WATER LOG

A Legal Reporter of the Mississippi-Alabama Sea Grant Consortium

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Land Conservation

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• UPCOMING EVENTS •

National Watershed and Stormwater Conference 2021

April 13-16, 2021
Virtual Event

https://www.cwp.org/2021-national-conference

Gulf of Mexico Alliance Conference 2021

April 14, 2021
Virtual Event

http://bit.ly/gomcon2021

Earth Day Coastal Cleanup in Mississippi

April 24, 2021
Pascagoula, MS

http://bit.ly/earthdayms

Dollars for Donations: Conservation Easements

Kristina Alexander

Sometimes doing the right thing pays off financially. Take, for example, conservation easements. A conservation easement is a way for a land owner to preserve property by donating the right to develop to a conservation group. The conservation group will have an easement over the property to keep nature intact. The landowner still owns the land, but the land will remain unchanged due to the restrictions imposed by the easement, even if the landowner sells it. Under U.S. law, the landowner can claim a tax deduction for the value of the lost development rights. In some cases, this can mean millions.

Sometimes, however, people donating a conservation easement claim too large of a tax deduction or misrepresent that the property will be conserved when it will actually be developed. The Internal Revenue Service (IRS) pursues those taxpayers.

The article discusses three recent cases where the IRS denied conservation easement deductions. The easements involve giant tracts of land in scenic areas – think the rolling hills of Alabama or the mountains in Tennessee – on which housing lots are plotted but with the majority of the land donated as a conservation easement. The homeowners have a preserved scenic place to live, and they benefit from tax deductions equal to what their property would be worth if they could develop to the extent permitted by law. Their profit is both intangible – increased enjoyment of their home due to the surroundings – and tangible – the value of the tax deduction as well as the increased value of their home due to its preserved surroundings.

Introduction to Conservation Easements

To claim a tax deduction for a conservation easement, a taxpayer must follow the law found in 26 U.S.C. § 170, which describes all deductible charitable contributions. The law is administered by the IRS. The specific rules pertaining to a conservation easement are found at 26 U.S.C. § 170(h). According to that provision, a qualified conservation contribution must be:

- A qualified real property interest
- To a qualified organization
- Exclusively for conservation purposes.

Each of these terms is defined in the statute.

Some baseline information first. "Real property," in law, means something other than "personal property." Real property is frequently described as a bundle of rights as it includes many things: the land, the buildings and structures on that land, and the things growing on the land (while they are growing); and also certain rights, such as the right to develop minerals or the right to occupy the property. Things that are movable, like cars or boats, are personal property. The distinction is found not in the value of the item but in its relation to land. In the case of an easement, some of the real property rights are given by the property owner to the easement holder. An easement is permanently tied to the property, meaning it "runs with the land."

A conservation easement is formed when the real property rights to develop and occupy land are separated from the title of the land. Once burdened by a conservation easement, the land's use is limited to conserving the natural resources of the property, diminishing the land's value. When a conservation easement is donated to a qualified nonprofit, the donation may be claimed as a charitable contribution equal to the value the landowner has lost by donating the right to develop the property to its highest and best use.

To qualify for a tax deduction, a conservation easement must convey a qualified real property interest that meets these three criteria:

- The entire interest of the donor,
- A remainder interest,[1] and
- A restriction granted in perpetuity on the use of the property.[2]

Under the law, a nonprofit organization known as a 501(c)(3) (so named for the part of the Internal Revenue Code which defines it), may hold the conservation easement.

The easement is for "perpetuity" and so the charitable organization must be able to administer and monitor the easement forever and not merely for a period of years.

This type of easement is distinguished from other easements, such as for power lines or access, because its purpose is to conserve the land. Section 170(h)(4) offers four ways to demonstrate a "conservation purpose":

- Preserve land for public outdoor recreation or education,
- Protect the relatively natural habitat of fish, wildlife, or plants,
- Preserve open space including farmland and forestland for the scenic enjoyment of the general public, or pursuant to a government policy that will yield a significant public benefit, or
- Preserve an historically important land area or a certified historic structure.

Thus, a conservation easement does not require setting aside pristine wilderness to satisfy the law. While the donated property may create a public recreation area, it may also confer a benefit for the public to enjoy from afar – by preserving open vistas or farmland.

Tax Benefits for Donating a Conservation Easement

The law allows a percentage of the donation to be deducted from the taxpayer-donor's income. In 2015 the law was amended to allow 50 percent of income to be deducted for making a conservation easement, an increase from 30 percent.[3] If the value of the donation is greater than 50 percent of that taxpayer's income for the year, the deduction may be carried forward for 15 years.

Additionally, in Mississippi, an eligible taxpayer may claim a state tax credit up to $10,000 for the costs incurred in making the transaction, such as surveys, appraisals, legal fees, and title insurance.[4]

Tax Fraud and Conservation Easements

Nationwide, conservation easements protect property equal to the size of Minnesota. Approximately 56 million acres were under a conservation easement in 2015, compared to 47 million acres in 2010, and 500,000 acres in 1990.[5] Consequently, the number of deductions for conservation easements have increased significantly. According to *Forbes*, the IRS estimates that syndicated conservation easement transactions led to nearly $27 billion in charitable deductions.[6] In 2017, the IRS declared that the deduction was one of the most abused tax deductions.[7] As of January 2020, the IRS had 80 cases pending in tax court against groups that organized investors for the purpose of buying property to claim more in deductions than the cost of the property.[8]

When taxpayers challenge an IRS ruling, the dispute is brought before the Tax Court, which is a federal trial court not associated with the IRS. Appeals from the Tax Court regarding conservation easement deductions may be brought in a federal court of appeals.

In Perpetuity

The law requires that to qualify for the deduction, a conservation easement must be donated in perpetuity. Courts have considered whether tax benefits can be voided when the language in the agreement between the donating party and the nonprofit does not establish that the donation is permanent.

In October 2020, the Eleventh Circuit Court of Appeals decided whether three conservation easements in Alabama were consistent with the law based on whether the easements were granted in perpetuity and preserved in perpetuity.[9] In that case, 1,282 of 6,224 acres near Birmingham owned by Pine Mountain Preserve LLLP were protected under three conservation easements donated in 2005, 2006, and 2007. Each of the three easements reserved the right to build on the conserved property. The first (559 acres) allowed 10 single family residences, barns, roads and driveways on 1-acre lots, 5 ponds, 2 scenic overlooks with structures, and an unspecified number of hunting blinds. The second (499 acres) allowed six residences; the third (224 acres) allowed construction of a water tower. The land was purchased for $37 million or $5,945 per acre. The taxpayer valued the easement at $26,443 per acre on average, making tax deductions of $16.5 million, $12.7 million, and $4.1 million for each donation, respectively. The IRS did not allow the deductions, and the matter was brought before the Tax Court.

The Tax Court agreed with the IRS that the first two easements were not made in perpetuity, in part because of the reserved rights to build, and also because a provision in the donation allowed the covenants to be amended. The 11th Circuit disagreed with that holding, in part. The 11th Circuit held that the easements were granted in perpetuity, determining that the rights to build at

unspecified locations within protected areas of the property did not thwart the fact that the easement was granted forever. However, the court found that the Tax Court had not considered whether the easements ensured the property was *conserved* in perpetuity and sent the case back for the Tax Court to consider that issue.

Extinguishing an Easement

In a different case, in May 2020, the Tax Court wrestled with a provision in the terms of an easement known as an extinguishment clause. A donated easement typically will include language for what happens when the easement is "extinguished." Of course, easements are intended to be tied to the land forever, but an outside force could nullify the intent. For example, the property could be seized by eminent domain for some use that eliminates the conservation value.

In law, extinguishment means an easement is formally cancelled. In practical terms, it means that the nonprofit holding the easement would be paid for its property right. In the May 2020 case, the IRS objected to a $9.545 million deduction for a 106-acre conservation easement near Chattanooga, TN. The 143-acre property had been purchased for $1.7 million. The Tax Court found that the terms of the extinguishment provision meant the easement was not granted in perpetuity.[10]

The concern of the Tax Court in that case was that the extinguishment provision allowed the nonprofit holding the easement to recover only the fair market value (FMV) of the property at the time the easement was donated, and not any increased FMV due to improvements made to the property at the time the easement was extinguished. Any increased value of the property would benefit only the donor. Both parties thought that was fair because the nonprofit would not have paid for the improvements. However, according to federal regulations pertaining to conservation easements, a nonprofit "must be entitled to a portion of the proceeds at least equal to that proportionate value."[11] The court was concerned that the donating party could get a windfall if the easement were extinguished. If that happened, the donor would have claimed the tax deduction, yet get back the right to develop and receive the value of any improvements to the property. That decision is being appealed to the 6th Circuit Court of Appeals.

The extinguishment clause was also at issue before the Tax Court in a case involving a 135-acre conservation easement near Savannah, Georgia.[12] The taxpayer claimed a $4.582 million deduction for the donation. The Tax Court found no deduction was allowed because the extinguishment clause meant the easement was not protected in perpetuity. The Tax Court focused on how the proceeds would be distributed if the easement were dissolved. The court faulted the easement language that would reduce the nonprofit's proceeds at the time of extinguishment by the amount of all improvements to the property.

Value of the Tax Deduction

According to the IRS regulations, a conservation easement's value is the fair market value, meaning "the price at which the property would change hands between a willing buyer and a willing seller."[13] That price can be assessed based on comparable sales in the area. Where there are no comparable sales, a common situation for conservation easements, the value of the easement is the difference between the value of the property before the easement and the value of the property after the easement. According to the IRS, it "has seen abuses of this tax provision [where] taxpayers, often encouraged by promoters and armed with questionable appraisals, take inappropriately large deductions for easements."[14] One Alabama appraiser reportedly surrendered his appraiser's license after offering artificially high appraisals for conservation easements.[15]

The value of an easement is frequently at issue before the Tax Court, and it is there that expert appraisals are weighed: the IRS's expert vs. the taxpayer's expert. Based on recent cases, that amount can be wildly different. For example, when it came to valuing the easement in the Pine Mountain Preserve case, the IRS argued that the easements were worth about one-tenth of the deduction, and nowhere near what Pine Mountain Preserve's assessor claimed at trial. The IRS value for all three easements was $2.576 million; the taxpayer's assessor's value was $97.41 million.

The Tax Court, which had rejected two of the three easements before considering their value, valued the third at $4,779,500, which is the amount the IRS said it was worth ($449,000) plus the amount claimed by the assessor ($9.11 million), divided by two. The 11th Circuit did not care for the guesswork, and told the Tax Court to establish the value of the easements, this time using a "discernible methodology that is appropriately tied [to the regulations]."

Conclusion

By allowing a tax deduction for conserving property, tax law has led to the protection of millions of acres in the United States. However, according to the IRS, that deduction has led to significant fraud. As valuation is in the eye of the beholder – and the beholder's appraiser – the Tax Court is sorting through dozens of cases to identify where property is being conserved or where cheating is occurring.

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Endnotes

1. A remainder interest would occur if someone was entitled to the property upon the current owner's death. This may be established in a will that gives property to someone until they die, and then the property is given to another named party.
2. 26 U.S.C. § 170(h)(2). Mineral rights do not have to be donated to qualify.
3. Qualified farmers and ranchers are allowed to deduct up to 100% of income. 26 U.S.C. § 2032A(e)(5).
4. Miss. Code Ann. § 27-7-22.21. No similar provision was found in Alabama.
5. *See* Land Trust Alliance, *2015 National Land Trust Census Report*; Logan Yonavjak and Todd Gartner, *Gaining Ground: Increasing Conservation Easements in the U.S. South*, World Resources Institute (Sept. 2011). Minnesota is 55,640,877 acres. *See* Beef 2 Live, *Ranking of States by Total Acres* (Jan. 12, 2021).
6. Jason B. Freeman, *Charitable Conservation Easements Remain Under Attack – The Latest IRS Data*, Forbes (Sept. 28, 2020). A syndication is a group of investors.
7. IRS Notice 2017-10, *Recognized Abusive and Listed Transactions* (2017-4 IRB 544) (last updated Jan. 31, 2020).
8. Peter Elkind, *The IRS Tried to Crack Down on Rich People Using an "Abusive" Tax Deductions: It Hasn't Gone So Well*, ProPublica (Jan. 3, 2020).
9. Pine Mountain Preserve LLLP v. Commissioner of Internal Revenue, 978 F.3d 1200 (11th Cir. 2020).
10. Oakbrook Land Holdings, LLC v. Commissioner of Internal Revenue Service, 119 TCM (CCH) 1352 (TC Memo 2020-054) (May 12, 2020).
11. 26 C.F.R. § 1.170A-14(g)(6)(ii).
12. Cottonwood Place, LLC v. Comm'r of Internal Revenue, 120 TCM (CCH) 91 (TC Memo 2020-115) (Aug. 4 2020).
13. 26 C.F.R. § 1.170A-1(c)(2).
14. IRS, *Background - Abusive Transactions Involving Charitable Contributions of Easements*.
15. Peter Elkind, *The IRS Tried to Crack Down on Rich People Using an "Abusive" Tax Deductions: It Hasn't Gone so Well*, ProPublica (Jan. 3, 2020).

In Sum.

A Summation of the Facts and Figures of Interest in this Edition

★ *Size of Alabama beach mouse's historic habitat in acres:*	8,000 to 9,000
★ *Remaining Alabama beach mouse habitat in acres:*	2,300 to 2,400
★ *Size of Flower Gardens National Marine Sanctuary in 2020 in square miles:*	56
★ *Size after the expansion is final, in square miles:*	160
★ *Size of Minnesota in acres:*	56,000,000
★ *Size of land preserved by U.S. conservation easements in acres (as of 2015):*	56,000,000

Protecting Fish Habitat in the Gulf of Mexico

Jacob D. Hamm

Introduction

Oil spills, antiquated fishing methods, and unregulated anchorage of large ships have damaged the Gulf of Mexico's aquatic ecosystem. The United States, through the National Oceanic and Atmospheric Administration (NOAA), has implemented various methods of protecting and preserving the Gulf's marine life. Two of these methods came to the public spotlight in 2020: Habitat Areas of Particular Concern (HAPCs) and Flower Garden Banks National Marine Sanctuary. Both are managed and regulated by NOAA, and both serve similar conservation purposes. However, they are designated under different legislation. HAPCs are created under the authority vested in NOAA by the Magnuson-Stevens Fishery Conservation Act (Magnuson-Stevens Act), whereas Flower Garden Banks was created under the National Marine Sanctuaries Act.

Habitat Areas of Particular Concern

The Magnuson-Stevens Act established eight regional fishery management councils tasked with creating a fishery management plan (FMP) for each fishery within their region. Part of an FMP must consider essential fish habitats, defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."[1] Further, councils must identify areas of essential fish habitats, called HAPCs, they found provided an important ecological function, were sensitive to human-induced environmental degradation, were at risk due to development activities, or were a rare habitat type. HAPCs have their own set of protective rules consisting of fishing equipment restrictions, time/area closures (closing an area to all fishing or specific types of fishing either permanently or for a set period), and harvest (catch) limits.[2]

On November 16, 2020, the Gulf of Mexico Fishery Management Council (the Council) amended its Coral and Coral Reefs of the Gulf of Mexico FMP to include 13 new HAPCs.[3] In the amendment, the Council listed several restrictions applicable to all HAPCs in the fishery. Deployment of bottom longlines, bottom trawls, buoy gear, dredge, pot, or traps within the HAPCs was prohibited. Anchoring of fishing vessels within the HAPCs was also prohibited. These year-round restrictions were implemented to protect the corals within the HAPCs from pollution and damage.

Credit: Brandi Noble, NOAA/NMFS/SEFSC

The new fishing regulations for the proposed HAPCs include exceptions to mitigate their economic impact. The amendment allowed for vessels with Gulf Royal Red Shrimp endorsements to continue fishing operations within an HAPC off the southernmost tip of Louisiana. Royal red shrimp fishermen have historically used a method of dragging large nets through the water as they travel, while keeping the nets off the bottom, in order to harvest shrimp. Recognizing that this method of harvesting shrimp is impossible if shrimpers were required to keep the nets out of the water, the Council made an exception for this fishing practice in order to preserve the shrimp industry.[4] This is significant because the revenue produced in the Gulf by royal red shrimp sales was $348 million in 2015 alone.[5]

The fishing regulations also included an exception that allowed for bottom longline fishing in a HAPC off the western coast of central Florida. This is due to the fact that,

according to NOAA, this type of fishing has been used for over a decade in the area without causing any significant harm to the now protected environment. Notably, fishing restrictions were lifted from eight HAPCs by the new rule. The restrictions were deemed unnecessary in those areas due to a lack of known fishing activity there, as well as the fact that the areas are located in exceptionally deep water (greater than 984 feet in depth).[6]

Opposition to HAPCs

Despite the important role HAPCs play in protecting marine ecosystems, NOAA has faced significant resistance in implementing them. During the public comment phase of the Gulf of Mexico Fishery Management Council's amendment to the Coral and Coral Reefs of the Gulf of Mexico FMP, commenters expressed concern regarding the ecological and economic impact the new HAPCs would have on the now protected areas. One concerned commenter wrote that restrictions on bottom longline gear would, "cause great economic harm to small family grouper fishing businesses, local fish house producers, and the local fishing communities."[7] Two other commenters expressed concern about the impact restrictions would have on fishing for species such as tilefish and deep-water grouper, which occurs over sand and mud bottoms. However, of the 12,055 comments submitted regarding the amendment, 12,035 supported it without recommendations. Only five comments opposed the amendment. Eight comments were in support of the amendment but stated that it did not do enough to protect deep-sea coral.

Opposition and concerns regarding HAPCs do not always stop at the conclusion of the public comment phase, however. NOAA and regional councils have faced legal challenges in other regions regarding the designation of HAPCs. In the 2003 case *Hadaja, Inc. v. Evans*, a fisher brought suit alleging that newly enacted regulations under the Tilefish Fishery Management Plan violated the Magnuson-Stevens Act.[8] The plan, drafted by the Mid-Atlantic Fishery Management Council, sought to protect the local Tilefish HAPC by establishing a permit-based limited access scheme to the area and prohibiting trawling within the HAPC. The fisher claimed that the permitting rule violated the Magnuson-Stevens Act requirement that optimum yield be met and that the best scientific information be used.

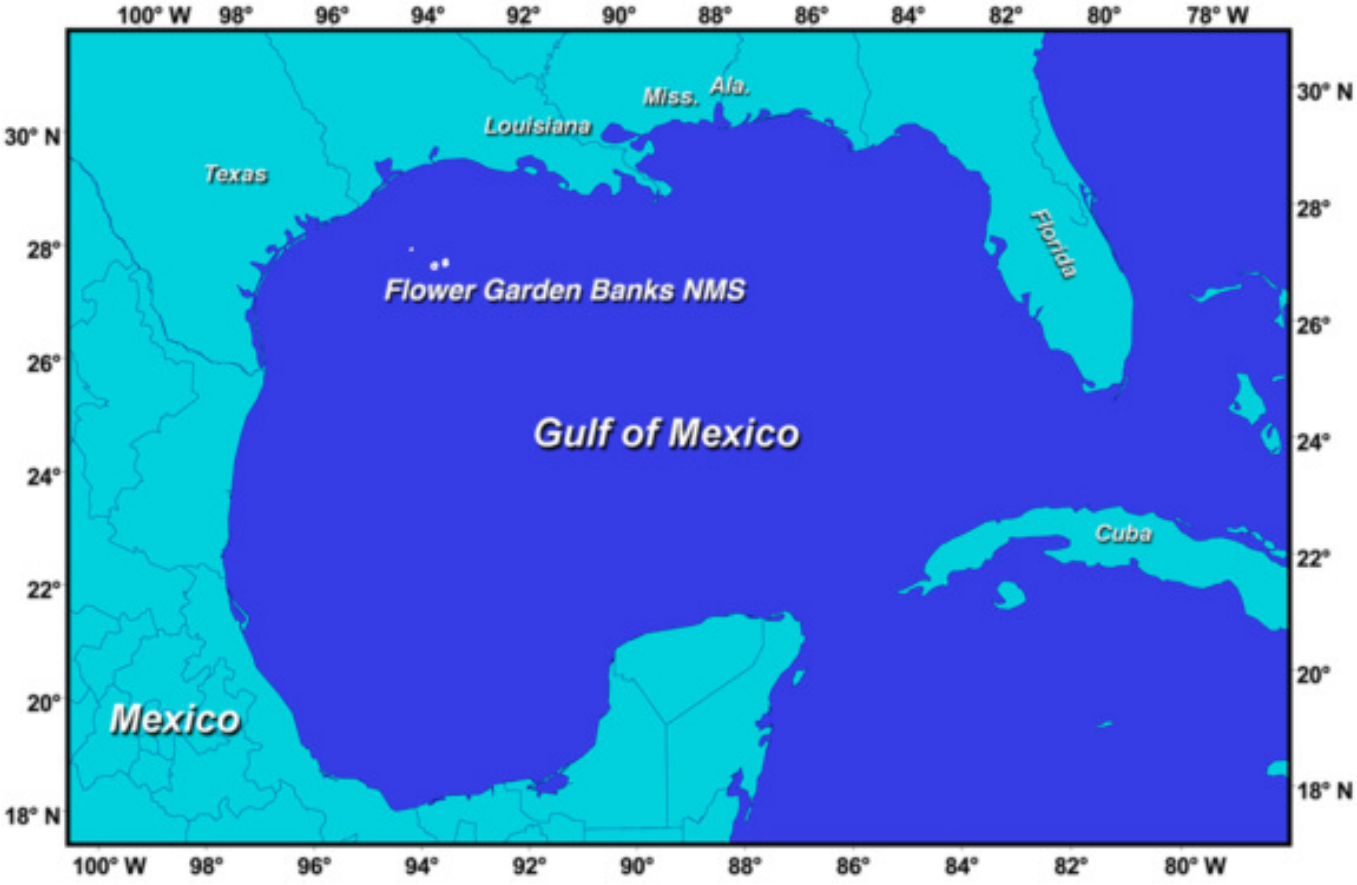
The court considered whether the plan prevented overfishing while achieving a sustainable population of fish and found that it did. The court next considered whether the best scientific information available was used in designating the HAPC and held that it did not. The court ruled in favor of the fisher's complaint regarding the trawling restrictions and set aside the permitting rule.

In a different district court that same year a coalition of nonprofit environmental organizations asserted that restrictions imposed on the local tilefish HAPC were inadequate. They argued that the use of bottom-tending mobile gear (trawl fishing) should be limited in the HAPC.[9] NOAA defended its lack of trawling restrictions based on an expert witness's testimony that "trawling does not impact the local environment or food chain to the detriment of the Tilefish lifecycle." The coalition conceded that "there is no information, besides inferences, based on the kind of evidence that the Council considered and that is in the record." The court found that it was reasonable for NOAA to decline to impose further trawling restrictions given the lack of evidence that the gear had an identifiable adverse effect on the HAPC's tilefish population.

As evidenced in those cases, NOAA's creation of HAPCs and imposition of restrictions are met with opposition for a variety of reasons. Some argue that the rules limit their ability to earn a living from fishing in the area, while others claim that the rules will permit too much harm to the environment. Faced with a variety of conflicting opinions, NOAA has the dual task of establishing HAPCs while also persuading the public that the new regulations are necessary and not harmful to the economy. This balance of conservation, public opinion, and economic stability make HAPCs a point of contention for coastal communities.

Flower Garden Banks

Flower Garden Banks is a National Marine Sanctuary located 70 to 115 nautical miles off the coasts of Texas and Louisiana, containing approximately 56 square miles of protected areas. The final rule creating Flower Garden Banks was published by NOAA on December 5, 1991.[11] The sanctuary was established to protect a series of underwater salt embankments that provide habitat for a variety of distinct biological communities, including the northernmost coral reefs in the continental United States.



Flower Gardens National Marine Sanctuary

The salt embankments were formed primarily as the result of underwater currents moving and shifting salt deposits (which are also known as salt diapirs or salt domes) along the ocean floor. The banks are home to a variety of marine habitats, including coral reefs, coralline algal reefs, algal nodule beds, mesophotic and deep-water reefs, and soft bottom communities. The sanctuary also includes many distinct geological features, such as brine seeps, exposed basalt, methane seeps, and even mud volcanoes. The most popular features of the sanctuary, according to NOAA, are the coral reefs found on East and West Flower Garden Banks, which are considered the healthiest in the Western Atlantic, and the deep-water coral reefs found at McGrail Bank.

The National Marine Sanctuaries Act (NMSA) authorizes the U.S. Secretary of Commerce to designate marine areas in need of protection as national marine sanctuaries (NMS); the Secretary delegated the authority to the Administrator of NOAA. Since then, NOAA has overseen the management, protection, upkeep, and research pertaining to America's National Marine Sanctuary System. The goal of NMSA was to establish a National Marine Sanctuary System that protected areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or esthetic qualities.[12]

Before designating an area as a NMS, NOAA has to consider the area's natural resources, ecological qualities, and historical significance. NOAA also has to consider the area's present and potential uses, the activities presently being performed in the area, current federal regulation in the area, the area's manageability, and if the public would benefit from the sanctuary designation. NOAA is required to provide the appropriate regional fishery management councils with the opportunity to determine whether fishing regulations are necessary in the new sanctuary and, if so, what the scope and extent of the regulations should be.

Expansion of Flower Garden Banks

On January 19, 2021, NOAA issued a final rule expanding the boundaries of Flower Garden Banks from 56 sq. miles to 160 sq. miles. The newly expanded sanctuary consists of

19 distinct polygons, each with its own set of restrictions and guidelines, and will become final after Congress is in session for 45 days.

NOAA initially introduced the idea of expanding Flower Garden Banks on February 3, 2015. NOAA received roughly 200 public comments on the proposed rule.[13] Most were in support of the expansion, while some raised concern regarding the impact of the expansion on Gulf industries such as fishing and offshore oil/gas. Others suggested that the expanded sanctuary was not large enough, and they recommended that NOAA increase the scale of the expansion.

Another hurdle to overcome for the expansion of Flower Garden Banks was President Trump's Executive Order 13,795 entitled "Implementing an America-First Offshore Energy Strategy."[14] This order required the Secretary of Commerce to refrain from designating or expanding any NMS unless the proposal included a full accounting from the Department of the Interior (DOI) for all energy or mineral resource potential within the proposed area. The report also had to assess the impact the expansion of the sanctuary would have on the area's energy or mineral potential. The DOI Bureau of Ocean Energy Management (BOEM) provided NOAA with a review of the expanded areas' offshore energy and mineral resource potential, finding that the expansion would restrict oil and gas development in the area by affecting an additional 65 outer continental shelf lease blocks.[15]

Much of the newly expanded Flower Garden Banks is designated as a "no-activity zone" for oil and gas activities.[16] The restrictions on oil and gas activity are not applicable to these areas: Stetson Bank and East and West Flower Garden Banks.

In general, NOAA applied its existing sanctuary regulations and regulatory prohibitions to all 19 polygons.[17] It did this in order to provide a more comprehensive and uniform management plan for the expanded sanctuary. Thus, anchoring/mooring is banned within the sanctuary, as well as discharging or depositing materials from outside of the sanctuary into sanctuary waters. Removal, attempted removal, and destruction of any resource within the sanctuary is prohibited. The possession of air guns and explosives is prohibited within the sanctuary. The deployment or possession of any fishing gear/apparatus within the sanctuary is also prohibited.

Conclusion

The United States government, through NOAA, uses HAPCs and national marine sanctuaries to protect the nation's marine ecosystems. Recent successful expansion of Flower Garden Banks, coupled with the designation of 13 new HAPCs in the Gulf of Mexico, will help protect marine life and underwater geological formations that are threatened by industrial activity in the Gulf. The protective measures have been objects of concern for some who feared that restrictions would stymie economic success in coastal communities, as well as those who felt that the measures being taken were not expansive enough to adequately fill conservation needs. Following its statutory directive, NOAA balanced these issues to protect areas, noting in the Flower Gardens final rule that protecting habitat could improve commercial fishing in the Gulf.

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Endnotes

1. 50 C.F.R. § 600.10. *See also* 16 U.S.C. § 1855(b).
2. 50 C.F.R. § 600.815(a)(8).
3. 85 Fed. Reg. 65740 (Oct. 16, 2020).
4. 85 Fed. Reg. 65740 (Oct. 16, 2020).
5. Ed Lallo, *NOAA Releases Fisheries Economics Report; 253,000 Jobs Good For Gulf*, Gulf Seafood News (2020).
6. 50 C.F.R. § 622.74.
7. 85 Fed. Reg. 65740 (Oct. 16, 2020).
8. Hadaja, Inc. v. Evans, 263 F. Supp. 2d 346, 349-51 (D.R.I. 2003).
9. Natural Resources Defense Council v. Evans, 254 F. Supp. 2d 434 (S.D.N.Y. 2003).
10. 56 Fed. Reg. 63634 (Dec. 5, 1991).
11. 16 U.S.C. § 1433. S*ee gen.* 39 Fed. Reg. 10255 (Mar. 19, 1974).
12. 16 U.S.C. § 1431.
13. Comments, Docket (NOAA-NOS-2014-0154).
14. Exec. Order No. 13795 (Apr. 28, 2017).
15. BOEM, *BOEM Review of Offshore Energy and Mineral Resources: Potential Expansion of Flower Gardens National Marine Sanctuary* (Feb. 21, 2019).
16. 86 Fed. Reg. 4937, 4948-49 (Jan. 19, 2021).
17. *Id.* at 4940.

Habitat Conservation Planning Helps Conserve the Alabama Beach Mouse and its Habitats

William Lynn

Guest Expert

The Alabama beach mouse is a nocturnal small mammal that might be extinct by now except for conservation of its habitat under Habitat Conservation Plans (HCPs). The Alabama beach mouse lives in the sand dunes of Alabama's coast where it builds complex burrows. It is a monogamous small mammal, a rare trait found in only three percent of all mammals. Dunes are a dry arid environment. A tough place to make a life. Being monogamous gives these small mammals an edge in such a tough environment.

Male and females share raising of the young. From monitoring, the U.S. Fish and Wildlife Service (the Service) has found life expectancy on average is nine months. While that is a short life, Alabama beach mice can reach reproductive maturity in as little as six weeks. Gestation is 23 days, and females can breed again within 24 hours of giving birth.

Another rare trait of the beach mouse is that it builds complex burrows. The burrows have an entrance tunnel about three feet into the sand dune, where a nest chamber is built. At the rear of the nest chamber, an escape tunnel is built that does not penetrate the surface. If a coyote, fox, or snake begins to dig into the entrance tunnel, the mouse will dig through the final parts of the escape tunnel and safely get away.[1]

The Alabama beach mouse's habitat is primary, secondary, tertiary, and interior scrub dunes. The Service estimated the historical range of the Alabama beach mouse included 8,000 or 9,000 acres of sand dune habitat. After total development of Alabama's coast occurs, the Service estimates between 2,300 and 2,400 acres of these types of sand dunes will remain.[2]

Of these dune types, tertiary dunes area is the most important habitat type for the beach mouse because they are the highest sand dunes along the coast. They are also the rarest habitat type left. In the event of a Category 3 tropical storm or higher, they will be the only dunes not inundated. Thus, they are extremely important because they serve as high hurricane refuges for the Alabama beach mouse during such a storm. Luckily, the majority of this type of habitat is in the publicly held lands, limiting development there.

At one time, the Alabama beach mouse was found on Ono Island and from the west side of Perdido Pass, Orange Beach to the tip of Fort Morgan in Gulf Shores, Alabama. Today, the range of the mouse has been reduced to an isolated population in Gulf State Park (between Orange Beach and Gulf Shores), and the core remaining population located from the west side of Little Lagoon Pass in Gulf Shores to the tip of Fort Morgan in Gulf Shores, Alabama.

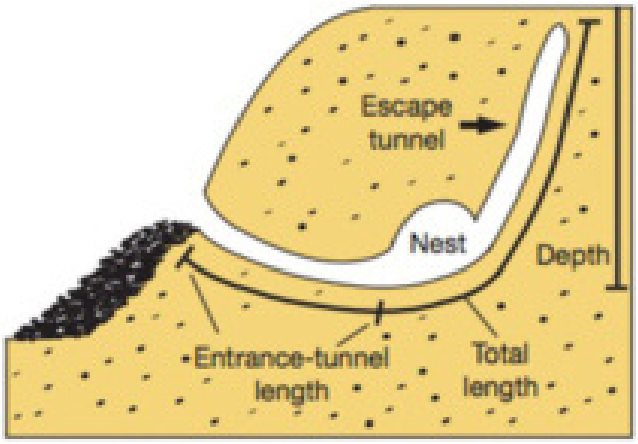

Diagram of an Alabama beach mouse burrow.

Listing and Development of Habitat Conservation Planning

The Alabama beach mouse was listed as an endangered species in 1985 mainly due to coastal development and its associated threats. Section 9 of the Endangered Species Act (ESA) prohibits take of any fish or wildlife listed as endangered.[3]

Section 3 of the ESA defines "take" as "harass, harm, pursue, hunt, shoot, would, kill trap, capture, or collect, or to attempt to engage in any such conduct."[4]

In 1982 Congress recognized the need to reduce conflicts between listed species and economic development by adding an exemption for the "incidental take" of a listed species by non-Federal activities.[5] Incidental take is that which is incidental to, and not the purpose of, carrying out an otherwise lawful activity.

The amendment created a permitting system in which applicants can obtain an Incidental Take Permit (ITP) if an approved conservation plan is developed. These plans are

commonly known as Habitat Conservation Plans. Among other requirements, the plan must specify the impacts that are likely to results from the taking, the measures the applicant will undertake to minimize and mitigate such impacts and funding that will be available to implement such measures. Section 10(a)(2)(A) of the ESA sets the statutory criteria that must be satisfied before an ITP can be issued. Once the permit is issued, the permittee must implement all portions of the plan. Permits for HCPs are typically issued for a 50-year time period and can be renewed.[6]

Habitat Conservation Planning and the Alabama Beach Mouse

Development of HCPs for the Alabama beach mouse began in earnest in the early 1990s. The development of any HCP starts with addressing the known threats which lead to the listing of the species originally. Known threats to the Alabama beach mouse included the following:

- development of the entire lot,
- non-native landscaping,
- unrestricted exterior lighting,
- free-roaming cats,
- no efforts to restore habitat (or create sand dunes),
- foot traffic through the sand dunes,
- tropical storms, and
- disease.

Intensive development lead to habitat fragmentation and isolated populations which increased the chance of extinction in the event of a catastrophic tropical storm.

Today, applicants seeking to build in beach mouse habitat must incorporate conservation measures into their habitat conservation plan. The conservation measures address the known threats to the Alabama beach mouse. First, applicants must minimize their development plans to the maximum extent practicable. Part of this includes leaving habitat onsite which creates corridors, keeps habitat connected, and keeps populations connected. This decreases habitat fragmentation and the isolation of populations. However, if the proposed development plans are intensive (such as a building with a large footprint), then the applicants must mitigate by creating offsite habitat to replace what will be developed.

In habitat conservation planning, the Service has found Alabama beach mouse can exist in developed areas if the landscaping is native. Accordingly, applicants may not use non-native vegetation, such as sod. While the majority of applicants have no landscaping plans, any plans for landscaping can only use native coastal vegetation found in Baldwin County. The Service maintains a list of native coastal plants for use in Alabama beach mouse habitat.

When managing for a nocturnal mouse and nesting sea turtles, it is important to have an artificial lighting regime which limits light pollution. Exterior lighting in HCPs are now required to be fully shielded. While the State of Alabama does not regulate exterior lighting along the coast, the City of Gulf Shores has sea turtle lighting regulations.[7] The goal of the Gulf Shores ordinance is to avoid illuminating the surrounding habitat by fully shielding fixtures to minimize light pollution.

HCPs require cats to be kept indoors at all times. Everyone knows cats and mice do not go together. Free-roaming cats are predators not native to this environment. Hunting by cats results in wildlife species being pursued, injured, and killed. Controlling free roaming cats not only protects the Alabama beach mouse, it protects birds and other wildlife, such as the monarch butterfly.

Unregulated foot traffic to get to the beach destabilized sand dunes and dune fields and created wide, flat, unvegetated paths. Foot traffic paths enable storm surges to reach further inland impacting more habitat and damaging private properties. Installing boardwalks help stabilize sand dunes, protect habitat, protect property, and make a more resilient coastline better able to withstand storm surges.

When a tropical storm hits the Alabama coastline, typically, the entire range of the Alabama beach mouse is impacted. Active restoration must occur after a tropical storm to help the coastal sand dune habitat recover quickly. Quicker habitat recovery means less of an impact to the Alabama beach mouse population. Sand dune restoration techniques have come a long way. There are more professional nurseries that grow coastal plants. Many nurseries can now send plants straight to an owner's property. These nurseries also collect seeds locally to ensure that the ordered plants match the location ensuring better survival.

The main tool of creating sand dunes has been the use of sand fencing which can create sand dunes while still allowing sea turtles to nest. Another tool has been the use of recycled Christmas trees. Christmas trees, installed in a "U" pattern toward the prevailing coastal winds, are a great sand catching device. Additionally, as they decay, they naturally

feed plants. The Alabama Department of Conservation and Natural Resources has used Christmas trees with great success at Gulf State Park. Most of the sand dunes observed there today were created by Christmas trees collected from Orange Beach and Gulf Shores.

Another threat to beach mouse habitat is gravel or oyster shell driveways when the material is scattered by hurricanes and other storms. After the tropical storm landfalls of Hurricanes Ivan and Katrina, these types of driveway materials were found over large areas of the sand dunes fields. These materials are almost impossible to remove. Additionally, the cost of gravel or shell removal is greater than the average homeowner can afford. New permits do not allow gravel to avoid a large additional loss of habitat over time. Only asphalt, concrete, a geo web material, or a Service-approved polymer-based driveway materials are allowed. These driveway materials are easier to remove and clean up after a tropical storm, if needed. If a HCP contains these conservation measures, the threat from development is greatly reduced and ensures the continued survival of Alabama beach mouse on private properties.[8]

Success and Testing of Habitat Conservation Planning

Today, habitat conservation plans are located on various properties from inside the City of Orange Beach to near the tip of Fort Morgan. The HCPs require population monitoring. Monitoring provides valuable data on the Alabama beach mouse populations, especially about the effects of tropical storms, the status of the mouse, sand dunes conditions, and the success or problems of each plan. In some HCPs, the Service has 26 years of monitoring data. Monitoring also helps to evaluate proposed HCPs.

Hurricanes Ivan and Katrina were valuable tests of habitat conservation planning. It was estimated that 90-95% of the primary and second dunes habitat within the range of the Alabama beach mouse was destroyed in 2004 and 2005. Habitat slowly recovered and so did the Alabama beach mouse. By 2012, all of the pre-Ivan and Katrina Alabama beach mouse range was reoccupied. Early population modeling estimated the Alabama beach mouse would have been extinct by now. Because of the HCPs, the conserved habitat, and the efforts of our partners in conservation, the newer population models suggest the Alabama beach mouse does not have such a bleak future. Monitoring demonstrates they are persisting and doing quite well in developed areas.

Other Conservation Success

Blessings in disguise have also assisted in the conservation and recovery of the Alabama beach mouse. The Alabama beach mouse recovery plan, which was approved in 1987, recommended that protection measures be developed to protect the mouse in case of an oil spill. In 2010, with the Deepwater Horizon oil spill, those measures were enacted to protect the Alabama beach mouse habitat while allowing safe clean up of the coast. Overall, the Alabama beach mouse was not affected. Population monitoring showed continued improvement over this time period.

The Alabama Department of Conservation and Natural Resources has conserved the Gulf Highlands tract on Fort Morgan and the Laguna Cove tract in Gulf Shores. The Gulf Highlands tract is the largest remaining undeveloped tract of land along Alabama's coast and contains high hurricane refuges. The Laguna Cove tract will provide Gulf Shores with a new public access park to Little Lagoon, while conserving the majority of its sand dunes for the Alabama beach mouse. Without penalties from the oil spill funding land purchases, these land conservation efforts most likely would never have occurred. Such land conservation efforts have improved the future of the Alabama beach mouse.

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Developing a Regional Planning Framework for Land Conservation

Stephen Deal

Land conservation is an important component of environmental resilience. By preserving open space, coastal jurisdictions can help preserve the natural character of the area and maintain the biodiversity of ecosystems. The need for large, contiguous tracts of land to improve biodiversity means that cities must look beyond their borders and adopt a regional planning approach.

Defining Goals and Developing a Vision

To successfully integrate land conservation into local policy it is important to understand that land conservation strategies can vary depending on the value judgements made by local leaders. In coastal regions, one of the primary motivations for land conservation is flood mitigation. The Federal Emergency Management Agency provides communities up to 2,870 points for open space conservation through the Community Rating System program.[1] These points can help reduce flood insurance premiums, which gives coastal communities a strong incentive to prioritize open space acquisition that provides natural protection from flooding. Government jurisdictions that have acquired lots of open space for flood protection often receive the most points under the program. King County, Washington, has conserved more than 100,000 acres within its floodplain, which has resulted in a class 2 ranking, one of the best in the nation, and an average special flood hazard area premium discount of $722.[2]

One thing to keep in mind when drawing up a local conservation strategy is that it can be difficult to convey the environmental value of a single land parcel, which is why a broad, regional vision is necessary when establishing conservation goals. A land conservation story centered on a large environmental feature or ecosystem, such as a river or swamp, can become the driving impetus of regional conservation and serve as a kind of regional brand that gives form and shape to conservation efforts. In the northern Gulf of Mexico, with its high annual rainfall and large waterways, the stories told to illustrate the value of conservation generally center around river deltas and estuaries. In southern Alabama, the Mobile-Tensaw River Delta has been a driving force for land conservation in the region.

The Mobile-Tensaw is Alabama's largest wetland ecosystem and is approximately 45 miles long and is home to over 400 square miles of wetland.[3] The ecological value they possess is why a group of southern Alabama leaders came together to form an organization devoted to promoting the environmental wonders of the delta known as the Alabama Delta Alliance.[4] Consisting of around 40 members, the Alabama Delta Alliance will promote the natural wonders of the delta along with various recreation and ecotourism opportunities that exist in the region.

Coordinating Environmental Restoration with Land Conservation

Coastal land poses two conservation challenges: first, they must acquire natural land for conservation purposes, and second, they must identify opportunities to reduce the urban footprint and reclaim land that can become a vital component of the coastal landscape.

One interesting example of coastal restoration being utilized in conjunction with land management and conservation is near Boston. Just to the east of the city are 34 islands and peninsulas known as the Boston Harbor Islands, an important fixture of the region's coastal ecosystem.[5] The environmental importance of these islands was recognized in 1996 when Congress designated the islands as a national recreation area within the National Park System. Some locations had been environmentally compromised. One island in particular, Spectacle Island, had been heavily degraded from years of heavy industrial use and city dumping. Though dumping was eventually discontinued on the island, leaking toxins made the site a hazard.

An unlikely savior for the island was Boston's Big Dig (a highway construction project), for which large amounts of dirt and stone were excavated to build a tunnel.[6] The legislature decided to use excavated material as part of a large harbor clean-up effort. In 1992 the first batches of excavated material from the Big Dig were relocated to

Spectacle Island, and a landscape architecture firm was selected to design and re-grade the island.[7] Dirt helped cover the old landfill with clay and topsoil. Re-grading on the island was performed to restore the original island formation. In 2006 the island was open to visitors. In 2012, around 130,000 visitors were ferried to Georges, Spectacle, and Peddocks islands.[8]

Farther south, in coastal Alabama, the value of coordinating restoration with conservation can be demonstrated by the small town of Bayou La Batre. The town, which is known as a center of the seafood industry, is an important economic and cultural fixture in southern Alabama. It is also vulnerable to long-term sea level rise and the damaging effects of storm surge. To address this, The Nature Conservancy has partnered with the city and others to enhance nearby shoreline habitats that can aid in flood mitigation.[9] At the center of this initiative is the Lightning Point restoration project, located where the Bayou La Batre navigation channel meets the Gulf of Mexico.

The project restored critical habitat previously lost to erosion and has provided a measure of natural protection to Bayou La Batre from coastal storms and hurricanes.[10] For the project, The Nature Conservancy utilized more than 240,000 cubic yards of dredged material to construct 40 acres of marsh in the area. The Lightning Point project helps extend and protect a critical conservation corridor of natural shoreline that extends to the Mississippi/Alabama border. Following the groundbreaking event in April 2019, 37 acres of the project were transferred to the Forever Wild Land Trust to be incorporated into the Grand Bay Savanna tract.[11] Project funds were also used to acquire additional conservation lands on the east side of the channel as well. It also built jetties for use by commercial shrimp boats and recreational fishers.

The Importance of Building Coalitions

The ACE Basin Task Force's conservation efforts in the lowcountry of South Carolina center around 350,000 acres that drain into the Ashepoo, Combahee, and South Edisto Rivers between Charleston and Beaufort, one of the largest undeveloped estuaries on the east coast.[12] Formalized in 1988, the task force includes the U.S. Fish and Wildlife Service, S.C. Department of Natural Resources, Lowcountry Land Trust, and Ducks Unlimited. The membership also includes in its ranks philanthropic organizations. Since its establishment, over 275 easements have been recorded in the area, constituting 83 percent of the protected land in the basin.[13]

The Basin Task Force has evolved over time. What originally started as a mission to preserve a vast, undeveloped estuary has now brought its conservation efforts to bear on Charleston County, the lowcountry's most populous county. In 2016 the Task Force and Ducks Unlimited worked with the county to preserve 638 acres.[14] This property, which includes a mile-long forested buffer along a highway and a 100-acre bottomland swamp, will establish future trail corridors.

Conclusion

Great conservation stories are expressed on a grand scale. Large, contiguous tracts of preserved lands are not only advantageous to flora and fauna, they also beckon one to explore nature's beauty. Land conservation also provides a number of concrete benefits to cities as well, such as improved water quality and flood protection. By utilizing the power of regional networks, coastal communities can develop a vision for conservation that provides opportunities for regional buy-in while fully addressing the needs of the broader ecosystem.

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