular, documents on past resource injuries may help in evaluating the current and potential extent of injuries involved in the incident under examination. A number of factors will influence the relevance of the literature studies, including the stressors (i.e, pollinations) involved and the exact resource (flora or fauna) affected.
- **Field Studies**: Field studies in the incident's area may yield the most useful information for assessing a sanctuary or park resource injury. Baseline conditions can often be determined by the observations, photographs and samples taken in field studies.
- Laboratory Studies: Laboratory studies are often used to analyze field data, to determine the extent of exposure and injury, and to analyze the pathways through which pollutants move. These studies may measure how exposure to a pollutant affects the reproductive and growth success of a particular special of flora or fauna.
- **Modeling**: Models are used to analyze complex physical, chemical and/or biological processes and systems such as coral reefs. Typically developed through analysis of field data, a model may establish a set of mathematical relationships that allow the user to simulate how changes in key parameters affect an outcome of interests or estimate how a pollutant affects wildlife in terms of survival, reproductive success and growth.

# **D.** Restoration Determination

Once the injury assessment is complete, the agency uses an "assessment" to determine what restoration measures are appropriate. Restoration does not mean restoring or replacing injured or lost resources to their exact pre-loss condition. Instead, restoration refers to the process of returning injured sanctuary or park resources to their baseline condition and replacing the services lost when resources are lost. There are two main categories or restorations, Primary Restoration and Compensatory Restoration. Primary Restoration measures return *injured* resources and resource services to their baseline conditions.<sup>31</sup> Compensatory Restoration measures replace resources *lost* as a result of the incident.

# a. Primary Restoration

Primary restoration may involve active measures that accelerate the return of injured resources to baseline (attaching and reconstructing damaged coral heads) or passive measures that allow the return of injured resources to baseline (fencing the affected area).<sup>32</sup> The following are the various types of primary restoration procedures the agency staff uses when restoring an injured sanctuary or park resource to baseline.

- **On-Site and In-Kind Restoration**: This approach involves restoring resources or services at the site where the injury occurred and restores the physical, biological or cultural nature of the resource to baseline.<sup>33</sup> For example, planting seagrass that was lost due to a vessel grounding.
- Off-Site and In-Kind Replacement: This approach involves restoring resources or services of the same

physical, biological or cultural resources as the injured resources but at a site different from the injury. <sup>34</sup> Continuing with the grounding example, planting seagrass not at the site of the loss but at a different area of the affected park.

- **On-Site and Out-of-Kind Replacement**: This approach entails restoration at the affected sites, but the resources are physically, biologically or culturally distinct from those injured.<sup>35</sup> Continuing the example, instead of planting seagrass the agency plants mangrove trees at the affected area.
- Off-Site and Out-of-Kind Replacement: This approach entails restoration resources that are physically, biologically, or culturally distinct from those injured and which are in a different location.<sup>36</sup> Continuing the example, the agency will plant mangrove trees not at the site of the loss but at a different area of the affected park.
- Acquisition of the Equivalent: Under this approach, the agency may allow the responsible party to acquire equivalent resources by purchasing private property and placing the property under public ownership and protection.<sup>37</sup> Alternatively, the agency may use monetary damages recovered to acquire equivalent resources.

When selecting a Primary Restoration approach, the agency must first consider the relative project implementation costs. The cost of implementation is reasonable if it is necessary for the restoration measure to achieve baseline and if the restoration measure conforms to applicable management policies and objectives. Along with the cost of implementation, feasible restoration measures should be arrayed according to their anticipated effectiveness in achieving baseline conformity with applicable management policies.

# i. Scaling Primary Restoration

The Primary Restoration measures are scaled to commensurate with the resource injury.<sup>38</sup> Scaling is the process of determining the appropriate size or degree of restoration. This process involves comparing the condition of the injured resource to its baseline condition when determining the quantities of labor, materials, equipments and other requirements needed to re-establish the baseline condition. Scaling Primary Restorations will be straightforward many times (e.g. *X* square yards of lost seagrass is equivalent to *Y* square yards of new seagrass). For example, if a grounding vessel caused the loss of seagrass in an area, scaling might simply involve determining the amount of fill, planting units of seagrass and birdstakes along with labor needed to re-vegetate the burdened area. This could be done by obtaining contract bids or relying on expertise within the park.

A number of factors, however, may make scaling primary restoration more complex. In the example above, if the baseline conditions on the burden area are unknown, it may be necessary to establish statistically controlled baseline by reference of adjacent areas with a similar ecological setting. Further, restoration measures such as invasive species control and area closures may need to be scaled to successfully reestablish the area. Restoration approaches other than on-site/in-kind will require closer attention to scaling considerations.<sup>39</sup> Keeping with the example, if mangrove trees are planted where the seagrass was lost, simple scaling rules (i.e. X square yards of lost seagrass is equivalent to Y square yards of mangrove trees) may not exist. This will cause the agency to craft a restoration that justifies the scale of primary restorations consistent with accepted and reliable scientific principles.

# Estimating Costs of Primary Restoration

Estimating costs of Primary Restoration vary greatly with the nature of restoration. For example, restoration costs for repairing or replacing a downed aid to navigation will involve minimal resources. In contrast, rebuilding a coral reef injured by a vessel grounding may require substantial research by experts in engineering and marine sciences which may require substantial resources to repair. In many cases, however, an effective approach to estimating restoration costs will be to gather competitive bids from commercial contractors specializing in the desired restoration service combined with an estimate of the monitoring costs anticipated by the agency for the project.

# b. Compensatory Restoration

Compensatory Restoration, unlike Primary Restoration which is intended to return *injured* resources and resource services to their baseline conditions, is intended to replace a specific quantity of lost or diminished services.<sup>40</sup> As with the NMSA, the PSRPA allows for the recovery of damages for interim lost or diminished services.

Lost or diminished services can involve either ecological services or human use services. Losses continue from the time of the injury until baseline conditions are achieved. For example, a primary restoration program may take several years to repair coral head damage caused by a vessel; however, during the time that the coral head restoration is being implemented, wildlife and the public lose the service that the coral would have provided.

#### i. Selection of Compensatory Restoration

Compensatory restoration measures must be selected to replace lost services with comparable services. Measures to replace lost ecological services are tailored to provide services or functions that are comparable to those provided by the injured habitat in its baseline condition.<sup>41</sup> Further, measures to replace lost human use services should benefit visitor use and be consistent with the park's management plan. The selection of Compensatory Restoration measures should also consider the relative project implementation costs. Implementation costs are reasonable if it is necessary for the restoration measure to provide comparable services and if the restoration measure conforms to applicable agency management policies and objectives.<sup>42</sup>

#### ii. Scaling Compensatory Restoration

Determining the proper scale of compensatory restoration can be complex and requires a basic understanding of key ecological concepts such as Lost Human Use Services and Ecological Services.

#### Lost Human Use Services

When a resource injury requires National Park visitors to endure a diminished experience or forgo their visits altogether, they incur a loss.<sup>43</sup> For example, park visitors may have their diving experience diminished as a result of a grounding incident on the coral reef they sought to dive. Similarly, a would-be park visitor who cannot swim at a seashore because of an oil spill may lose their desired experience altogether.

Economists have developed generally accepted methods for measuring the economic value of lost human use services and quantifying its lost economic value. Economic value is a net-benefit concept that equals the maximum willingness to pay for a resource or service minus the costs incurred to use that resource or service. Economic value is analogous to the equity value of real estate. As such, equity equals the maximum sales potential of real estate minus the costs of ownership (including any transaction costs incurred in transferring real estate). Therefore, equity represents the true value of real estate because the owner is free to spend or invest that amount at will. Similarly, the lost economic value incurred by park visitors represents the true value of their losses resulting from a resource injury.

Under the NMSA and PSRPA, compensatory restoration of lost human services is generally scaled using the following three-step process:

- Step 1: Estimate the economic value of lost human use service using applicable methods (see above).
- Step 2: Select compensatory restoration projects that provide human use services comparable to those lost as a result of the resource injury.
- Step 3: Scale selected projects such that their cost equals the economic value of lost human services.<sup>44</sup>

# Lost Ecological Services

Sanctuary or park resources often provide ecological services in addition to human use services. These services include the functions performed by a resource for the benefit of other resources such as when a habitat provides food and refuge for fish and wildlife species.<sup>45</sup> Valuation of lost ecological services can be assessed using applicable original research methods.

# **Overview of Popular Scaling Methods**

# a. Habitat Equivalency Analysis ("HEA")

The Habitat Equivalency Analysis ("HEA") has become the most popular scaling method in determining how much habitat needs to be restored in order to compensate the public for the ecosystem services lost. The HEA is an example of the service-to-service approach of scaling. The goal of the analysis is to determine the amount of restoration such that the services lost are offset by services provided by restoration. The assumption of the HEA is that the public is willing to accept a one-to-one trade-off between a unit of lost habitat services and a unit of restoration project services (i.e., the public equally values a unit of service at the injury site and the restoration site).<sup>46</sup>

# b. Travel Cost Method

The Travel Cost Method is principally used to describe demand for recreational experiences and human loss services.<sup>47</sup> This measurement procedure evolved from the idea that the travel costs individuals incur to visit a site are like a price for the site visit. By gathering information on the number of visits to a particular site, the analyst can estimate a demand function for the site that relates the number of site visits to the amount of travel costs incurred per visit.<sup>48</sup> Variations in visitation related to similar sites can then be used to estimate the site's demand.<sup>49</sup> In short, the travel cost method assesses an individual's willingness to travel further (thereby incurring higher travel costs) in order to re-create at more highly valued site.<sup>50</sup>

# c. Factor Income

The factor income method is used as a means of valuation in applications where natural resources are used as inputs in the production of other goods and services.<sup>51</sup> This approach can be employed to calculate changes in economic rent under certain special conditions using the principles of supply and demand.

# d. Hedonic Price Model

Hedonic pricing is a useful tool in assessing amenity value.<sup>52</sup> This approach relates the price of a marketed commodity to its various attributes rather than the price of the commodity itself. In the natural resources damage assessment context, it may be used to determine the change in value of some non-market services from public trust natural resources where they function as attributes of private market goods. Hedonic pricing can give a realistic estimation of environmental

benefits and values as model estimates are based on market information.

# e. Benefit Transfer

Benefit transfer is an expedited method that is used to scale the compensatory restoration of lost human use services.<sup>53</sup> This approach uses estimated values or demand relationship in existing studies to evaluate a site or event for which no sitespecific study is available.<sup>54</sup> The advantage of the benefit transfer approach is the avoided cost of conducting sitespecific economic studies.

# f. Contingent Valuation

Contingent valuation is a form of nonmarket valuation which determines the value of a resource based upon surveys.<sup>55</sup> The contingent valuation method estimates the total value (direct and passives use) of a resource by using a questionnaire designed to objectively collect information about the respondent's willingness to pay for the resource or service.<sup>56</sup>

# **E.** Claim Resolution

The fifth case management step is claim resolution. At this point, the Department of Justice ("DOJ") becomes involved. Under the NPSA, the DOJ is required to prosecute all claims in excess of US\$10,000. Once restoration measures are determined, the government can present a claim for damages. The claim will first take the form of a "Demand for Payment of Damages" to the responsible party. The Demand will inform the responsible party of the injury and explain his legal and financial obligations. Full payment of the Demand will release the responsible party

from liability and thus resolve the matter. If the demand is refused, the government may choose to litigate the claim by filing a civil action in the appropriate Federal District Court (usually the district in which the National Park is located).

# a. Settlement

In resolving NMSA and PSRPA claims, the government seeks to minimize litigation costs through settlement negotiations with the responsible party. To ensure satisfaction of the NMSA and PSRPA goals, the government gives particular consideration to the adequacy of a proposed settlement to replace, restore, or acquire the equivalent of the injured sanctuary or park resource.<sup>57</sup> Other factors are important when the government considers a particular settlement position. The settlement should account for the ancillary costs of restoration to ensure effective implementations.<sup>58</sup> These include the costs for preparing the restoration plan, conducting environmental or other required compliance studies. Finally the government considers how to build flexibility in the resolution document (consent decree) to accommodate potential changes in restoration measures that may be necessitated as a result of environmental and other compliance actions.<sup>59</sup>

# b. Litigation

If the case cannot be quickly settled, the government will then file a civil action in Federal District Court which will be handled like any other litigation. The government is not entitled to attorney's fees and costs under the PSRPA or the other

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statutes discussed herein. A discussion of defenses to government brought actions under the PSRPA as well as other environmental statutes is contained below.

# **F.** Restoration Planning and Implementation

Once a resolution of damages has been achieved, the agency then proceeds to restoration planning and implementation. This paper will only give a general overview of this case management step.

Though the purpose of restoration measures is to restore a sanctuary or park resource, nearly all of them will require an environmental assessment and/or environmental impact statement before commencement.<sup>60</sup> Restoration measures must also comply with federal statutes and regulations affecting restoration of sanctuary or park resources. This compliance may also involve obtaining permits and performance bonds. If a private company performs the restoration work, agency staff may need to issue a special use permit allowing the company to use sanctuary or park resources. Though the PSRPA does not address public participation, such participation may be required.

#### IV. DEFENSES

Defenses to the CWA, NMSA, PSRPA, OPA and CERCLA are generally limited by statute and can be discussed en masse. These defenses include: (1) statute of limitations; (2) Act of God; (3) Act of War; (4) Act or Omission of a Third Party 24

and Destruction; and, (5) Loss or Injury Caused by an Activity Authorized by Federal or State Law. Given the strict liability nature of these statutes, courts have narrowly interpreted these defenses.

# A. Statute of Limitations

Though not an enumerated defense, the statute of limitations gives courts jurisdiction to hear the case. Should the government bring its claim outside the statute of limitations, its claim must be dismissed. The statutes discussed in this paper have the following varying statutes of limitations:

# a. CWA

The government must bring an action under the CWA within 5 years of the time of the discharge.<sup>61</sup> In situations where the pollutant remains in the water, the 5 year statute of limitations does not begin to run until the pollutant is removed.<sup>62</sup>

# **b.** NMSA

The NMSA requires that the government file a complaint within 3 years of the completion of the damage assessment and restoration plan for the sanctuary resources to which the action relates.<sup>63</sup>

# c. PSRPA

The PSRPA does not have a limitation period. As the PSRPA is silent as to the appropriate statute of limitations, as such the 5 year limitation delineated in 28 U.S.C.

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§ 2462 should apply. The Department of Interior, however, advises that a case under the PSRPA should be prepared within 2 years of the incident's discovery.<sup>64</sup>

# d. OPA

OPA's statute of limitations and trigging events are as follows:

1. <u>Damages</u>. All actions for damages must be commenced within 3 years after:

after:

- the date on which the loss and the connection of the loss with the discharge in question are reasonably discoverable with the exercise of due care, or
- in the case of natural resource damages, the date of completion of the natural resources damage assessment.

2. <u>Removal costs</u>. An action for recovery of removal costs must be commenced

within 3 years after completion of the removal action.

3. <u>Contribution</u>. No action for contribution for any removal costs or damages

may be commenced more than 3 years after:

- the date of judgment in any action under this Act for recovery of such costs or damages, or
- the date of entry of a judicially approved settlement with respect to such costs or damages.
- 4. Subrogation. No action based on rights subrogated may be commenced more

than 3 years after the date of payment of such claim.

# e. CERCLA

CERCLA's statute of limitations and trigging events are as follows:

1. <u>Actions for Natural Resource Damages</u>. All resource damage claims must be commenced within 3 years after the date of the discovery of the loss..

2. Actions for Recovery of Costs. An initial action for recovery of the costs

must be commenced:

- For a removal action, within 3 years after completion of the removal action, except that such cost recovery action must be brought within 6 years after a determination to grant a waiver for continued response action; and
- For a remedial action, within 6 years after initiation of physical on-site construction of the remedial action, except that, if the remedial action is initiated within 3 years after the completion of the removal action, costs incurred in the removal action may be recovered in the cost recovery action brought under this subparagraph.
- 3. <u>Contribution</u>. No action for contribution for any response costs or damages

may be commenced more than 3 years after:

- the date of judgment in any action under this Act for recovery of such costs or damage, or,
- the date of an administrative order relating to cost recovery settlements or entry of a judicially approved settlement with respect to such costs or damages.
- 4. Subrogation. A claim based on rights subrogated must be commenced within

3 years after the date of payment of such claim.

5. <u>Actions to Recover Indemnification Payments</u>. An indemnification claim must be commenced within 3 years from the date on which such payment is made.

# **B.** Act of God

Damage caused solely by an "Act of God" is a statutory defense to claims brought under the CWA, NMSA, PSRPA, CERCLA. An "Act of God" is "an act occasioned by an unanticipated grave natural disaster."<sup>65</sup> To prevail under the Act of God defense, the shipowner must prove by a preponderance of the evidence that:

- (1) the circumstances constituted an unanticipated, grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character;
- (2) the effects of the natural phenomenon could have been prevented by the exercise of due diligence and foresight; and
- (3) a grave natural disaster or other natural phenomenon was the sole cause of the loss.<sup>66</sup>

Courts have taken a strict view of this defense. It is not enough that the loss was caused by a natural disaster in which the shipowner took precautions to avoid to be considered an "Act of God," but the shipowner could not have anticipated such a disaster. The following have been determined not to be "Acts of God:" spills of hazardous substances caused by bursting pipes following unprecedented cold spell;<sup>67</sup> loss of containers storing pollutants resulting from a storm where weather predicted by weather service was known to captain and crew prior to their departure and even

though the crew was directed to take extra precautions to insure vessel and cargo were secure for rough seas;<sup>68</sup> heavy rainfall where rains were foreseeable based on normal climactic conditions;<sup>69</sup> predicted rough weather causing a vessel to run aground in the Florida Keys National Marine Sanctuary.<sup>70</sup>

# C. Act of War

The term "Act of War" is undefined by the statutes and there is little decisional interpretation. The best discussion of the "Act of War" defense can be found in the Ninth Circuit's opinion of *United States v. Shell Oil Co.*<sup>71</sup> There, the court recognized that the term "act of war" appears to have been borrowed from international law, where it is defined as a "use of force or other action by one state against another" which "the state acted against recognizes ... as an act of war, either by use of In rejecting the argument that any retaliatory force or a declaration of war." governmental act taken by authority of the War Powers Clause of the U.S. Constitution is an "act of war," the opinion cites two treatises that suggest the "act of war" defense has a narrow meaning and requires "massive violence" or a "natural or man-made catastrophes beyond the control of any responsible party." Therefore. under the guidance of *Shell Oil*, an act of war within the meaning of the environmental statutes would require some sort of attack by a foreign state which causes massive violence and/or destruction.

# **D.** Act or Omission of a Third Party

This is the "it was not me, it was him" defense. Should there be a situation where the government brings a claim against a vessel *in rem* or vessel operator, and the resource injury was caused by another vessel or person, this defense can be raised.

# E. Destruction, Loss or Injury Caused by an Activity Authorized by Federal or State Law

NOAA and the NPS issue permits for various activates in the National Marine Sanctuaries and National Parks including activities that may harm or cause injury to marine resources. Should NOAA or NPS issue a permit for an activity, it cannot bring a claim against the party for conducting the permitted activity. For example, a university seeks to conduct a marine archeology project on a sunken Spanish galleon within a national park's boundaries. National Park Service issues a permit for a university to conduct marine archeology on the galleon including raising one of its cannons for study at the university. The NPS then cannot bring a claim against the university for removing an artifact (the cannon) from the park.

Though federal common law permits an activity, it is not necessarily a defense to a claim under the NMSA and PSRPA. The federally authorized activity defense was raised and rejected in the marine salvage context.<sup>72</sup> In *United States v. Fisher*, a treasure salvor conducted salvage operations within the Florida Keys National Marine Sanctuary and the government filed suit for violating the NMSA. The treasure salvor defended the government's claim by stating that salvage is recognized and permitted under general maritime law. In rejecting the federal permitted activities defense, the court held that Congress has the right to modify general maritime law and that common law principles do not automatically bar Congress from exercising its legislative prerogative to protect federal lands from potentially damaging activity. The court further found that maritime salvage law of the common law of finds is not a federal law within the meaning of the NMSA.

# F. Challenging the Appropriateness of Damages Assessed

The government is entitled to recover the costs of implementing its plan that restores or replaces the injured resource, or the cost of acquiring the equivalent of the resource if it cannot be restored or replaced. These damages can be challenged several ways.

# a. The Government is Required to Have a Restoration Plan

As an initial matter, courts cannot award damages without a specific restoration plan before it.<sup>73</sup> As such, a clam presented under the CWA, NMSA and PSRPA can be defeated should the government not have a restoration plan.

# b. Challenging the Damage Assessment and Restoration Plan

Courts have wide discretion in determining the appropriate remedy in environmental cases and are not bound by the government's recommendation as to the best plan for restoration.<sup>74</sup> In order for a restoration plan to be accepted it must: (1) be designed to confer maximum environmental benefits tempered with a touch of equity; (2) be practical and feasible from an environmental and engineering standpoint; (3) take into consideration the financial resources of the responsible party; and (4) include consideration of the responsible party's objections.<sup>75</sup> When determining whether the government's proposed primary restoration plan is feasible and costs justified, the court must, "make a complete examination of both the environmental factors involved and the practicalities of the situation"<sup>76</sup> and consider the cost of the plan in relation to its prospects for success.<sup>77</sup> The court must not order a restoration plan when its contemplated results prove too speculative and its implementation too costly.

Another point of challenge is whether the assessment passes evidentiary muster under the Federal Rules of Evidence. The Supreme Court has interpreted the Federal Rules of Evidence to require scientific evidence to be relevant and reliable.<sup>78</sup> As such, if the government's damage assessment and/or restoration plan is not substantiated by reliable scientific methods, it will be rejected by the court. This issue was raised in *United States v. Great Lakes Dredge and Dock Co.*<sup>79</sup> In that case a tugboat owner challenged the use of a HEA to assess damages caused by a 13 mile long scar on the ocean's bottom caused by a dragging of a pipe.<sup>80</sup> The tugboat owner argued that the HEA is not an appropriate method to calculate damages and the underlying scientific data plugged into the mathematical equations as input parameters were deficient under the scientific evidence standard.<sup>81</sup> The court rejected the tugboat owner's argument and found that the HEA is an appropriate method to measure damages for environmental resource losses and the scientific data imputed into the model appropriately.<sup>82</sup>

Other courts have accepted the HEA to determine the scale of compensatory restoration projects. However, to be deemed appropriate the HEA must show that: (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.<sup>83</sup>

# G. Applicability of the Shipowners' Limitation of Liability Act

The Shipowners' Limitation of Liability Act ("LOLA") allows a shipowner to limit its liability to the post-loss value of the vessel following a maritime disaster.<sup>84</sup> Given its ability to limit exposure, the LOLA is attractive to many shipowners as a defense to various types of claims. The NMSA, however, expressly excludes application of the LOLA.<sup>85</sup> Furthermore, the PSRPA has been interpreted to exclude the application of the LOLA.<sup>86</sup> With regard to the CWA, though it is settled that the LOLA cannot limit the government to recover actual cleanup costs, there is a split of authorities concerning whether the Act applies to civil penalties.<sup>87</sup>

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# H. Use of Bankruptcy

At least one court has found civil penalties imposed under an environmental act are not dischargeable in bankruptcy.<sup>88</sup>

# V. INSURANCE COVERAGE FOR GROUNDING EVENTS

# A. The Environmental Claim

Most domestic policies exclude coverage for, "fines and penalties issued by the government or governmental agencies." Most policies define this clause to exclude coverage for grounding events which cause damage to coral and seagrass. Some policies go so far as to expressly exclude the duty to defend its insured for such losses. Though most basic marine insurance polices exclude coral and seagrass damage, many underwriters accept this type of risk on a limited basis (i.e., providing less coverage than other liabilities under the policy). Limited coverage ranges from US\$25,000 to US\$100,000 for each event.

# **B.** The Non-Environmental Claim

There are many issues underwriters must be aware of besides environmental damage when an insured vessel runs aground in a Marine Sanctuary or National Park besides environmental claims.

### a. Wreck Removal/Salvage

Many times when a vessel runs aground it must be removed from its strand. Under the Wreck Removal Act, when a grounded vessel impedes navigation, the owner is required to have it removed.<sup>89</sup> Most insurance policies respond to such compulsory wreck removals. Further, should the vessel suffer little damage for the grounding, the owner will want it removed so that he could continue to enjoy the watercraft. In such events, a salvor may be hired to free the vessel. Such salvage could be contractual or "pure." Contractual salvage is usually a flat fee or an hourly In a "pure" salvage context, a salvor will receive an rate for the salvage efforts. award based upon the following factors: (1) the labor expended by him in rendering the salvage service; (2) the promptitude, skill, and energy displayed in rendering the service and saving the property; (3) the value of the property employed by him in rendering the service, and the danger to which such property was exposed; (4) the risk incurred by him in securing the property from the impending peril; (5) the value of the property saved; and (6) the degree of danger from which the property was rescued.<sup>90</sup> Like instances where removal is compulsory, insurance polices respond to voluntary salvage operations. Insurers should further note that a salvor may bring a claim directly against the vessel's underwriters as well as the owner.<sup>91</sup>

# **b.** Personal Injury

Like with any maritime incident, a personal injury claim may arise from a grounding incident. The standard yacht policy will respond to such personal injury claims (usually up to a million dollars) under its liability section.

# VI. CONCLUSION

As shown, the Federal Goverment has enacted significant legislation designed to protect the Nation's marine sanctuary and national park resources. Further, agencies such as NOAA and the NPS have adopted guidelines to respond to incidents, assess and restore damages as well as present claims against the responsible parties. Given the strict nature of the marine environmental legislation, there are few defenses to a violation. These few defenses have additionally been given strict interpretation by the courts. To lessen exposure to such environmental claims, the marine insurance industry has either expressly excluded liabilities imposed by vessel groundings in the Marine Sanctuaries or National Parks or limited coverage. Despite such exclusions and limitations by insurers, there are many environmental marine claims made by recreational boaters each year.

# LIST OF ACRONYMS

**CERCLA** – Comprehensive Environmental Responses, Compensation and Liability Act **CWA** – Clean Water Act

DAC – Damage Assessment Center
DARP – Damage Assessment and Restoration Program
DOI – Department of the Interior
DOJ – Department of Justice

EA – Environmental Assessment
 EIS – Environmental Impact Statement
 EQD/ERDAR – National Park Service Environmental Quality Division Environmental
 Response, Damage Assessment, and Restoration Branch

FWPCA – Federal Water Pollution Control Act

HEA – Habitat Equivalency Analysis

LOLA – Shipowners' Limitation of Liability Act

NMSA – National Marine Sanctuaries Act
 NOAA – National Oceanic and Atmospheric Administration
 NPS – National Park Service
 NRDA – Natural Resource Damage Assessment

**OGCNR** – Office of General Counsel for Natural Resources **OPA** – Oil Pollution Act of 1990

**PSRPA** – Park System Resource Protection Act

# END NOTES

<sup>&</sup>lt;sup>1</sup> Mark Spalding et al., World Atlas of Coral Reefs note 6, at 97-98 (2001). <sup>2</sup> 33 U.S.C. § 1251. <sup>3</sup> S. Rep. No. 595, 100th Cong., 2d Sess. 1 (1988). <sup>4</sup> 15 C.F.R. § 922 <sup>5</sup> 16 U.S.C. § 1443 (b). <sup>6</sup> 16 U.S.C. § 1436. <sup>7</sup> United States v. Fisher, 22 F.3d 262 (11<sup>th</sup> 1994). <sup>8</sup> 16 U.S.C. § 1432(8); 15 C.F.R. § 922.3. <sup>9</sup> 16 U.S.C. § 1432(6)(a) <sup>10</sup> United States v. M/V Miss Beholden, 856 F. Supp. 668 (S.D. Fla. 1994). <sup>11</sup> United States v. Great Lake Dredge & Dock Co., 259 F.3d 1300, 1307 (11<sup>th</sup> Cir. 2001). <sup>12</sup> 16 U.S.C. § 19jj-1(a). <sup>13</sup> 16 U.S.C. § 19jj-1(b). <sup>14</sup> 16 U.S.C. § 19jj-3(a)-(b). <sup>15</sup> 33 U.S.C. § 2702(b)(2). <sup>16</sup> 33 U.S.C. § 2706(d) <sup>17</sup> Damage Assessment and Restoration Handbook, (Dept. of Interior Dec. 2003). <sup>18</sup> *Id*. <sup>19</sup> *Id*. <sup>20</sup> Id. <sup>21</sup> *Id*. <sup>22</sup> Id. <sup>23</sup> Id. <sup>24</sup> Id. <sup>25</sup> Id. <sup>26</sup> Id. <sup>27</sup> Id. <sup>28</sup> Id. <sup>29</sup> Id. <sup>30</sup> *Id*. <sup>31</sup> *Id*. <sup>32</sup> *Id*. <sup>33</sup> *Id*. <sup>34</sup> Id. <sup>35</sup> Id. <sup>36</sup> Id. <sup>37</sup> Id. <sup>38</sup> Id. <sup>39</sup> *Id*. <sup>40</sup> *Id*. <sup>41</sup> *Id*. <sup>42</sup> *Id*. <sup>43</sup> *Id*.  $^{44}$  Id. <sup>45</sup> *Id*. <sup>46</sup> NOAA, *Habitat Equivalency Analysis: An Overview* (October 2000). <sup>47</sup> Uibarri, C.A., and K.F. Wellman, Natural Resource Valuation: A Primer on Concepts and Techniques, p. 15 (1997). <sup>48</sup> *Id*. <sup>49</sup> *Id*.

<sup>50</sup> Karcher, Michael R., *The Ever Increasing Environmental Damage Claim*.

http://www.darp.noaa.gov/library/pdf/heaoverv.pdf

- <sup>56</sup> Karcher, Michael, *The Ever Increasing Environmental Damage Claim*.
- <sup>57</sup> Damage Assessment and Restoration Handbook, (Dept. of Interior Dec. 2003).

<sup>58</sup> Id.

<sup>59</sup> Id.

<sup>60</sup> Id.

<sup>61</sup> 28 U.S.C. § 2462.

- <sup>62</sup> United States v. Reaves, 923 F. Supp. 1530 (M.D. Fla. 1996).
- <sup>63</sup> 16 U.S.C. § 1443(e).

<sup>64</sup> Damage Assessment and Restoration Handbook, pg. 13 (Dept. of Interior Dec. 2003).

- <sup>65</sup> 33 U.S.C. § 1321(a)(12); 42 U.S.C. § 9601(1); 33 U.S.C. § 2701(1).
- <sup>66</sup> Apex Oil Co. v. United States, 208 F. Supp. 2d 642 (E.D. La. 2002).
- <sup>67</sup> United States v. Barrier Industries, Inc., 994 F. Supp. 678 (S.D.N.Y. 1998).
- <sup>68</sup> United States v. M/V Santa Clara I, 887 F. Supp. 825 (D.S.C. 1995).
- <sup>69</sup> United States v. Stringfellow, 661 F. Supp. 1053 (C.D. Cal. 1987).
- <sup>70</sup> United States v. M/V Miss Beholden, 856 F. Supp. 668 (S.D. Fla. 1994).
- <sup>71</sup> United States v. Shell Oil Co., 294 F.3d 1045 (9<sup>th</sup> Cir. 2002).
- <sup>72</sup> Lathrop v. The Unidentified, Wrecked & Abandoned Vessel, 817 F.Supp 953 (M.D. Fla. 1993); United States v. Fisher, 1997 U.S. Dist. LEXIS 19434 (S.D. Fla. April 30, 1997).
- <sup>73</sup> United States v. M.C.C. of Florida, Inc., 772 F.2d 1501 (11<sup>th</sup> Cir. 1985).
- <sup>74</sup> United States v. Board of Trustees of Florida Keys Community College, 531 F. Supp. 267 (S.D. Fla. 1981).
- <sup>75</sup> United States v. Sexton Cove Estates, Inc., 526 F.2d 1293 (5<sup>th</sup> Cir. 1976); United States v. Joseph G. Moretti, Inc., 526 F.2d 1306, 1310 (5<sup>th</sup> Cir. 1976) and Untied States v. Weisman, 789 F. Supp. 1331, 1343-50 (M.D. Fla.) affd. 632 F.2d 891 (5<sup>th</sup> Cir. 1980).
- <sup>76</sup> United States v. Joseph Moretti, Inc., 526 F.2d 1306 (5<sup>th</sup> Cir. 1976); United States v. Great Lakes Dredge and Dock Co. 259 F.3d 1300 (11<sup>th</sup> Cir. 2001).
- <sup>77</sup> United States v. M.C.C. of Florida, Inc., 772 F.2d 1501 (11<sup>th</sup> Cir. 1995).
- <sup>78</sup> Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).
- <sup>79</sup> United States v. Great Lakes Dredge and Dock Co., 259 F.3d 1300 (11th Cir. 2001).
- <sup>80</sup> Id. at 1302.
- <sup>81</sup> *Id.* at 1305.
- <sup>82</sup> Id.
- <sup>83</sup> United States v. Fisher, 977 F. Supp. 1193 (S.D. Fla. 1997).
- <sup>84</sup> 46 U.S.C. § 183 *et seq.*
- <sup>85</sup> 16 U.S.C. § 1443(a)(4).
- <sup>86</sup> Tug Allie-B, Inc. v. United States, 273 F.3d 936 (11<sup>th</sup> Cir. 2001).
- <sup>87</sup> United States v. CF Industries, Inc., 542 F.Supp 952 (D. Minn. 1982)(finding that civil fines imposed under the CWA fall outside the LOLA) In re: Korea Wonyang Fisheries Co., Ltd., 1994 AMC 804 (D. Alaska 1992). (finding that civil fines imposed under the CWA are subject to the LOLA).
- <sup>88</sup> United States v. Jones (In re Jones), 2005 AMC 264 (Bankr. M.D. Ga. 2004).
- <sup>89</sup> 33 U.S.C. §§ 409-414
- <sup>90</sup> The Blackwall, 77 U.S. (10 Wall.) 1, 14, 19 L. Ed. 870 (1869).
- <sup>91</sup> Cresci v. Yacht, "Billfisher", Official Number: 517-614, 874 F.2d 1550 (11th Cir. 1989).

<sup>&</sup>lt;sup>51</sup> Uibarri, C.A., and K.F. Wellman, Natural Resource Valuation: A Primer on Concepts and Techniques, p. 23 (1997).

<sup>&</sup>lt;sup>52</sup> Uibarri, C.A., and K.F. Wellman, Natural Resource Valuation: A Primer on Concepts and Techniques, p. 19 (1997).

<sup>&</sup>lt;sup>53</sup> NOAA, 2000. Habitat Equivalency Analysis: An Overview. National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program. E-5 Website location: http://www.dom.noce.com/librom/adf/honoury.adf

<sup>&</sup>lt;sup>54</sup> Uibarri, C.A., and K.F. Wellman, *Natural Resource Valuation: A Primer on Concepts and Techniques*, p. 19 (1997). <sup>55</sup> *Id.*