Fishing in Troubled Waters: Essential Fish Habitat

by Megan Greiner
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The Gulf of Mexico Fishery Management Council (Council) recently released amendments to seven fishery management plans (FMP) as required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act, 16 U.S.C. 1801 et seq., Section 305(b)(1)(A and B)). The Magnuson Fishery Conservation and Management Act (PL 94-265, April 13, 1976) addresses the long term sustainability of U.S. fisheries stocks by establishing a 200 mile fisheries conservation zone in which the United States has exclusive regulation of fisheries resources. Management of the fishery resources occurs through the development and administration of fishery management plans by one of eight regional fishery management councils, and in accordance with national standards for fisheries conservation and management.

Recently, Sustainable Fisheries Act (1996) amendments to the Magnuson Act were introduced with requirements to identify “essential fish habitat” (EFH) for important fisheries species. The concept of EFH arose from recognition that “...direct and indirect habitat losses ...have resulted in a diminished capacity to support existing fishing levels...” (16 U.S.C. 1801(a)(2)). While the necessity of identifying EFH and threats to EFH is obvious as a means to ensure the maintenance of adequate quality habitat for the fisheries, the difficulties in applying the concept of EFH are manyfold. To begin, documenting the distribution of all fisheries throughout their life cycles is a labor intensive task. Second, once the EFH boundaries are drawn, identifying activities that may have direct and/or indirect impacts on the EFH without including the whole realm of human activities poses its own problems. Last, addressing the activities that may have impacts is likely to require a strong commitment from all interested parties, including those not directly involved with the fisheries.

The latest draft amendments on EFH put out by the Council had several objectives: (1) to identify and describe EFH for various life stages of species under management; (2) to identify adverse impacts to EFH from fishing and non-fishing activities; (3) to provide recommendations to minimize impacts to EFH from non-fishing activity threats; (4) to identify for later consideration threats from fishing related activities and (5) to identify needed research. In addressing these objectives, the Council was quite thorough and the amendments provide an excellent reference for information on EFH boundaries and a review of available information on fishing and non-fishing activity impacts. Unfortunately, despite an obvious need for some proactive management actions, the Council ultimately proposes no management measures, nor regulations. Actual management measures or regulations are deferred to some “future” or “appropriate” time when “adequate” data exist to make sound decisions. Unfortunately, their rationale for deferring management measures and regulations until “adequate” data exist provides a good argument for ensuring that no actions be taken, ever.

Fisheries and EFH identification
EFH was defined as: "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. For the purpose of interpreting the definition of essential fish habitat: ‘Waters’ include aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; ‘necessary’ means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem; and ‘spawning, breeding, feeding, or growth to maturity covers a species’ full life cycle” (52CFR 66551).

EFH amendments were made for approximately one third of species under management by the Council, covering the most important commercial and recreational fisheries. According to the Council, the EFH identified for these species encompasses all marine and estuarine waters of the Gulf of Mexico, and thus, there is no pressing need to designate EFH’s for the remaining species. Future amendments would address any specific needs of species not covered. The species for which EFH designations were made include shrimp (brown shrimp, Penaeus aztecus; white shrimp, P. setiferus; pink shrimp, P.


Imagine a situation where efforts related to fisheries are undertaken in areas that may directly or indirectly affect EFH. However, while this section comprises the most concrete statements in the report, it is interesting to note that none of these activities are directly under the authority of the Council, or involve individuals that have the most to directly gain (or lose) from sustainable fisheries.

A straightforward and initially simple approach that could have been taken, was for the Council to identify and pledge full support for initiatives underway or under development whose objectives match those of the Council’s recommendations. For example, numerous groups and legislation are aimed at restoring and protecting the coastline (i.e. CWPPRA), or reducing chemical and sediment inputs into the Mississippi or into the Gulf (i.e. Hypoxia workgroup). It is important to note that the Council is able to fully protect and control non-fishing related activities that affect the EFH, but in recognizing and supporting the essential activities of relevant initiatives, they are less likely to achieve their goals. Ironically, while the recommendations dealing with non-fishing related activities are somewhat limited overall, they are far more instructive and proactive than those addressing fishing related activities.

**Non-fishing activity impacts and recommendations**

Identification of threats from non-fishing related activities is necessarily extremely comprehensive, recognizing not only direct impacts such as marsh loss and physical alterations of EFH, but also recognizing indirect impacts of land uses the length of the Mississippi River, and coastal areas. Numerous small scale recommendations such as suggestions on the maximum size of pilings, distance between dock slats or a switch from the use of marsh buggies to airboats (section 7.1.1.1 Generic Amendment for Addressing Essential Fish Habitat Requirements, June 1998, hereafter cited as draft amendments) are given. The recommendations all appear to be reasonable, and achievable in the future as a sort of guide of “best management practices” for projects that are undertaken in areas that may directly or indirectly affect EFH. However, in fact, Auster and Langton (1998) conclude that due to our rudimentary knowledge of ecosystem dynamics, “...managers bear the responsibility of adopting a precautionary approach when considering the environmental consequences of fishing...” Thus, Auster and Langton encourage use of the “precautionary principle” in fisheries management. The precautionary principle states that “…where there are threats of serious or irreversible environmental degradation, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation” (Smith et al. 1997). In essence, precautionary measures would suggest a pro-active approach to addressing threats to the long term sustainability of fishery stocks, which include habitat destruction. Ironically, the EFH amendments fail to adopt precautionary measures as evidenced by their lack of specific recommendations and their statement that “…limited or lack of scientific, verifiable information concerning fishing-related activities impacts on essential fish habitat precludes the Council from proposing any possible management options for consideration and implementation at this time”.

The report indicates that specific recommendations and guidelines will evolve to deal with fishing related activity impacts on EFH, but no specific time line or course of action is outlined. Ultimately, it appears that statements that may be politically controversial were avoided. It is far less controversial to identify and promote changes in non-fishing related activities rather than attempt to regulate fishing activities. Admittedly, regulating fisheries in terms of how, what and where fishing can occur often has significant consequences for the individuals involved. However, two things are fairly certain: (1) many of the fisheries are severely threatened; and (2) it is unlikely that irrefutable scientific data will be available for all gear types in specified areas at specified times prior to significant impacts on a number of the fisheries in question. Scientific data collection must go forward, but lack of data should not be an excuse for the status quo, especially when there are clear signs of adverse fishery stock impacts. Individuals and organizations with a vested interested in the status and health of fishery stocks must acknowledge the need for changes, and be willing to deal with it today while options still exist.
Furthermore, until individuals and organizations involved in fisheries are willing to make changes, it seems wrong to expect individuals or organizations causing impacts from non-fishing related activities to make significant changes in their activities.

A recent report by the National Research Council entitled “Sustaining Marine Fisheries” (NRC 1998) calls for drastic changes for fishing practices, which they acknowledge, “...will cause some economic and social pain at first...”, but should lead to future sustainable fisheries. They further state that “…the options lie in deciding how and when to reduce effort so as to reduce economic and social disruption. The options, however, can be exercised only if decisions are made before the resources are depleted.” Thus, the adoption of precautionary measures in the face of uncertainty are recommended. It seems quite clear that while the data may be limited on the exact effects of different fishing activities on EFH and on sustainable fishing limits, sufficient evidence exists to justify the enactment of rules based on the precautionary principle. Otherwise, options for managing the fisheries sustainably may rapidly become limited. The longer we wait to make real decisions, fewer options, and greater economic and social disruption are likely to occur. Furthermore, as stated in the NRC report “…when overfishing (including bycatch) has been effectively eliminated, other human activities will be the major threat to fisheries and marine ecosystems.” Thus use of the Council’s authority is critical to proactively ensure that we maintain our options for the future by first implementing precautionary measures related to fishing activities, and secondly by identifying and recommending action for non-fishing activities in order to ensure sustainable fisheries in the future.

CaseNote on U.S. v. Wilson
by Suzanne Wright

The Clean Water Act prohibits the discharge, without a permit, of pollutants into navigable waters. (33 U.S.C. Sections 1311(a) & 1362(12)) Navigable waters are the “waters of the United States.” (33 U.S.C. 1362(7)). These “waters of the United States” are not further defined in the statute.

The Supreme Court in Riverside (United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 133, 106 S.Ct. 455, 462, 88 L.Ed.2d 419 (1985)) extended the definition of navigable waters, through the Commerce Clause, to regulate even some waters that would not be deemed navigable under the traditional definition of that term. That decision was somewhat limited by Lopez (United States v. Lopez, 514 U.S. 549, 115 S.Ct. 1624, 131 L.Ed.2d 626 (1995)), where the court decided that Congress could regulate activities, including the discharge of pollutants that substantially affect interstate commerce.

Regulation 33 C.F.R. Section 328.3(a)(3), which comes under attack in Wilson, defines “waters of the United States” to include: “All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use degradation or destruction of which could affect interstate or foreign commerce...” (emphasis added) This regulation extends coverage of the Clean Water Act to waters that are intrastate, non-navigable, or both, solely on the basis that the use, degradation, or destruction of such waters could affect interstate commerce. It does not require the substantial affect of Lopez.

The court in Wilson decided, in dicta, that this regulation exceeded the authority of the Clean Water Act and the Commerce Clause. The court found this to be a far more expansive view than that summarized in Lopez. The court held that 33 C.F.R. Section 328.3(a)(3) which defines “waters of the United States” to include intrastate waters that need have nothing to do with navigable or interstate waters, expanded the statutory phrase “waters of the United States” beyond its definitional limit.

“Accordingly, we believe that in promulgating 33 C.F.R. Section 328.3(a)(3), the Army Corps of Engineers exceeded its congressional authority under the Clean Water Act, and that, for this reason, 33 C.F.R. Section 328.3(a)(3) is invalid.” (Wilson at 257)

At least two courts have elected not to follow the rational of Wilson. In U.S. v. Hallmark Construction Company (14 F.Supp.2d 1069 (N.D.III. 1998)), the court pointed out that the same conclusion reached by the Wilson court was reached in the Hoffman Homes I (961 F.2d 1310, 1314 (7th Cir. 1992)) case which was later vacated by Hoffman Homes II (999 F.2d 256, 260 (7th Cir. 1993)) where the definition was found to be reasonable. This court did not agree that the Corps exceeded its authority under the Clean Water Act. It further noted that the Corps definition is entitled to deference. (Chevron USA, Inc. v. Natural Resources Defense Council, Inc. 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984))

The court in Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (998 F.Supp. 946 (N.D.III. 1998)), also respectively declined to follow the approach in Wilson. This court felt that the Clean Water Act was broad enough to extend the Corps’ jurisdiction to the kinds of local waters listed in 33 C.F.R. Section 328.3(a)(3).

For more information, see http://www.epa.gov/owow/wetlands/wilson.htm
Invasive Species

Invasive Species Executive Order
by Sharonne O’Shea

On February 3, 1999 President Clinton signed into effect an executive order to "prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause...." It revokes President Carter’s 1977 executive order addressing exotic organisms. Essentially, President Carter’s plan proposed to restrict federal agency actions, funds and authorizations from introducing exotic species and exporting species native to the U.S. The Department of Interior was charged with promulgating rules to implement the order. Unfortunately, these rules never came into existence and the brief but direct order was essentially ignored during its 21 year existence.

The newer and much longer executive order requires federal agencies to identify actions that will affect the status of invasive species and to refrain from authorizing, funding, or conducting actions that introduce or spread invasive species unless the benefits of the action outweigh the potential harm caused by the invasive species. As budgets allow, federal authorities are to prevent introductions and spread of invasive species, monitor existing invasive species, conduct research and educate the public.

The order establishes an Invasive Species Council, composed of various Department Secretaries and staffed by the Department of Interior. Two concrete tasks charged to the Council are the preparation of guidance under the National Environmental Policy Act for federal agencies to prevent and control invasive species and the preparation of a National Invasive Species Management Plan. This Council also is provided several goals: implementation of the executive order; coordination of various federal activities addressing invasive species, support planning by other governmental entities; develop recommendations for international cooperation; and facilitate information sharing. The order also charges the Secretary of Interior with establishing an advisory committee of stakeholders.

The National Invasive Species Management Plan is to be issued in August, 2000 after a public process. The first edition will contain a review of existing and potential authorities, identify research needs, and recommend measures to evaluate and minimize introduction pathways. Thus, the plan essentially updates the 1993 report requested by Congress and undertaken by the Office of Technology Assessment, “Harmful Non-Indigenous Species in the United States.” However, the Council also may develop and suggest legislative proposals when existing legislation falls short of adequately addressing recommended areas. Periodic updates and evaluations of the plan are anticipated. The plan also contains a provision requiring that any federal agency that fails to take action recommended by the plan provide a written explanation of why the action is not feasible.

The order specifically states that it creates no “right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity....” This language, coupled with the “as budgets allow” caveats, and aspiring language provides little means of ensuring this new effort at addressing an old issue doesn’t fail the same fate of neglect.

Judge Denies Writ To Order Pasteurization of Raw Oysters
by Chad Pitre

After hearing two days of testimony, a state district judge denied a writ of mandamus which would have required the Secretary of the Environmental Conservation Department (DEC) to mandate pasteurization of oysters destined for raw consumption.

A mandate is a writ compelling a public officer to perform his/her ministerial duties required by law. The Secretary of DEC is responsible for implementing and enforcing rules and regulations to protect the public from dangerous food products. On February 24, Judge Kay Bates of the 19th judicial district court in Baton Rouge ruled that DEC has discretion on how to suppress diseases found in raw Gulf oysters. The Courts have generally held that where a public official has the discretion to perform or not perform a certain act, he may not be compelled by mandamus to perform such act. A judge can only issue a writ of mandamus when the law provides no relief by ordinary means or where the delay involved in obtaining relief may cause injustice. Judge Bates told plaintiffs, who advocate a process that kills the potentially deadly Vibrio vulnificus bacteria, to proceed with their case in a DEC administrative hearing process.

Vibrio vulnificus bacteria occurs naturally in raw oysters and can be deadly to people suffering from weakened immune systems. The bacteria is harmless to most people. On average 10 to 15 people die each year across the United States from eating raw oysters containing the bacteria. DEC attorney Frank Perez stated in court that his agency has taken the lead in warning at-risk people about eating raw oysters. In the 1980s DEC began implementing an education program on the dangers of Vibrio vulnificus and later mandated warning signs posted in restaurants serving raw oysters. Opponents

Louisiana Coastal Law - Number 74 - April 1999
A TMDL is an estimate of the total pollutant load that do not meet the "fishable, swimmable" standard even though pollution control technology has been implemented by many pollution sources. Contained within the CWA is section 303(d), which addresses these waters that are not "fishable, swimmable." Section 303(d) requires the state to identify those waters and to develop total maximum daily loads (TMDLs) for them, with oversight from the U.S. Environmental Protection Agency (EPA). These TMDLs were to be set during the 1970’s. Louisiana is only one of the many states that had missed that deadline by nearly 2 decades.

The section 303(d) process has 4 steps. First, the states are required to list those waters which will fail to meet established water quality standards. Second, the state must determine the TMDL for each listed water. Third, waste load allocation (WLA) must be determined. Lastly, the permit must incorporate effluent limits into a given point source’s permit, based on the WLA for that point source.

A TMDL is determined in stage 2. A TMDL is established by first determining the total capacity of a water body to assimilate a particular pollutant. This total daily load is then allocated among contributing point and nonpoint sources of the pollutant at issue. The TMDL is the sum of these individual allocations. Section 303 explicitly recognizes the need to develop TMDLs even when there is insufficient data. Congress recognized that defining TMDLs would be complex and often inexact because oftentimes scientific studies would not be available. Congress therefore specifically allowed for states to account for this scientific uncertainty by providing a "margin of safety" when setting TMDLs.

A TMDL is an estimate of the total loading of a pollutant or pollutant stressor (from point, nonpoint, and natural background sources) that may be allowed within a segment of receiving water without exceeding applicable water quality criteria. The purpose of the TMDL is to set an upper limit for the discharge of certain pollutants into waterbodies. The TMDL program focuses on identifying and restoring the nation’s polluted waterbodies, ensuring that they attain and maintain water quality standards. Once the TMDL is reached, no other permits would be allowed for discharges until reductions were made elsewhere to keep total discharges below the limit.

In the early 1990’s the lack of action by either the states or the EPA spearheaded lawsuits to force performance. These lawsuits have forced the states and the EPA to finally begin the process that was to be started so many years ago. As of November 20, 1998, Louisiana had finally completed the first step. Its final list of affected waters was approved by the EPA. However, that did not stop the lawsuits. The next steps are to establish TMDLs for these listed waters and then to make sure that the load allocations established by the TMDLs are implemented by point and nonpoint sources alike.

There are 16 states where plaintiffs have filed complaints seeking to compel the EPA to establish TMDLs. Among those is Louisiana in Sierra Club, et al v. Saginaw, et al. In February 1996, plaintiffs sought a court order directing the EPA to establish a section 303(d) list for the state, establish TMDLs for all waterbodies on the list, and establish a schedule for submission of TMDLs for all listed waterbodies. The court ordered the EPA to devise a schedule for setting maximum pollution limits for 255 waterbodies in Louisiana that are not "fishable, swimmable."

It is important to remember the basic purpose behind the CWA and section 303(d)—that is, to improve water quality. TMDLs only improve water quality when the pollution allocations are implemented, not when the TMDLs are established. Listing the waters is a solid first step but we have a long way to go to actually improve water quality.
Sharonne O'Shea has resigned her position as Sea Grant Legal Program Coordinator, to return to a more temperate climate in the state of Washington. We regret losing Sharonne's legal expertise and charming character. We wish her the best and know that she will be an asset to the Washington Department of Natural Resources. Erinn W. Neyrey has accepted the position as our new Coordinator. Erinn is a 1995 graduate of the L.S.U. Law Center and a past SGLP research assistant. After earning her J.D., she attended Vermont Law School and received her Master of Studies in Environmental Law. Taking advantage of the diversity of classes offered, Erinn focused on both water and natural resources legal issues. For the past year and a half she has been working at the Texas Institute for Applied Environmental Research, where she concentrated in the areas of agriculture regulation and water quality. We are pleased to welcome Erinn to the SGLP and are confident that her abilities and experiences will benefit the program.

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