

## **Marine Aquatic Resource Mitigation Banking in Florida: An Overview and Analysis of Proposed Legislation**

**Thomas T. Ankersen, Legal Skills Professor & Legal Program Director**  
**Matthew DePaolis, Coastal Policy Analyst**

**University of Florida Coastal Policy Lab<sup>1</sup>**

**December 2022**

Bills to authorize mitigation banking for seagrass and other marine resources on sovereign submerged lands (SSL) have been introduced in the Florida House of Representatives and Florida Senate for consideration in the 2022 legislative session. This policy brief reviews the history of efforts to allow seagrass mitigation banking on sovereign submerged lands, explains the two bills that have been introduced, and discusses some of the issues raised by mitigation banking on sovereign submerged lands. We begin with a brief explanation of mitigation banking and its current uses, primarily for freshwater wetland resources and species management.

### **Mitigation Banking Generally**

Mitigation banking is a well-defined and highly regulated market-based management system that has been practiced in Florida since at least the mid-1990s.<sup>2</sup> It has historically been used to offset impacts to freshwater wetland and upland resources by creating or enhancing similar resources elsewhere. The banks are usually constructed on private property. The bank is typically- but not always- a private profit-seeking entity that takes on the responsibility of restoration and enhancement of degraded resources. Upon approval by a regulatory agency the bank then sells credits, which are purchased by individuals or entities needing the credits to offset damages to resources for which they are responsible. The use of the credits is typically limited to a defined service area, often a watershed or habitat type. This ensures that the resources impacted are replaced in the general area of impact. Credits are released to the bank by the regulatory agency over time as the amount of restoration or enhancement reaches defined progress goals. Both Florida and the federal government allow the use of mitigation banking to offset impacts based on their respective jurisdiction over water resources,<sup>3</sup> or species and habitats in the case of uplands.<sup>4</sup>

---

<sup>1</sup> A project of the University of Florida Levin College of Law Conservation Clinic; The Center for Coastal Solutions, University of Florida College of Engineering; and the Florida Sea Grant Legal Program.

<sup>2</sup> *Mitigation and Mitigation Banking*, Florida Department of Environmental Protection (Nov. 12, 2021), <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mitigation-and-mitigation-banking>.

<sup>3</sup> Section 373.4136, Florida Statutes (2021); USACE, EPA, 2008. Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. Federal Register, 73 Fed. Reg. 70, 19593–19705 (242 pp.).

<sup>4</sup> *For Landowners Conservation Banking*, U.S. Fish and Wildlife Service (Jan. 30, 2020) <https://www.fws.gov/conservation/landowners/conservation-banking.html>.

## **Mitigation Banking in Florida**

Mitigation banking in Florida is primarily governed by Sections 373.4135 and 373.4136, Florida Statutes, and administered by the Florida Department of Environmental Regulation and the State's Water Management Districts. At present there are at least 40 wetland mitigation banks in Florida, most of which involve freshwater wetlands.<sup>5</sup> In addition, the Florida Fish and Wildlife Conservation Commission (FWC) administers "Conservation Banks" which restore and enhance upland habitat for at-risk species such as gopher tortoises.

## **Mitigation Banking for Marine and Estuarine Resources**

Mitigation banking for marine resources is a relatively novel application, but it is not without precedent,<sup>6</sup> and not unheard of in Florida. California adopted a statewide eelgrass policy in 2014, that includes an option for mitigation banking.<sup>7</sup> Applications thus far appear to have been limited to ports and local governments mitigating impacts for their own activities over time. The Port of Los Angeles has developed an "umbrella mitigation bank" that includes wetland and marine resources.<sup>8</sup> The City of St. Petersburg, Florida recently established a sea grass mitigation bank on submerged lands that it owns.<sup>9</sup> In 2018, a multi-habitat private sector mitigation bank that includes seagrass and mangroves was created on privately owned submerged lands in Sarasota County.<sup>10</sup>

## **History of Marine Resource Mitigation Banking Initiatives in Florida**

**In 2008**, the Florida legislature enacted a bill for the establishment of seagrass mitigation banks on SSL.<sup>11</sup> The bill, however, was vetoed by Governor Charlie Crist. In his veto Christ expressed constitutional concerns over the conveyance of a perpetual interest in sovereign submerged lands to a private entity that could include the right exclude the public.<sup>12</sup> Christ also expressed concern that "the long-term success of artificially created seagrass beds has not been conclusively established."

---

<sup>5</sup> Levrel, Harold & Scemama, Pierre & Vaissière, Anne-Charlotte, 2017. "Should We Be Wary of Mitigation Banking? Evidence Regarding the Risks Associated with this Wetland Offset Arrangement in Florida," *Ecological Economics*, Elsevier, 135(C), 136-149.

<sup>6</sup>Niner, H.J., Jones, P.J.S., Milligan, B. & Styan, C.A. (2017) A global snapshot of marine biodiversity offsetting policy. *Marine Policy* 81 (2017) 368-374. <https://doi.org/10.1016/j.marpol.2017.04.005>; Celine, J., Sebastien, T., Sylvain, P. (2018) Marine Biodiversity Offsetting: An Analysis of the emergence of an environmental governance system in California. *Marine Policy* 93, 128-141.

<sup>7</sup> California Eelgrass Mitigation Policy and Implementing Guidelines, (2014). [https://media.fisheries.noaa.gov/dam/migration/cemp\\_oct\\_2014\\_final.pdf](https://media.fisheries.noaa.gov/dam/migration/cemp_oct_2014_final.pdf).

<sup>8</sup> Prickett, Katherine, et al. "Development of a Multi-Habitat Umbrella Mitigation Banking Agreement at the Port of Los Angeles." *Ports 2013: Success through Diversification*. 2013. 1-8.

<sup>9</sup> Dema, Michael J., *An Introduction to St. Petersburg's North Shore Seagrass Mitigation Bank*. 2017

<sup>10</sup> Suncoast Waterkeeper Inc v. Long Bar Point, LLLP. FDEP DOAH Case 0795 <https://floridadep.gov/sites/default/files/17-0002%20%26%2017-0012.pdf>.

<sup>11</sup> Broad, Stephanie A., (2011) *Seagrass Mitigation Banks and the Governor's Veto*. *Stetson Law Review* 39:285.

<sup>12</sup> Memo from Gov. Christ to Sec. Browning. (June 30, 2008) <https://static.votesmart.org/static/vetotext/21176.pdf>. See also Broad, Stephanie A, *Seagrass Mitigation Banks and the Governor's Veto* (August 20, 2008). *Stetson Law Review*, Vol. 39, No. 285, 2009, Stetson University College of Law Research Paper, Available at SSRN: <https://ssrn.com/abstract=1240769>

**In 2018**, the Florida legislature amended Chapter 327, Florida’s boating statute, to authorize boating restricted areas over privately owned SSLs to protect seagrass.<sup>13</sup> Previously this was exclusively permitted for safety and Manatee protection.<sup>14</sup> While mitigation banking is not expressly addressed by this statute, boating restrictions are a key tool for restoring and enhancing seagrass damaged by prop scars. The constitutional issues raised by Governor Christ’s veto are less of a concern on privately owned submerged lands, but questions of navigation rights and the public trust doctrine persist.

**In 2021**, Companion bills (HB 1335<sup>15</sup>/SB 1668<sup>16</sup>) were introduced to authorize sea grass mitigation banking, provided the banks meet the public interest criteria under Chapters 253 (state lands) and 258 (State Parks and Preserves/Aquatic Preserves), and comply with the mitigation banking statute for freshwater resources in Section 373.4136. These bills did not make it out of Committee. The direct reference to public interest criteria may represent an effort to address the concerns raised in the 2008 Christ veto. Environmental concerns expressed during the committee deliberations appear to have centered around the uncertainty associated with seagrass restoration success.<sup>17</sup> According to a staff report accompanying this legislation, an FDEP analysis “discusses how traditional public uses of sovereign submerged lands may not be consistent with mitigation banks. DEP also discusses concerns that offsetting the loss or degradation of seagrass resources with existing protected seagrasses may lead to a net loss of seagrass resources.”<sup>18</sup>

### **Current Proposals**

For the 2022 legislative session, companion bills have been filed in both the House and the Senate. There are significant differences between the two bills.

**Senate Bill 198** is identical to its 2021 predecessor.<sup>19</sup> It is limited to seagrass and requires that the mitigation bank meets the public interest criteria of Chapters 253 and 258, Florida Statutes. Chapter 253 requires that activities on sovereign submerged lands be “not contrary to the public interest,” while Chapter 258, Part II, which governs Aquatic Preserves, sets a higher bar, requiring that the same activities be in the “public interest.” Rules implementing Chapter 258 create a balancing test of “public interest assessment criteria.” There are no analogous rules

---

<sup>13</sup> Ch. 327.46(1). See also Rowe, Robert, Proposed Rule-Private Submerged Land Seagrass Protection Boating Restriction Area. June 19, 2018.

<sup>14</sup> Ankersen, Tom and Flagg, Byron and Poor, Kaci and Saviano, Jennifer, Boating, Waterways, and the Rights of Navigation in Florida (February 19, 2019). Boating, Waterways, and the Rights of Navigation in Florida, Fifth Edition (Spring, 2019), University of Florida Levin College of Law Research Paper No. 19-10, Available at SSRN: <https://ssrn.com/abstract=3338070>.

<sup>15</sup> Seagrass Mitigation Banks, HB 1335. (2021) <https://www.flsenate.gov/Session/Bill/2021/1335/BillText/Filed/PDF>.

<sup>16</sup> Seagrass Mitigation Banks, SB 198. (2021) <https://flsenate.gov/Session/Bill/2021/1668/BillText/c1/HTML>.

<sup>17</sup> Powers, Scott. (2021) Tyler Sirios’ seagrass bank bill survives rough waters. Florida Politics. <https://floridapolitics.com/archives/476839-tyler-sirois-seagrass-bank-bill-survives-rough-waters/>.

<sup>18</sup> Bill Analysis and Fiscal Impact Statement: Seagrass Mitigation Banks. (March 29, 2021) <https://www.flsenate.gov/Session/Bill/2021/1668/Analyses/2021s01668.en.PDF> (citing DEP, 2021 Legislative Session, Bill #: SB 1668, 1-2 (2021)(on file with the Florida Senate Environment and Natural Resources Committee).

<sup>19</sup> Seagrass Mitigation Banks, SB 198. (2021) <https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName= s0198 .DOCX&DocumentType= Bill&BillNumber=0198&Session=2022>.

associated with the Chapter 253 ‘public interest’ standard. Like its 2021 predecessor, SB 198 preserves other forms of duly authorized seagrass mitigation.

**House Bill 349** differs substantially.<sup>20</sup> This bill does not restrict marine mitigation banking to seagrass, instead allowing mitigation banks for ‘natural resources.’ This suggests that other marine or estuarine resources and habitats, such as oysters, sponges and corals, could be included.<sup>21</sup> The bill also specifically authorizes the use of easements to create a mitigation bank on sovereign submerged lands. The bill further requires that the Department of Environmental Regulation adopt rules to ensure financial assurances are “equivalent and sufficient to provide for the long-term management of mitigation permitted” under the general mitigation banking statute.

### **Key Issues in Marine Resource Mitigation Banking Proposals**

Mitigation banking on sovereign submerged lands raises several important scientific and policy questions that distinguish it from the more familiar and time-tested banking undertaken for freshwater wetlands and upland resources. Some of these are described below. As a general observation, we note that the current statutes, rules, and scientific methods governing mitigation banking are more oriented toward traditional wetlands than they are to submerged lands.

**Legal and regulatory authority.** Florida law appears to neither explicitly prohibit nor explicitly authorize mitigation banking on sovereign submerged lands. However, it does preclude the Department of Environmental Protection and Water Managements Districts from issuing final orders authorizing the use of SSL for mitigation banks. By statute, the custodian of SSL is the Governor and Cabinet, sitting in their capacity as trustees for the people of the state, officially referred to as the Board of Trustees of the Internal Improvement Trust Fund.<sup>22</sup> The Trustees have then, by rule, delegated certain authority to authorize the use of sovereign submerged lands to state agencies - the DEP, the Water Management Districts and the Department of Agriculture (for aquaculture).<sup>23</sup> Expressly excluded from this delegation is the authority to authorize mitigation banks.<sup>24</sup> Neither the statute nor the rule address whether the Trustees themselves can authorize mitigation banks on sovereign submerged lands. However, the Trustees do enjoy broad proprietary authority to allow public and private activities on SSL, provided those activities conform to the Trustees constitutional and common law public trust obligations.<sup>25</sup> Presumably, a mitigation bank authorized by the Trustees would still require a permit to be issued by the DEP or WMD.

**The perpetuity requirement and permanent preemption.** Florida’s general mitigation banking statute requires that an applicant “demonstrate sufficient legal or equitable interest in the

---

<sup>20</sup> [Seagrass Mitigation Banking, HB349. \(2022\)](https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=h0349.docx&DocumentType=Bill&BillNumber=0349&Session=2022)

[https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=h0349.docx&DocumentType=Bill&BillNumber=0349&Session=2022.](https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=h0349.docx&DocumentType=Bill&BillNumber=0349&Session=2022)

<sup>21</sup> *Id.*

<sup>22</sup> Ch. 253.03.

<sup>23</sup> Florida Admin Code 18-21.0051.

<sup>24</sup> *Id.* at 18-21.0051(2)(d).

<sup>25</sup> Art. 10; Section 11, Fla. Const.; Sidney F. Anshbacher & Joe Knetsch, 4 J. Land Use & Envtl. L. 337 (1989) *The Public Trust Doctrine and Sovereignty Lands in Florida: A Legal and Historical Analysis.*

property that serves as the bank to ensure perpetual protection and management of the land within the mitigation bank.”<sup>26</sup> However, in the case of sovereign submerged lands, the land is owned by the state, and held in trust for the people of Florida.<sup>27</sup> For the state to be able to transfer sovereign submerged lands it must surpass a very high burden demonstrating an appropriate reason to do so. However, as noted above, the State does authorize private and public activities on submerged lands, and it does so through a hierarchy of “use authorizations.”<sup>28</sup> Florida Administrative Code Rule 18-21.005 describes the activities associated with these forms of authorization. These use authorizations include: 1) Exceptions, 2) Consent by Rule, 3) Letters of Consent, 4) Leases and 5) Easements. While Senate Bill 198 does not prescribe a particular use authorization, HB 349 specifically calls for easements. Listed among the activities suitable for easements are “[m]anagement activities, which include permanent preemption by structures or exclusion of the general public, associated with...habitat restoration or enhancement areas.”<sup>29</sup> Thus, permanent preemption suggests that some forms of potentially permanent public exclusion could result from an SSL mitigation bank created by such an easement. One other form of use authorization also addresses restoration and enhancement. However, the “letter of consent” use authorization specifically precludes permanent preemption, and notably, also precludes mitigation banks.<sup>30</sup>

**Boating Restricted Areas.** Prop scar damage is among the most significant causes of seagrass degradation in Florida. Areas in the process of restoration are especially vulnerable. Thus, restricting boat traffic is one way to restore and enhance damaged areas, and to protect areas in restoration. The Florida Fish and Wildlife Commission regulates boating on Florida waters under its authorizing statute, Chapter 327. Chapter 327 authorizes FWCC and local governments (upon approval by FWC) to establish boating restricted areas, but only for purpose of “protecting the safety of the public.”<sup>31</sup> With the exception of Manatee protection, FWC does not have the authority to create, or to authorize boating restricted areas for environmental protection purposes.<sup>32</sup> However, as the owner and trustee of sovereign submerged lands and overlying waters, it is likely that the Trustees have concurrent authority to restrict boating to protect resources. Regulatory ‘No Internal Combustion Motor Zones’ (NIMZ) have been created to protect seagrass in Florida through conservation easements, SSL leases, and SSL letters of consent, including some for compensatory mitigation.

**Service Area.** Florida’s general mitigation statute and implementation rule establishes service areas for mitigation banks and requires that activities seeking offsets lie within a bank’s service area. For freshwater wetland systems the service area is based on watersheds and established by

---

<sup>26</sup> Ch. 373.4136(1)(h); Florida Admin. Code 62-342.350.

<sup>27</sup> Article X, Section 11, Fla. Const.

<sup>28</sup> Florida Administrative Code Rule 18-21.003(23)(“Easement” means a non-possessory interest in sovereignty lands created by a grant or agreement which confers upon the applicant the limited right, liberty, and privilege to use said lands for a specific purpose and for a specific time).

<sup>29</sup> Florida Administrative Code Rule 18-21.005(1)(e)11.

<sup>30</sup> Florida Administrative Code Rule 18-21.005(1)(c)16.

<sup>31</sup> FLA. STAT. § 327.46(1) (2018); FLA. STAT. § 327.46(1)(a)-(b) (2018).

<sup>32</sup> Ankersen, Tom and Flagg, Byron and Poor, Kaci and Saviano, Jennifer, Boating, Waterways, and the Rights of Navigation in Florida (February 19, 2019). Boating, Waterways, and the Rights of Navigation in Florida, Fifth Edition (Spring, 2019), University of Florida Levin College of Law Research Paper No. 19-10, Available at SSRN: <https://ssrn.com/abstract=3338070>.

the regulatory agency.<sup>33</sup> However, if the watershed is especially large, including many smaller nested watersheds, the offset remains ecologically imperfect.<sup>34</sup> Further research is necessary to determine a proper and systematic approach to establishing marine resource service areas.

**Environmental Stochasticity and Force Majeure.** While also true of freshwater wetlands and terrestrial ecosystems, the interconnectedness of the marine environment represents a particular challenge to restoration and enhancement of marine resources. It is difficult, if not impossible, to “fence off” marine mitigation sites from offsite threats, both anthropogenic and natural. A single harmful algae bloom event could eliminate all the effort invested into a successful mitigation bank and, if credits have been released, result in a net loss of marine resources. For example, between 1987 and 1991 researchers documented a causally complex mass mortality event involving 4000 hectares of seagrass in Florida Bay.<sup>35</sup> A 2010-2011 harmful algae “superbloom” resulted in a loss of almost 100% of seagrass in the northern Indian River Lagoon.<sup>36</sup> Most mitigation bank agreements contain a “force majeure” clause, some of which appear to release the banker from continuing responsibility.<sup>37</sup>

**Restoration success.** Marine resources present special restoration challenges that has led to concerns about rates of success.<sup>38</sup> A 2019 study of 33 Florida-specific seagrass restoration sites ranging in age from 3 to 33 years concluded that 88% of these sites continued to support seagrass but that overall there was 37% less seagrass coverage than on reference sites. However, the study distinguished between prop scar restoration and sediment modification and transplantation restoration, with prop scar restoration demonstrating a higher degree of success. These authors and others suggest that scale is important to success.<sup>39</sup> Mitigation banks are likely to encompass broader restoration areas than site-specific mitigation for individual projects. To compensate for the uncertainty of success regulators typically require mitigation at greater ratios than the damages being mitigated.

**Applicability of Uniform Mitigation and Assessment Methodology.** Florida regulators determine the quantity and value of mitigation credits through a rule-based method known as the

---

<sup>33</sup> Uniform Mitigation and Assessment Methodology, Florida Administrative Code Rule 62-345 (2017).

<sup>34</sup> Levrel, Harold & Scemama, Pierre & Vaissière, Anne-Charlotte, 2017. "Should We Be Wary of Mitigation Banking? Evidence Regarding the Risks Associated with this Wetland Offset Arrangement in Florida," *Ecological Economics*, Elsevier, vol. 135(C), pages 136-149.

<sup>35</sup> Robblee, M. B., et al. “Mass Mortality of the Tropical Seagrass *Thalassia Testudinum* in Florida Bay (USA).” *Marine Ecology Progress Series*, vol. 71, no. 3, Inter-Research Science Center, 1991, pp. 297–99, <http://www.jstor.org/stable/24817304>.

<sup>36</sup> Virnstein, R. “Can we plant seagrass as part of restoration? A proposal, using small plots, volunteers and feedback loops. *Florida Scientist* 84 (2–3) 2021.

<sup>37</sup> Sandhill Lakes Mitigation Bank, Northwest Florida Water Management District (2017), <https://www.nfwwater.com/Water-Resources/Regional-Wetland-Mitigation-Program/Regional-Mitigation-Plan/NFWMD-Mitigation-Sites/Choctawhatchee-Watershed-Mitigation-Sites/Sand-Hill-Lakes-Mitigation-Bank> (The requirements of this permit shall not be enforceable against the Bank Sponsor or the letter of credit if the Bank Sponsor has been precluded from performing the conditions of the permit due to acts of God, rebellion, strikes, or natural disaster, including but not limited to hurricane, flood, or fire.).

<sup>38</sup> Fonseca, Mark S., “Addy Revisited: What Has Changed with Seagrass Restoration in 64 Years?” *Ecological Restoration* 29 (2011): 73 - 81.

<sup>39</sup> Van Katwijk, Marieke M., et al. "Global analysis of seagrass restoration: the importance of large-scale planting." *Journal of Applied Ecology* 53.2 (2016): 567-578.

Uniform Mitigation and Assessment Methodology (UMAM). The UMAM was initially developed largely with wetland resources in mind, something that has been noted from time to time.<sup>40</sup> In 2013, FDEP initiated rulemaking to revise the UMAM to specifically consider submerged aquatic resources.<sup>41</sup> However, the rule change never came to fruition.<sup>42</sup> Nonetheless, UMAM in its current form continues to be used for compensatory seagrass mitigation.

**Mitigation Credit Valuation.** There seems to be considerable uncertainty about the monetary value that should be associated with credits awarded for seagrass mitigation. In an instance involving a federal “in lieu fee” program for sea grass mitigation the Florida Keys National Marine Sanctuary, a proposal was submitted to, and granted by, the Army Corps of Engineers to raise the cost of sea grass restoration credit from \$25 per square foot of restoration to \$50. Under this program, this would increase the cost of an individual credit from \$435,600.00 to \$1,089,000.00<sup>43</sup>

## Conclusion

Mitigation banking for marine aquatic resources on sovereign submerged lands would represent a significant development in Florida environmental policy, and a significant departure from current banking practice. Examples do exist on privately owned or non-state submerged lands. Florida’s mitigation banking statute, to which the proposed bills defer, does not appear to have been written with SSL mitigation banking in mind. Sovereign submerged lands enjoy special constitutional protections and impose special obligations on the State that constrain the privatization of public resources and protect the interests of sometimes competing public trust-protected activities. These competing interests may be at odds with the mitigation banking statute’s requirement of “sufficient legal or equitable interest... to ensure perpetual protection,” and the SSL easement use authorization that includes “permanent preemption” and “exclusion of the general public.” However, marine biodiversity offset mechanisms, including marine resource mitigation banking, do provide opportunities to conduct restoration at scale, something, as noted above, that researchers believe greatly enhance the potential for restoration success, especially for seagrass. As a possible alternative, Florida’s general mitigation banking statute also authorizes “Regional Offsite Mitigation Areas (ROMA), an “in lieu fee” arrangement where those seeking to offset impacts can pay into a larger-scale regional offsite mitigation area that run under a memorandum of agreement between governmental entities.<sup>44</sup>

---

<sup>40</sup> Althea S. Hotaling, R. Benjamin Lingle & Thomas T. Ankersen, *Comprehensive Seagrass Restoration Planning in Southwest Florida: Science, Law and Management*, 4 Sea Grant L. & Pol’y J. 61 (2011), available at <http://scholarship.law.ufl.edu/facultypub/690>.

<sup>41</sup> <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/uniform-mitigation-assessment-1>.

<sup>42</sup> Uniform Mitigation and Assessment Methodology, Florida Administrative Code Rule 62-345 (2017).

<sup>43</sup> Bryan M. Dewsbury et al, A review of seagrass economic valuations: Gaps and progress in valuation approaches, *Ecosystem Services* 18 (2016) 68-77.

<sup>44</sup> Memo to President of Coastal Resources Group, Inc., Army Corps of Engineers, (2015), <http://floridakeysrestoration.com/wp-content/uploads/2020/03/KRF-ILF.pdf>

<sup>45</sup> Fla Stat 373.4135(6). <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/regional-offsite-mitigation-areas>. See also Kihlsinger, R., Libre, C., Ma, K.R., Okuno, E., & Gardner, R.C. (2019). In-Lieu Fee Mitigation: Review of Program Instruments and Implementation Across the Country. Environmental Law Institute, Washington, DC.