

## Buying the Way to a Better Gulf Fishery: Buybacks for Hurricane Relief and Fisheries Rationalization in the Gulf of Mexico

by Mike Pappas

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*Editors' Summary: Fishing stocks in the Gulf of Mexico have been dwindling for years, and in the aftermath of Hurricanes Katrina and Rita, the fishing industry has found itself in even deeper waters. But while the two hurricanes caused massive damage to fishing fleets and infrastructure, they may have also created an opportunity for reform in the way Gulf fisheries are managed. In this Article, Mike Pappas evaluates the use of a buyback program as a possible solution. After examining the problems of the Gulf fisheries both before and after the hurricanes, he looks at other buyback programs that have been successful elsewhere in the United States. He then analyzes the potential of a buyback program in the Gulf. He concludes that although buybacks may be a useful interim tool for improving fisheries in the Gulf, they are just one step toward recovery.*

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### I. Introduction

The Gulf of Mexico fisheries are in poor shape. A history of inadequate management has crippled the Gulf's productivity and Hurricanes Katrina and Rita have wrecked its fishing industry. In an effort to save both the fish populations and the industry in the Gulf, some have suggested fishing fleet and permit buyback programs. The hope is that such programs will decrease harvest capacity, reduce competition, improve fishery productivity, and offer a form of relief to a commercial fishing industry that has suffered greatly from the storms. In the wake of the recent disasters, some see a buyback as the foundation upon which to rebuild a better Gulf of Mexico Fishery.

This Article strives to evaluate the possibility of a buyback program in the Gulf and to prescribe the elements needed for its success. In shaping a solution, we must first understand the problem; therefore, Part II examines the troubles, new and old, of the Gulf fishery. Part III then discusses buybacks as a possible remedy and looks to the examples of past buyback programs. Based on the successes and failures of other buybacks, Part IV analyzes the possibility of buybacks in the Gulf and suggests strategies for shaping an optimal program. Finally, Part V concludes that buybacks may be a useful interim tool for improving the Gulf of Mexico fisheries but that buybacks alone cannot solve the problems of the Gulf.

### II. Problems With the Gulf Coast Fishery

#### A. Pre-Hurricane Problems

Even before being devastated by Hurricanes Katrina and Rita in 2005, the Gulf of Mexico fisheries suffered from numerous problems. Most of them, though, stemmed from only two sources: overcapitalization and inadequate management. Overcapitalization simply means that the commercial fishing fleet in the Gulf contained more fishing boats than the fish populations could support. As a result, fishing pressure pushed fish populations beyond their sustainable limits, and increased competition transformed the fishing business into an unprofitable race for the catch. Coupled with, and possibly contributing to, this overcapitalization problem, the inadequacy of fishery management in the Gulf has allowed the productive Gulf fishery to suffer a long, slow decline. Lack of attention, failure to account for scientific uncertainties, poorly designed management practices, incorrectly set limits, and most grandly a long failure even to recognize fisheries problems are just a few of the historic mismanagements that have plagued the Gulf fisheries.<sup>1</sup>

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1. These problems are, of course, not unique to the Gulf and have caused crises in nearly every U.S. fishery as well as fisheries worldwide. Detailing the various forms of fisheries mismanagements and failure, though, would be an entire paper unto itself and is beyond the scope of this analysis. As an example of just one common fisheries management problem, though, traditional single-species take limits have often proven incredibly ineffective. Such single-species limits may have failed because they were based on poor science, did not account for scientific uncertainty, were based on an incorrect calculation of maximum sustainable yield, or because the single-species approach took no account of food web components and habitat. See generally Ray Hilborn et al., *Institutions, Incentives, and the Future*

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Mike Pappas is a third-year law student at Stanford Law School. He grew up in New Orleans, Louisiana, and likes nothing better than fishing for redfish in the brackish marshes of his home state.

Together these two root causes, overcapitalization and inadequate management, account for the bulk the Gulf's pre-hurricane fisheries problems. These ills have plagued the Gulf and forced the fish populations and industry to endure overfishing, derby fishing, and bycatch.

## 1. Overfishing

□ *How Overfishing Occurs.* Birth and death rates shape every population, fish and otherwise. Most basically, when the birth rate exceeds the death rate, a population will grow, and conversely when the death rate exceeds the birth rate, a population will dwindle. When the birth and death rates are roughly equal, a population will remain stable. Population dynamics do become much more complex than these simple relationships, but these basic concepts can demonstrate the link between overcapitalization and overfishing.

Naturally, fishing pressure can increase the death rate among fish populations; for each fish caught or killed another fish must be born to maintain the population. Once the mortality rate exceeds the birth rate, a fish population will begin to decline, and even if the birth and death rates equalize once again, the population will not return to its original level unless there is a period in which birth rate exceeds mortality. Since overcapitalization increases fishing pressure, it in turn can increase the mortality rate among fish populations. The overly high demand for fish damages the supply.

Correct management techniques could be used to counteract the overfishing effects of overcapitalization. For example, fisheries could simply be managed so that the total permitted fish harvest allows for maintenance of a sustainable population. In fact, such a balanced, sustainable limit has been the goal of most fisheries' management attempts. Unfortunately, such a result is easier to conceptualize than to implement. Scientifically, there are problems with calculating a sustainable limit because it is difficult to strike the perfect balance between extraction and population recharge. There are flaws and uncertainties in population monitoring, and the fact that fish populations naturally change over time adds instability to these calculations.<sup>2</sup> Also, studies of fish populations are often too infrequent to detect overfishing before it has already reduced the fish population.

In addition to this already difficult science, fisheries policymakers often face political pressure to increase allowable catch. Such pressure is another result of overcapital-

ization because fishermen<sup>3</sup> want more fish to be available so that their businesses remain profitable. Also, even if policymakers somehow designed a perfect catch limit, the limit remains only as effective as its compliance and enforcement. Thus, even ideal fisheries management may be overmatched in trying to prevent overfishing within overcapitalized fisheries.

□ *Particular Instances of Overfishing in the Gulf.* Of the many commercial species in the Gulf of Mexico, few have escaped overfishing. According to a presentation by the Gulf of Mexico Fisheries Management Council (GMFMC) in November 2003, most of the commercial reef fish in the Gulf are currently either "over fished" or "undergoing over fishing."<sup>4</sup> The commercially and recreationally valuable red snapper, red grouper, and vermilion snapper are among these reef fish undergoing overfishing, and of these, the red grouper is the only one not currently overfished.<sup>5</sup> Also, the red drum, prized both as a commercial fish and a recreational sport fish, is overfished and undergoing overfishing.<sup>6</sup> In fact, so many of these commercial species are overfished that it seems surprising that the GMFMC did not list shrimp as currently overfished or experiencing overfishing.<sup>7</sup>

## 2. Derby Fishing

□ *What Is Derby Fishing?* Short fishing seasons and enormous industry competition force fishermen to race to take their share of a total allowable catch (TAC), a phenomenon often termed "derby fishing." Seasonal management prac-

3. I use the term "fishermen" throughout the Article in a gender-neutral sense. It can be read as shorthand for "men and women in the fishing industry."
4. Gulf of Mexico Fisheries Management Council (GMFMC) 2003 Power Point Presentation, [http://www.gulfcouncil.org/Beta/GMFMCWeb/GMFMC-DC%20Presentation\\_files/frame.htm](http://www.gulfcouncil.org/Beta/GMFMCWeb/GMFMC-DC%20Presentation_files/frame.htm).
5. *Id.*
6. *Id.*
7. *Id.*

According to the stock status report, brown, pink, and white shrimp are not overfished, and overfishing is not occurring for those species. Overfishing is also not occurring in the royal red shrimp fishery. However, it has not been determined whether royal red, rock or seabob shrimp are overfished or if overfishing is occurring in the rock and seabob shrimp fisheries.

J.M. HARRINGTON ET AL., *WASTED RESOURCES: BYCATCH AND DISCARDS IN U.S. FISHERIES* 127 (2005), available at [http://www.Oceana.org/fileadmin/oceana/uploads/Big\\_Fish\\_Report/PDF\\_Bycatch\\_July28.pdf](http://www.Oceana.org/fileadmin/oceana/uploads/Big_Fish_Report/PDF_Bycatch_July28.pdf) [hereinafter *WASTED RESOURCES*].

Such a positive picture of the shrimp population is additionally surprising because of reports of low profits and other hardships in the shrimping industry. Though these reports do not state that shrimp are actually overfished, many sources do note problems of profitability in the U.S. shrimping industry. These sources cite foreign competition and high fuel prices as detriments to the industry, but they also often link profitability problems to a scarcity of shrimp available. For example, an article on the Environmental Defense website states "too many boats go after a limited number of shrimp. Competition is fierce and many shrimpers can barely eke out a living." *Environmental Defense, Battered Gulf Fisheries Look to Future: Hurricane Aftermath Puts Focus on Dangerous Race for Fish*, <http://www.environmentaldefense.org/article.cfm?contentID=4874> (last visited July 13, 2006) [hereinafter *Battered Gulf Fisheries*]. Of course, this limited number of shrimp could merely reflect overcapitalization for the natural carrying capacity.

*of Fisheries*, 360 PHIL. TRANSACTIONS OF THE ROYAL SOC'Y 47 (2005) (stating: "The majority of existing governance structures encourage fishermen to overcapitalize and overexploit and managers to elude responsibility."); Marc Mangel & Phillip S. Levin, *Regime, Phase, and Paradigm Shifts: Making Community Ecology the Basic Science for Fisheries*, 360 PHIL. TRANSACTIONS OF THE ROYAL SOC'Y 95 (2005) (noting the complexity of fisheries management and the shortcomings of a single-species approach); Susan S. Hanna, *Institutions for Marine Ecosystems: Economic Incentives and Fishery Management*, Supplement: Ecosystem Management for Sustainable Marine Fisheries, 8 ECOLOGICAL APPLICATIONS S170 (1998) (noting fishery management's sluggish response to signals of productivity decline and the problems of single-species management); Tim Lauck et al., *Supplement: Ecosystem Management for Sustainable Marine Fisheries, Implementing the Precautionary Principle in Fisheries Management Through Marine Reserves*, 8 ECOLOGICAL APPLICATIONS S72 (1998) (noting the global scale of fisheries problems and the uncertainties that plague fisheries management).

2. Mangel & Levin, *supra* note 1.

tices represent the initial cause of derby fishing because they create an inflexible time period limiting the fishing season.<sup>8</sup> Overcapitalization then aggravates the derby fishing problem because more fishermen clamoring to catch a limited number of fish in a limited time increases the intensity of the race.

Although derby fishing does not necessarily lead to overfishing, this system can prove both dangerous for fishermen and unfavorable to the fish market. The present management system and state of overcapitalization “create a grueling race and spur fishermen to brave dangerous conditions.”<sup>9</sup> Derby fishing also results in early closure of fishing seasons because fishermen race out and fill the season’s TAC as quickly as possible.<sup>10</sup> When the TAC has been filled, the season effectively ends, and often seasons close well before scheduled. Such a self-perpetuating cycle demonstrates a literal “race” to the bottom. Because seasons are limited, fishermen rush to catch fish and fill TACs; because the TACs fill more quickly, seasons become even shorter. Each season then forces fishermen to race even faster for their catch. During this whole ordeal, there is little time to consider safety of fishermen or favorable fishing conditions.

Another problem with derby fishing causing early season closures is its adverse economic effects on the fishing industry. “Derby fishing causes the season to close earlier than anticipated and reduces the value of the landings while the season is open due to the depressed prices.”<sup>11</sup> So, in addition to making commercial fishing more competitive and more dangerous, derby fishing also makes it less profitable.

□ *Particular Instances of Derby Fishing in the Gulf.* A 1999 report by the Socioeconomic Panel of the GMFMC succinctly describes the problems that derby fishing has caused to the Gulf’s enormously important red snapper fishery<sup>12</sup>:

Since 1990, the principal method of managing the commercial fishery for red snapper has been with quotas set at 51% of TAC and seasonal closures after each year’s quota was filled. The result has been an accelerating rush for fish in which fishermen are compelled to fish as quickly as possible to maximize their shares of the overall quota before the season is closed. Seasons have become shorter despite implementation of trip limits in 1992 and larger minimum size limits in 1994 and 1996. The fishing year is now characterized by short periods of intense fishing activity and large landings rather than lower levels of activity with landings spread more uniformly throughout the year. One consequence has been the unusually low dockside prices necessary for the market to absorb the large volumes of fish that are landed

during relatively short periods of time. Average monthly dockside prices rose in concert with the consumer price index prior to the first closure in 1991, but since then, prices have declined sharply during each open season both in nominal and real (i.e., after adjusting for inflation) terms.<sup>13</sup>

Similarly, a proposed plan published in November 2005 evaluated the status of the Gulf’s grouper fishery as follows:

Under current management the GULF OF MEXICO grouper fishery is in a downward socioeconomic spiral. Restrictive quotas have created a derby fishery that will result in increasingly shorter fishing seasons and greater inefficiencies in the fleet (e.g., increasing number of months idle and market disruptions as imports displace the current fresh fish market during the ever lengthening closures).<sup>14</sup>

While these sources only mention the derby fishing of red snapper and grouper,<sup>15</sup> shrimp<sup>16</sup> and other commercial species throughout the Gulf appear to suffer similarly.

### 3. Bycatch

□ *What Is Bycatch?* Typically commercial fishing practice is species specific; distinct fleets of fishermen seek only one or a few specific types of fish. Often, though, the fishing equipment (whether it be trawling nets or long lines) is not nearly as selective as the fishermen, and non-target species commonly get caught. This unintended catch is called bycatch, and it can have serious detrimental effects on not only other fisheries but also on the ecosystem as a whole.

Generally, fishermen separate intended catch from bycatch and merely discard the bycatch; even if the bycatch is an otherwise commercially valuable species, it is of no value if not the target fish. Thus, bycatch represents the ultimate in wasteful extraction: the indiscriminate catching, killing, and disposing of non-target species. To make matters worse, the percentage of bycatch in certain fishing industries is alarmingly high.<sup>17</sup>

□ *Particular Problems of Bycatch in the Gulf.* Bycatch represents a recognized international problem, and even in the context of such a worldwide issue, the bycatch of the Gulf shrimping industry raises particular concern. Of all commercial fishing practice, shrimping has the highest percentage of bycatch, and the Gulf of Mexico shrimping industry numbers among the most wasteful.<sup>18</sup> Moreover, the Gulf

8. *Battered Gulf Fisheries*, *supra* note 7.

9. *Id.*

10. GMFMC AND NAT’L OCEANOGRAPHIC & ATMOSPHERIC ADMIN. (NOAA), FINAL REGULATORY AMENDMENT TO THE REEF FISH FISHERY MANAGEMENT PLAN TO SET COMMERCIAL MANAGEMENT MEASURES FOR GROUPER STARTING IN 2006 vi (2005), available at <http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Final%20Grouper%20RA%20Comm%2010%2012%2005.pdf> [hereinafter FINAL REGULATORY AMENDMENT].

11. *Id.* at 7.

12. According to this report, “red snapper continues to be the top revenue-generating reef fish in the northern Gulf of Mexico, despite its overfished status.” SOCIOECONOMIC PANEL, REPORT OF THE SOCIOECONOMIC PANEL MEETING ON REEF FISH 2 (1999), <http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/sep99rpt.pdf> (last visited Aug. 29, 2006) [hereinafter REPORT OF THE SOCIOECONOMIC PANEL].

13. *Id.*

14. THE GULF OF MEXICO COMMERCIAL GROUPER INDUSTRY LIMITED ENTRY AND VOLUNTARY BUYBACK MANAGEMENT PLAN 2 (2005), available at [http://monroe.ifas.ufl.edu/marine/GOMEXGrouperManagementPlan\\_9%2013%202005\\_.pdf](http://monroe.ifas.ufl.edu/marine/GOMEXGrouperManagementPlan_9%2013%202005_.pdf) [hereinafter THE GULF OF MEXICO COMMERCIAL GROUPER INDUSTRY LIMITED ENTRY AND VOLUNTARY BUYBACK MANAGEMENT PLAN].

15. For more documentation of the problems of derby fishing in the grouper fishery, see FINAL REGULATORY AMENDMENT, *supra* note 10, at vi.

16. *Battered Gulf Fisheries*, *supra* note 7.

17. According to a recent study, the Gulf of Mexico reef fish fishery has a discard to landing ratio of 0.41 and the Gulf of Mexico shrimp fishery has an astounding discard to landings ratio of 4.56. WASTED RESOURCES, *supra* note 7, at 13.

18.

Each year, U.S. commercial fishing operations throw away more than one million metric tons of fish, an amount equivalent to 28 percent of all commercial landings and more than

shrimpers' wastefulness causes even more concern within the fishing industry because the Gulf shrimping bycatch affects red snapper populations. Thus, the shrimping bycatch takes its toll on a highly valuable commercial and recreational fishery.<sup>19</sup> According to the Coastal Conservation Association (CCA), "every year more than 80 percent of juvenile red snapper are caught and killed in shrimp trawls at an average size of 4 inches."<sup>20</sup> As a result, "shrimp trawl bycatch is the largest source of red snapper mortality in the Gulf."<sup>21</sup>

Acknowledging that this mass extermination of juvenile snapper has handicapped attempts at snapper population recovery, the GMFMC has required bycatch reduction devices (BRDs) for shrimp trawls in federal waters.<sup>22</sup> Unfortunately, BRDs have reduced red snapper bycatch by only 12%, largely due to noncompliance with the BRD requirements.<sup>23</sup> The U.S. Department of Commerce has even conceded, "current efforts to reduce bycatch have fallen well short of targeted goals."<sup>24</sup> The CCA reports that this bycatch problem is so great that "it is generally acknowledged that even if the entire directed red snapper fishery was eliminated, red snapper would never recover with current shrimp trawl bycatch reduction rates."<sup>25</sup>

Blaming poor management practices for both the persistently high shrimping bycatch and the failure of the red snapper recovery efforts, the CCA has publicly criticized the GMFMC's lack of action to remedy this bycatch problem.<sup>26</sup> The CCA has supported "bycatch quotas, area closures, BRDs, seasonal closures and effort reduction measures" and requests "that the Council set a firm target for bycatch reduction on the order of 60% to 80% from historic levels and achieve that target in the shortest time possible."<sup>27</sup> To date, though, nothing has been done to address these concerns.<sup>28</sup>

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all of the fish landed on the East and West coasts combined. The Gulf of Mexico shrimp fishery ranked worst of all, discarding more than 472,000 metric tons, or one billion pounds of fish, nearly half of the total waste in U.S. fisheries.

Aquatic Network, *Discarded Bycatch Wastes Fishery Resources*, [http://www.aquanet.com/index.php?option=com\\_content&task=view&id=580&Itemid=42](http://www.aquanet.com/index.php?option=com_content&task=view&id=580&Itemid=42) (relying on WASTED RESOURCES, *supra* note 7) (last visited Aug. 31, 2006).

19. As stated above, "red snapper continues to be the top revenue-generating reef fish in the northern Gulf of Mexico, despite its over-fished status." REPORT OF THE SOCIOECONOMIC PANEL, *supra* note 12. Additionally, red snapper attracts many recreational fishermen. *Id.*
20. Press Release, Coastal Conservation Ass'n (CCA), CCA Legal Action Demands Emergency Measures for Red Snapper (Mar. 29, 2005), available at <http://www.joincca.org/Positions/2005/Snapper%20briefing%20document.pdf> (last visited July 13, 2006).
21. News Release, CCA, Department of Commerce Concedes Failure on Red Snapper Rebuilding Plan (June 29, 2005), available at <http://www.ccamaing.org/snapper%20release.htm> (last visited May 2006).
22. CCA Legal Action Demands Emergency Measures for Red Snapper, *supra* note 20, at 4.
23. *Id.*
24. Department of Commerce Concedes Failure on Red Snapper Rebuilding Plan, *supra* note 21.
25. CCA Legal Action Demands Emergency Measures for Red Snapper, *supra* note 20, at 5.
26. *Id.*
27. *Id.*
28. According to its most recent press release, the CCA reports no action regarding bycatch reduction, though the CCA continues to urge the GMFMC to address shrimp bycatch and continues with its lawsuit.

## B. Post-Hurricane Problems

In August and September 2005, Hurricanes Katrina and Rita ravaged the Gulf Coast. These two hurricanes visited unspeakable destruction on the region, and the coastal fishing industry felt the full brunt of this force. The two hurricanes caused massive damage to fishing fleets and infrastructure. Additionally, the hurricanes crippled certain fisheries and left huge economic losses in the fishing industry.

### 1. Fleet and Infrastructure Destruction

Hurricane Katrina "struck a center of commercial and recreational fishing along the Gulf of Mexico coast."<sup>29</sup> The affected region contained "15 major fishing ports, 177 seafood processing facilities, 1,816 federally permitted fishing vessels, and an unknown number of state permitted fishing vessels."<sup>30</sup> These areas suffered "widespread flooding and significant property and infrastructure damage," and at the time of writing the number of fishing vessels "beached, sunk, damaged, or otherwise lost" had still yet to be determined.<sup>31</sup>

### 2. Effects on Fisheries

Katrina struck the area where "10% of the shrimp and 40% of the oysters consumed in the United States are produced."<sup>32</sup> According to a GMFMC briefing report from October 2005, "initial losses of seafood production are estimated at \$1.1 billion for Louisiana and could exceed \$200 million for Alabama, exclusive of infrastructure."<sup>33</sup> Most fish and crustacean populations did survive the hurricanes with little detrimental effect, but the oyster populations "likely suffered significant mortality."<sup>34</sup> Even though the hurricanes did not deplete most commercial species, by demolishing fishing fleets they did destroy the methods of extracting these species. In addition to the fleet destruction, "damage to processing facilities and disruption of former market dealer relationships will add to recovery time and alter broader seafood markets and product availability."<sup>35</sup> Among all this destruction, the plights of the shrimp and oyster fisheries remain particularly notable.

□ *Shrimp.* In addition to the costs of property and infrastructure damage, the hurricanes could not have struck at a worse time for the shrimp industry. The damage to boats and processing facilities in this fleet occurred during the "peak harvesting season"<sup>36</sup> and caused a major disruption in the in-

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Press Release, CCA, CCA Insists Council Take on Gulf Shrimp Trawl Bycatch (Mar. 15, 2006), available at <http://www.joincca.org/press%20releases/2006/Bycatch%20first.html>.

29. EUGENE H. BUCK, CRS REPORT FOR CONGRESS, HURRICANES KATRINA AND RITA: FISHING AND AQUACULTURE INDUSTRIES—DAMAGE AND RECOVERY 1 (2005), <http://fpc.state.gov/documents/organization/57873.pdf> (last visited Aug. 31, 2006) [hereinafter CRS REPORT FOR CONGRESS].
30. *Id.*
31. *Id.*
32. *Id.*
33. *Id.*
34. *Id.*
35. *Id.* at 2.
36. *Id.*

dustry. Falling during the autumn white shrimp harvest, the hurricanes prevented shrimpers from “earning much of their annual income.”<sup>37</sup>

From an industrywide perspective, the economic losses for shrimpers are incredible. “For shrimp, the Louisiana Department of Wildlife and Fisheries estimates the 12-month potential loss at dockside at more than \$81 million, with 12-month potential production losses at the retail level at almost \$540 million.”<sup>38</sup> Even those shrimpers who survived the hurricanes with little property loss may suffer as well because the high fuel costs of shrimping may make it difficult or uneconomical to resume.<sup>39</sup>

□ *Oysters.* The hurricanes did double damage to oyster fisheries in the Gulf; in addition to infrastructure and fleet destruction, some oyster populations were severely damaged “if not totally destroyed by siltation and contamination related to Katrina.”<sup>40</sup> In terms of economic loss for oysters, “the Louisiana Department of Wildlife and Fisheries estimates the direct loss of available resources at more than \$205 million and the 24-month potential loss at dockside at almost \$45 million, with 24-month potential production losses at the retail level at almost \$300 million.”<sup>41</sup>

### III. Buybacks as a Possible Solution for the Gulf

Though Hurricanes Katrina and Rita have heaped problems upon problems, the concerns with the Gulf fisheries are hardly new. While there have been efforts to improve the Gulf fisheries for years, reliance interests within the fishing industry have prevented the GMFMC from truly addressing fisheries problems. Because many had invested in and relied on the past fisheries management structure, changes to the system, in the rare event that they occurred, were slow and controversial. The hurricanes have tragically destroyed much property in the commercial fishing industry, but they may have also created an opportunity for fisheries reform by reducing the reliance interests. The hurricanes have forced the industry to start over, and hopefully future management can learn from the problems of the past. Buybacks, programs to purchase and retire fishing boats, could take advantage of the post-hurricane rebuilding opportunity by improving fishery management and reducing overcapitalization while at the same time helping the commercial fishing industry to recover.

Certainly it would be far fetched to believe that a single program could cure the ailing Gulf fishery of its many pre- and post-hurricane problems. Still, while a buyback program may not be a complete panacea, it does represent a practical, workable step toward improving Gulf fishery populations, profitability, and management. A buyback of commercial fishing licenses and boats could improve a number of troubled areas. First, such a program could provide immediate aid and income to those in the fishing industry who lost their livelihoods to the storms. Purchasing and retiring licenses of those who now lack the capital equip-

ment to fish commercially could provide interim financial relief for those who no longer have a means of income. If coupled with alternative job training, such a buyback program could provide the additional benefit of reducing overcapitalization in the Gulf fisheries fleets. If lost boats are not replaced, then the fleets can be reduced to a size more suited to fish populations.

This idea of a post-hurricane buyback program does have some support, and general buyback solutions have been proposed. These calls for buybacks have contained little detail, though, and have not gone far beyond expressing the basic concept. While buybacks may be helpful in theory, the specifics of any buyback program will have the biggest impact on its success. To accomplish the hoped-for goals, a buyback program for the Gulf must be tailored to meet the specific needs and challenges of the hurricane-torn Gulf fisheries. In order to analyze and shape a proper buyback program, then, we must consider the examples of other successful buybacks. Also, to evaluate the feasibility of such a buyback in the Gulf, it will be helpful to look at the history of Gulf buyback proposals. With these past successes and experiences as guides, we may then offer a more informed consideration and critique of the buyback alternatives for the Gulf Coast.

#### A. Successful Buyback Programs

The most recent and successful buyback programs relevant to the Gulf effort have taken place in the Pacific and North Pacific; two have been in California and one in Alaska.<sup>42</sup> Specifically, a general capacity reduction buyback throughout the Pacific and a specialized trawler buyback program in Moro Bay, California, have demonstrated initial success and support. Also, the buyback of Alaskan crab fleets appears to be progressing well. Though the circumstances surrounding these programs are dissimilar to the disastrous events in the Gulf, the successful elements of the Alaska and California buybacks may serve as examples for shaping a buyback design for the Gulf.

##### 1. Federal Buyback for Pacific Groundfish Capacity Reduction

In 2003 the federal government approved a capacity reduction buyback program to reduce the number of vessels in the Pacific groundfish fleet.<sup>43</sup> This program allotted \$46 million for the buyback, and \$36 million of that figure represented a 30-year loan “to be repaid to the federal government by those remaining in the affected fisheries.”<sup>44</sup> The individual fisheries, e.g., the groundfish, pink shrimp, and Dungeness crab fisheries, were to share the cost of loan repayment ac-

37. National Geographic, *Fishing “Shut Down,” Oyster Beds Destroyed by Katrina*, [http://news.nationalgeographic.com/news/2005/09/0912\\_050912\\_katrina\\_fish\\_2.html](http://news.nationalgeographic.com/news/2005/09/0912_050912_katrina_fish_2.html) (last visited July 13, 2006).

38. CRS REPORT FOR CONGRESS, *supra* note 29, at 2.

39. *Id.*

40. *Id.*

41. *Id.* at 2-3.

42. NOAA fisheries website contains information on only two buybacks, implying that these are the only two federal programs that have taken place. NOAA Fisheries Office of Management & Budget, *Fishing Capacity Reduction Programs*, [http://www.nmfs.noaa.gov/mb/financial\\_services/buyback.htm](http://www.nmfs.noaa.gov/mb/financial_services/buyback.htm) (last visited July 13, 2006). The third buyback in Moro Bay was a privately financed effort. The Nature Conservancy, *Partners Bring Together Disparate Interests to Protect Underwater Habitat*, <http://www.nature.org/success/art15728.html> (last visited July 13, 2006).

43. *Trawl Fleet Harvest Capacity Reduction Process Begins*, SEA GRANT FISHERIES, Summer 2003, at 2, available at [http://www-csgc.ucsd.edu/PUBLICATIONS/PDF\\_pubs/SGFSummer03.pdf](http://www-csgc.ucsd.edu/PUBLICATIONS/PDF_pubs/SGFSummer03.pdf).

44. *Id.*

ording to the proportion of capacity reduced in their individual sectors.<sup>45</sup>

This voluntary program invited fishermen to submit irrevocable bids to sell their fishing businesses.<sup>46</sup> In order to maximize harvest capacity reduced per loan dollar spent, the bids were divided and ranked based on the fishermen's average total revenues, which reflected their individual percentage of extraction from the local fish populations.<sup>47</sup> Fishermen whose bids were selected committed to surrender all permits issued to their vessels, and their vessels were registered with the U.S. Coast Guard as ineligible for commercial fishing.<sup>48</sup>

This whole program, though, was subject to approval or rejection through an industry referendum.<sup>49</sup> The referendum took place after the bids were received but before participants were informed of the outcomes.<sup>50</sup> While approval required a simple majority, votes were weighted based on the "debt obligation calculated for each fishery sector" according to the bid results.<sup>51</sup> In late 2003, this referendum process approved the buyback plan, and when the buyback was complete, the vessels removed accounted for at least 36.5% of all groundfish caught in the fishery.<sup>52</sup> As a result of this buyback program, certain trip limits for vessels remaining in the fishery were expected to increase 50% over the limits approved prior to the buyback.<sup>53</sup>

This trawl buyback program did succeed in decreasing the capacity of the Pacific groundfish fleet, but problems of bycatch and economic instability persisted, so in July 2005 the Pacific Fisheries Management Council (PFMC) considered further action to reform and improve these fisheries.<sup>54</sup> At this time, the PFMC began investigating the feasibility and possible impacts of individual fishing quotas (IFQs) for the Pacific groundfish fishery.<sup>55</sup> The PFMC "indicated its support for future use of IFQ programs . . . so that individual fishery participants have both more flexibility in how they choose to participate in the fishery and more accountability for how their individual actions affect the bycatch of overfished species in the groundfish fishery."<sup>56</sup> At the time

of writing, the PFMC was still working on designing and implementing an IFQ program.<sup>57</sup>

## 2. Federal Buyback of Bering Sea/Aleutian Island Crab Fleets

In December 2003, the National Oceanic and Atmospheric Administration (NOAA) promulgated a final rule establishing a capacity reduction program to benefit the Bering Sea/Aleutian Island (BSAI) King and Tanner Crab fishery.<sup>58</sup> Under the program, the National Marine Fisheries Service (also referred to as NOAA Fisheries Service, but hereinafter the NMFS) would "pay participants for withdrawing vessels from fishing, relinquishing fishing licenses, and surrendering fishing histories."<sup>59</sup> The NMFS planned to finance the voluntary program with a \$100 million loan, to be paid back over 30 years by those fishermen remaining in the fishery.<sup>60</sup> Intended to increase crab harvests for remaining fishermen and to conserve and manage fishery resources, this rule became effective in January 2004,<sup>61</sup> and the program appeared quite popular.<sup>62</sup>

Similar to the Pacific groundfish buyback, to enter into this buyback fishermen offered bids for the value of their businesses.<sup>63</sup> Before fishermen were informed of whether their bid had been accepted or rejected, though, the industry was called to approve the buyback through a referendum.<sup>64</sup> Ultimately the referendum approved the buyback, and repayment of the buyback loan was scheduled to begin in October 2005.<sup>65</sup> The plan to finance this loan repayment relies

45. *Id.*

46. *Id.*

47. *Id.*

48. *Id.*

49. *Id.*

50. *Id.*

51. *Id.*

52. The 36.5% represents the low range estimate of reduction, which could go as high as 46% when another vessel classification is taken into account. *Buy-Back a Success*, FISHERMEN'S MARKETING ASS'N NEWSLETTER, Dec. 15, 2003, at 1, available at <http://www.trawl.org/news.pdf>.

53. *Id.*

54. GROUND FISH TRAWL INDIVIDUAL QUOTAS FOR THE PACIFIC COAST JULY 2005 INFORMATIONAL REPORT 1-2 (2005), available at [http://www.pcouncil.org/groundfish/gfifq/info\\_sheet.pdf](http://www.pcouncil.org/groundfish/gfifq/info_sheet.pdf).

55. The management technique of IFQs, or individual fish quotas, assigns to each fisherman a total amount of catch that can be harvested in a given time period, e.g., per year, per month. The total amount of fish to be harvested is divided between all of those in the industry. The fisherman may fill this quota on his own schedule, so thus it allows safety and flexibility to fish when conditions are good and safe. It also prevents derby fishing because there is no need to race because in theory there are enough fish to fill everyone's quota. Such a system intends to share the natural resources (everyone gets some percent of the pie) rather than cause a competition for it (everyone races to finish the pie first). *Id.* at 1-3.

56. *Id.* at 2.

57. According to their most recent newsletter, the PFMC is still reviewing the environmental impacts of an IFQ program. *Trawl Individual Quotas Update—Public Workshop in April*, PACIFIC COUNCIL NEWS, Winter 2005, at 3, available at <http://www.pcouncil.org/newsletters/2005/winter05.pdf>.

58. Fishing Capacity Reduction Program for the Crab Species Covered by the Fishery Management Plan for the Bering Sea/Aleutian Islands King and Tanner Crabs, 68 Fed. Reg. 69331, 69331 (Dec. 12, 2003) (to be codified at 50 C.F.R. pt. 600), available at [http://www.nmfs.noaa.gov/mb/financial\\_services/buyback\\_docs/crab\\_buyback\\_final\\_rule.pdf](http://www.nmfs.noaa.gov/mb/financial_services/buyback_docs/crab_buyback_final_rule.pdf).

59. *Id.* at 69332.

60. *Id.*

61. *Id.* at 69331-32.

62. Of the 28 official comments on the plan, only Comment 20 challenged the buyback approach; the rest of the comments attempted to modify or improve the rule but accepted the overall buyback structure. *See id.* at 69332-34.

63. *Id.* at 69335.

64. *Id.* This design seems to have benefited from the experience with the last federal buyback because NMFS changed the timing of the referendum:

The proposed rule provided for this notification occurring before the referendum about the reduction loan repayment fee. Based on interim public comment during the Pacific Coast groundfish fishing capacity reduction program (68 FR 42613), however, NMFS now believes that postponing this notice until after the referendum has already occurred may help neutralize any potential which the proposed rule aspect might have had for biasing referendum results. If referendum voters know before they vote whose bids NMFS accepted and whose bid NMFS rejected, they may vote differently than they otherwise would have if they did not know whose bids NMFS accepted and whose bids NMFS rejected.

*Id.* at 69334.

65. Magnuson-Stevens Act Provisions; Fishing Capacity Reduction Program; Bering Sea/Aleutian Islands King and Tanner Crabs; Industry Fee System for Fishing Capacity Reduction Loan, 70 Fed. Reg. 54652, 54654 (Sept. 16, 2005) (to be codified at 50 C.F.R. pt.

on a fee, essentially a tax, on five types of fish from the BSAI fishery; the tax is assessed on the fishermen when they sell these types of fish to the initial buyer.<sup>66</sup> Once the buyback loan has been repaid, the tax will cease.<sup>67</sup>

### 3. Private/Public Buyback for Moro Bay Trawlers

Adopted in June 2005, the Moro Bay buyback program not only intended capacity reduction but also ushered in a newly adopted management scheme. This buyback program, which purchased local bottom-trawling vessels, was designed to accompany the PFMC's adoption of a ban on bottom-trawling in more than 3.8 million marine acres off of central California.<sup>68</sup> The PFMC classified this program as a "a public-private partnership under which private funds are used to purchase groundfish limited entry trawl licenses and vessels in concert with the designation, through the Council and NMFS, of no-trawl zones off the central California coast."<sup>69</sup> The Nature Conservancy and Environmental Defense, the two organizations that funded the buyback, cooperated with local stakeholders to design this program and "help alleviate any economic impacts of the new large no-trawl zones."<sup>70</sup> Additionally, The Nature Conservancy and Environmental Defense plan to continue working with trawlers who remain in the fishery in order to monitor and document the results of the program.<sup>71</sup>

Though the buyback's practical success and impact on fish population has yet to be determined, the program appears to be an initial victory for compromise and co-management. The bottom trawl ban and buyback resulted from a partnership between The Nature Conservancy, Environmental Defense, the Monterey Bay Aquarium, local trawl fishermen, and central coast harbor masters. In working together, these groups hoped to cooperatively construct a plan to "[harmonize] conservation with viable commercial fishing, processing and distribution in central California ports."<sup>72</sup> Since many of the 23 local permit holders have expressed interest in the program, the plan seems to have an auspicious beginning.<sup>73</sup>

As intended by the cooperating groups, the widespread acceptance of this trawl ban and buyback seems to be a result of the process used to develop the plan. According to The Nature Conservancy, this possibly controversial program "didn't set off a firestorm of opposition, as is often the case, because trawl fishermen and environmentalists laid the groundwork for consensus before the Council vote."<sup>74</sup>

600), available at [http://www.nmfs.noaa.gov/mb/financial\\_services/buyback\\_docs/Fee%20System%20Final%20Rule.pdf](http://www.nmfs.noaa.gov/mb/financial_services/buyback_docs/Fee%20System%20Final%20Rule.pdf).

66. *Id.*

67. Letter from Michael Grable, Chief, NOAA Fin. Servs. Div., to Fish Sellers and Buyers, on Fee Payment Collection (Sept. 19, 1995), available at [http://www.nmfs.noaa.gov/mb/financial\\_services/buyback\\_docs/FeePaymentCollectionGuidanceLetterGrable%20%2019%2005.pdf](http://www.nmfs.noaa.gov/mb/financial_services/buyback_docs/FeePaymentCollectionGuidanceLetterGrable%20%2019%2005.pdf).

68. The Nature Conservancy, *supra* note 42.

69. GROUND FISH ESSENTIAL FISH HABITAT (EFH) ENVIRONMENTAL IMPACT STATEMENT (EIS)—FINAL PREFERRED ALTERNATIVE 8-9 (2005), [http://www.pcouncil.org/bb/2005/0605/ag\\_c3.pdf](http://www.pcouncil.org/bb/2005/0605/ag_c3.pdf).

70. The Nature Conservancy, *supra* note 42.

71. *Id.*

72. *Id.*

73. *Id.*

74. The Nature Conservancy, *Fisheries Council Adopts Ocean Conservation Plan Developed by a Trio of Unlikely Partners*, <http://www.nature.org/wherewework/northamerica/states/california/press/pfmc.html> (last visited July 14, 2006).

The program reflects a concerted effort not only to improve fish populations and habitat but also to protect the local fishing industry, which was concerned that "in the wake of recent federal buyout of trawlers and in the face of tighter fishing regulations, an additional buyout would disrupt supplies of fish to Moro Bay and threaten the very existence of the working waterfront."<sup>75</sup> Initially, it appears that the result has satisfied the various interests involved.

### B. Buyback History in the Gulf

While the GMFMC has completed no buyback programs to date, there have been discussions on the matter, and a grouper fleet buyback plan was being voted on just after the hurricanes hit. So although there are not yet any Gulf buyback results to consider, these proposals and discussions should be helpful in shaping and critiquing possible post-hurricane buyback plans.

#### 1. Early Buyback Suggestions

As early as 1999, the Socioeconomic Panel for the GMFMC considered buybacks as a possible solution for problems with the Gulf's red snapper and red grouper fisheries.<sup>76</sup> Noting that major regulatory change to the fishing industry could lead to problems for fishermen and their families,<sup>77</sup> the Socioeconomic Panel very briefly mentioned buybacks as a possible mitigation for the adverse effects.<sup>78</sup> The panel noted:

Given this range of social impacts, one solution may be mitigation strategies which would address the possible outcomes previously mentioned. Recent mitigation in the New England Groundfish fishery and for Florida's gill net fishermen has included, vessel and gear buybacks; programs for retraining, i.e., aquaculture; special enrollment onto welfare; special incentives for community development; and others.<sup>79</sup>

The attention paid to this suggestion seemed to match the space devoted to it, though, and there is no evidence of any action taken on this passing thought. Indeed, buybacks do not even appear in the official "recommendations" portion of this report.<sup>80</sup>

#### 2. Gulf Grouper Buyback Program

The GMFMC, however, did take recent action toward instituting a buyback in the region. Responding to concerns about overfishing, derby fishing, and the inability to quickly institute IFQs,<sup>81</sup> in early 2005, the U.S. Congress approved a federal buyback program for voluntary capacity reduction

Nature.org/wherewework/northamerica/states/california/press/pfmc.html (last visited July 14, 2006).

75. *Id.*

76. REPORT OF THE SOCIOECONOMIC PANEL, *supra* note 12, at 35.

77. Such projected problems included stress, depression, substance abuse, layoffs, and business closures. *Id.* at 34.

78. *Id.*

79. *Id.* at 35.

80. *Id.*

81. GROUPE BUYOUT INFORMATIONAL SHEET 1 (2005), <http://www.gulfcouncil.org/downloads.htm> (follow "November 14-17, 2005 - Fort Walton Beach, FL (zip file - 32,872 kb)" hyperlink; then open "B-10(b) Grouper Buyback" document).

in the Gulf grouper fishery; to achieve its goals, the program primarily targeted longline vessels.<sup>82</sup> Though the grouper buyback facially seemed to concern the entire Gulf fishery, the reactions to and discussion of the plan seem to demonstrate that the buyback would really only affect Florida's commercial fisheries.<sup>83</sup>

While this buyback may be practically limited to Florida, the funding and planning process seems similar to the Pacific federal buyback plans discussed above. Section 218 of the Congressional Appropriations Act of 2005 approved the voluntary buyback by authorizing a \$35 million loan to be repaid over 35 years by those remaining in the fishery.<sup>84</sup> Congress' loan authorization only laid the groundwork for the program, though, and the appropriation called for a more detailed business plan to be formulated within the fishing industry.<sup>85</sup> The appropriation also designated that approval of this plan would require a two-thirds majority vote of industry participants.<sup>86</sup>

□ *Proposed Business Plan for Gulf Grouper Buyback.* As a representative of the Gulf grouper fishing industry, the Southern Offshore Fishing Association (SOFA) was largely responsible for Congress' approval of the buyback and appropriation of the \$35 million loan.<sup>87</sup> SOFA also appears to have been involved with the steering committee, which designed the buyback's business plan that the industry voted on.<sup>88</sup> This plan proposed a loan repayment method similar to that used in the BSAI—the fishermen were not personally liable for the loan; rather, a loan repayment fee was assessed on all grouper commercially sold to fish dealers.<sup>89</sup>

82. Consolidated Appropriations Act of 2005, Pub. L. No. 108-447, §218, 118 Stat. 2809, 2886 (2004). See also *Congress Creates Longline Vessel Buyback Program for Gulf of Mexico*, GULF FISHERY NEWS, Jan./Feb. 2005, at 6, available at <http://www.gulf-council.org/newslet/NEWSLTR-01-2005.pdf> (summarizing approval of buyback plan).

83. Though the buyback nominally concerns the entire Gulf of Mexico fishery, the reaction to the plan seems to indicate that Florida fisheries will be the most, if not the only, affected. See generally *infra* notes 87 & 115.

84. Consolidated Appropriations Act §218.

85. *Id.*

86. *Id.*

87. SOFA had actually sought a direct congressional appropriation to fully fund the buyback program rather than a loan just of the initial capital. GROUPE BUYOUT INFORMATIONAL SHEET, *supra* note 81.

88. SOFA's role in the business plan is more implied than directly stated. According to GMFMC's Grouper Buyback Informational Sheet:

Once the loan package was issued, a representative steering committee was formed with regional representation of the fishery. [Eleven] participants in the grouper fishery made up the steering committee as well as advisory members from [the Florida Fish and Wildlife Conservation Commission (FWC)], Louisiana State University, University of Florida, and Florida Sea Grant. Over the course of several months, the steering committee, working with recommendations made by Mike Grable, buyout specialist from NMFS, formulated the current business plan for the buyout.

GROUPE BUYOUT INFORMATIONAL SHEET, *supra* note 81, at 1. Additionally, the FWC also indicates that SOFA developed the voluntary buyback plan. GROUPE BUYBACK PROGRAM UPDATE 2 (2005), [http://www.myfwc.com/commission/2005/Nov/\\_presentations/GROUPEBUYBACKPROGRAM.pdf](http://www.myfwc.com/commission/2005/Nov/_presentations/GROUPEBUYBACKPROGRAM.pdf) (last visited July 14, 2006) [hereinafter GROUPE BUYBACK PROGRAM UPDATE].

89. GROUPE BUYOUT INFORMATIONAL SHEET, *supra* note 81, at 2.

This loan repayment fee was set at a maximum of 5% of grouper value.<sup>90</sup>

To be approved, this plan first called for an industrywide referendum, with a longline-only referendum to follow if the first vote did not pass; if either of the referenda approved the plan, federal legislation would then legally implement it.<sup>91</sup> Following acceptance of the plan, the bid process for buybacks would begin, and qualified participants would be able to bid their average catch history.<sup>92</sup> Once bids were accepted, another referendum would be required to finally approve the loan repayment fee system.<sup>93</sup>

The plan did mention that an IFQ program might be preferable for addressing the grouper fishery's problems but noted that such an IFQ would take four to five years to implement.<sup>94</sup> Thus, the plan proposed the buyback as a stabilization measure until an IFQ program could go into effect.<sup>95</sup> According to the plan:

The purpose of this industry Plan is to reduce fishing effort and catch capacity to mitigate the derby effect so that the domestic fresh fish fishery can operate year round. The re-establishment of a year round fishery will be accomplished by implementing endorsement criteria to eliminate the major portion of latent capacity in the fishery and a voluntary buyback program to further reduce catch capacity/effort. The buyback will be funded by a loan to the fishery that will be paid by the participants that choose to remain in the fishery.<sup>96</sup>

An informational report on this buyback predicted that it would cause a total increase in value of nearly \$7 million annually for those remaining in the fishery.<sup>97</sup> Additionally, the report claimed that the buyback would reduce the season-shortening effects of derby fishing and "hopefully achieve . . . a grouper fishery of 11 months."<sup>98</sup> Finally, the report acknowledged that an IFQ program might be beneficial to the grouper fishery, but it ultimately supported the buyback as an immediate course because of the complexity and long implementation period of an IFQ program.<sup>99</sup>

□ *The Referendum Voting Process.* All fishermen holding commercial federal reef fish permits were invited to participate in the referendum to approve the plan.<sup>100</sup> For passage the plan required a supermajority of 60% approval, and votes were to be weighted according to each permit's catch history from the 2001 to 2004 seasons.<sup>101</sup> This weighting system was designed to ensure that the voting influenced the decision proportionally to each permit holder's impact on

90. *Id.*

91. THE GULF OF MEXICO COMMERCIAL GROUPE INDUSTRY LIMITED ENTRY AND VOLUNTARY BUYBACK MANAGEMENT PLAN, *supra* note 14, at 1.

92. *Id.*

93. *Id.* at 6.

94. *Id.* at 2.

95. *Id.*

96. *Id.* at 3.

97. GROUPE BUYOUT INFORMATIONAL SHEET, *supra* note 81.

98. *Id.*

99. *Id.* at 2.

100. THE GULF OF MEXICO COMMERCIAL GROUPE INDUSTRY LIMITED ENTRY AND VOLUNTARY BUYBACK MANAGEMENT PLAN, *supra* note 14, at 3.

101. *Id.*



the fishery.<sup>102</sup> In the event that the industrywide vote failed to achieve 60% approval, there would be another referendum among longline fishermen for approval of a longline-specific buyback program.<sup>103</sup>

□ *Reaction to the Proposed Buyback.* In October 2005, the Florida Fish and Wildlife Conservation Commission (FWC) published a Grouper Buyback Program Update evaluating the program.<sup>104</sup> In the Update, the FWC asserted that the buyback plan was industry-generated and had “minimal federal and no state involvement in the process.”<sup>105</sup> The Update also noted that the first buyback vote was completed in early October and that the unweighted results showed 38% for and 62% against the buyback.<sup>106</sup> The weighted results were unavailable at the time,<sup>107</sup> but by December newspapers were reporting that the plan passed after the votes were weighted.<sup>108</sup>

As far as substantive criticisms, the FWC Update also considered the general fairness and pros and cons of the proposed buyback plan, noting that an IFQ program might remove fairness concerns that existed with the buyback program.<sup>109</sup> Among the fairness concerns with the buyback, the Update asserted that the buyback plan would most affect small commercial fishing operations, whereas an alternative trip limit system would have a greater effect on the large harvesters. Similarly, the Update reported that as a result of the buyback, “small scale or part-time fishers will be forced out by the minimum landings criteria and the larger operations will have the option of staying in or selling their fishing privileges.”<sup>110</sup> The Update also noted that the buyback should only represent a temporary solution because quota closures and limited seasons—two management practices that the buyback was proposed to help avoid—would be needed once again as those remaining in the fishery became more efficient.<sup>111</sup> Finally, the Update took issue with the fact that there was no process for comment on or reshaping of the buyback plan.<sup>112</sup> It also foresaw that the buyback might actually create a derby system among those remaining in the fishery competing for IFQ shares.<sup>113</sup> Ultimately, the FWC staff preferred an IFQ program to the proposed buyback program because the IFQ was fairer, more certain, and more beneficial; however, the FWC did acknowledge that an IFQ would take longer to set up and be harder to enforce.<sup>114</sup>

In addition to the FWC commentary, there was a large public reaction to the proposed grouper buyback, with many considering the plan and voting practice to be unfair. One group in particular, the Florida-based Fishermen’s Advocacy

Organization, has taken a strong position against the buyback and has urged its members to contact Congress in opposition to the plan.<sup>115</sup> The Fishermen’s Advocacy Organization website also directs visitors to a number of newspaper articles from October 2005 to January 2006, most of which vehemently oppose the buyback.<sup>116</sup> Most of the criticism centered on the weighted vote process, which many regarded as corrupt.<sup>117</sup> Thus, even though there has been little action since the vote, the grouper buyback plan remains controversial.

### C. Post-Hurricane Buyback Proposals

Since the hurricanes decimated great parts of the Gulf fishing industry, there have been suggestions that buybacks should play a large part in the rebuilding effort, despite criticisms of the grouper buyback program outlined above. Both the GMFMC and Environmental Defense have advocated for buyback programs, but only in very general terms. Most of the buyback rhetoric, in fact, has gone into little detail beyond the mere invocation of buybacks as a solution. Though there has been no formal plan proposed, it is still worth examining these general suggestions for buyback programs because any buyback in the Gulf will likely stem from this advocacy.

#### 1. GMFMC Letter to Congress Requesting Buyback Funding

Responding to a congressional request that the GMFMC recommend projects to rebuild the hurricane-afflicted Gulf fishing industry, in early October 2005 the GMFMC sent a letter to Congress suggesting possible recovery methods. This GMFMC letter espoused the joint goals of providing “compassionate relief response” and addressing “overca-

115. Fishermen’s Advocacy Organization, <http://www.fishermensadvocacy.org/index.shtml> (scroll down to the “Buy Out Update” heading) (last visited July 14, 2006). According to the Fishermen’s Advocacy Organization website, the repayment plan for the buyback is unworkable, large commercial interests have used “back door politics” to pass this buyback for private profit, and the buyback is a result of political contributions to senators and congressmen in Alaska. *Id.*

116. *Id.* (scroll down to “Here are links for recent articles regarding the buyout and fisheries related topics” heading). Some of the links are dead or no longer archived but others remain and contain strong sentiments against the buyback.

117. Terry Tomalin, *Grouper Buyback Okayed in Weighted Vote*, ST. PETERSBURG TIMES, Dec. 14, 2005, available at [http://www.sptimes.com/2005/12/14/State/Grouper\\_buyback\\_okaye.shtml](http://www.sptimes.com/2005/12/14/State/Grouper_buyback_okaye.shtml). This article quoted local fishermen as follows:

Opponents of the plan say it will not reduce the number of fish caught, but simply maximize profits for the small group of boat owners who drafted the plan. “That is a scam if I ever heard of one,” said Keith Hawkins, a commercial fisherman from Tampa. “The big longliners raped the gulf and now they want to put all the little guys out of business so they can catch what is left.” And the National Marine Fisheries Service, he said, “is helping them do it.” Ellis Dozier, a commercial fisherman from Steinhatchee, said the vote was “rigged from the start.” “Most of the people I know didn’t even vote,” he said. “The feeling was why bother. They knew what the results would be right from the start.” The controversy stems partly from the vote being “weighted.” That meant the votes of fishermen who caught the most grouper carried the most weight.

Additionally, the fact that the exact breakdown of the weighted votes will remain secret (because commercial landings are not public record) does little to allay the suspicions. *Id.*

102. *Id.*

103. *Id.*

104. GROUPE BUYBACK PROGRAM UPDATE, *supra* note 88.

105. *Id.*

106. *Id.*

107. *Id.*

108. See *infra* note 117. The discrepancy between the weighted and unweighted voting would later become a contentious point. See, e.g., *infra* note 115.

109. GROUPE BUYBACK PROGRAM UPDATE, *supra* note 88, at 5.

110. *Id.*

111. *Id.*

112. *Id.* at 7-8.

113. *Id.* at 7-8.

114. *Id.* at 11.

capacity and overfishing through voluntary buyouts.”<sup>118</sup> A brief paragraph in this letter succinctly reviewed the pre- and post-hurricane problems with the Gulf fishery and suggested a voluntary buyback as one possible solution:

Shrimp and red snapper are overcapitalized. Red snapper is also overfished. In addition the charterboat sector is overcapitalized, targeting reef fish and mackerel. Inventories are incomplete, but many vessels in these three fisheries have been damaged or lost in the northern Gulf. A voluntary buyout of vessels and permits in these fisheries would help fishermen who choose to exit the fishery following the storms, and, at the same time, would reduce overcapitalization and support recovery of overfished reef fish.<sup>119</sup>

The letter goes on to offer a bit more detailed recommendation for the proposed buyback, asking Congress to

[f]ully fund a voluntary buy-back program for vessels and permits in federally managed Gulf fisheries with limited entry. Vessels bought-back would be scrapped and permits would be permanently retired. The Council’s first priority is for shrimp vessels and permits, second priority is for red snapper vessels and permits, and third priority is for charterboat vessels and permits.<sup>120</sup>

In conjunction with these buyback efforts, the GMFMC stressed the need for “job retraining for fishermen who want to voluntarily leave the Gulf fishery.”<sup>121</sup> At the time of this writing, there was no evidence of a congressional response to this letter.

## 2. Other Sources Suggesting Buybacks

As early as September 19, 2005, a Congressional Research Service briefing, which reported to the GMFMC on hurricane issues, suggested a form of buyback in response to the hurricane.<sup>122</sup> The report noted an opportunity in the shrimp industry for a “capacity reduction program to remove vessels and licenses permanently from the fleet.”<sup>123</sup> The report went on to suggest that the program could be funded as a form of disaster relief, providing damage compensation for those selling licenses and vessels while reducing competition for those remaining in the industry.<sup>124</sup>

Also, Environmental Defense, one of the groups instrumental in the Moro Bay trawler buyback, has advocated for a number of congressionally funded “smart tools for recovery” in the wake of the hurricanes.<sup>125</sup> Environmental Defense listed “voluntary vessel buyouts and job retraining for fishermen who choose to leave” as tools of “smart disaster relief”; in line with this sentiment, Environmental Defense supported the GMFMC’s buyback suggestion.<sup>126</sup> Environ-

mental Defense also recommended IFQs as an important part of this relief strategy.<sup>127</sup>

## IV. Analysis of Buybacks for the Gulf

The GMFMC letter to Congress raises the buyback issue, but it provides no detailed suggestions for buyback structure or design. Likewise, while the Congressional Research Service and Environmental Defense advocated for a buyback program, they did not offer any details for a working plan. The following section hopes to pick up where these suggestions left off and to consider the successes and failures of past buybacks in shaping a buyback plan designed for the problems of the Gulf. This section hopes to suggest ways to repeat the successes of the Pacific buybacks as well as to avoid some of the criticisms of the proposed grouper buyback.

### A. Structure of a Buyback in the Gulf

Of most immediate concern is the actual structure of a proposed Gulf buyback. Funding for the program, the sine qua non of a buyback, represents the first, and possibly highest, hurdle. Assuming that funding is available, the experience of other buyback programs shows that participation in program design may be key to the acceptance of a buyback. Finally, a correctly crafted bid process and job retraining program will be key to the success of a Gulf buyback.

#### 1. Funding Issues<sup>128</sup>

□ *Federal Funding.* It is obvious that for any buyback to function, funds must be available to buy the vessels or permits in question. The GMFMC’s letter seems to wish away this threshold funding problem by requesting that Congress fully fund the buyback initiative. While it certainly cannot hurt to ask, it is unlikely that such generosity will be forthcoming.

Full federal funding for the buyback appears improbable for a number of reasons. First, such wholesale funding is un-

127. *Id.*

128.

Under section 312(b) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the National Marine Fisheries Service (NMFS) has the authority to conduct a fishing capacity reduction program if funds are provided and it is determined that such a program is necessary to prevent or end overfishing, rebuild stocks of fish, or achieve measurable or significant improvements in the conservation and management of the fishery. Under the authority of this section, the Secretary may buy back vessels and/or fishing permits in order to obtain the maximum sustained reduction in fishing capacity at the least cost and in a minimum period of time. Declaration of a fishery resource disaster is not required to authorize such a program.

The capacity reduction program must be consistent with any State and Federal fishery management plans in place for that fishery. Funding for such programs is authorized under Section 312(c) of the Magnuson-Stevens Act and allows NMFS to obtain funding under authorization of the Saltonstall-Kennedy Act, through specific appropriations, from industry fee systems, and from public, private, or non-profit sources.

NOAA Fisheries Office of Management & Budget, *Fishing Capacity Reduction Programs*, [http://www.nmfs.noaa.gov/mb/financial\\_services/buyback.htm](http://www.nmfs.noaa.gov/mb/financial_services/buyback.htm) (last visited Aug. 31, 2006).

118. Letter from Gulf of Mexico Fisheries Management Council, to Senators Thad Cochran and Trent Lott I (Oct. 7, 2005), <http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Ltr%20to%20Cochran%20and%20Lott.pdf> (last visited Aug. 30, 2006) [hereinafter Letter to Senators Thad Cochran and Trent Lott].

119. *Id.*

120. *Id.* at 3.

121. *Id.*

122. CRS REPORT FOR CONGRESS, *supra* note 29, at 5.

123. *Id.*

124. *Id.*

125. *Battered Gulf Fisheries*, *supra* note 7.

126. *Id.*

precedented. In every example of a federally funded buyback, from the Pacific groundfish fleet to the BSAI crab fleet to the Gulf grouper fleet, Congress has demonstrated a preference for a loan system rather than a full buyback subsidy. While the overwhelming tragedy of the present situation definitely differentiates the Gulf from those past examples, it is not clear that the widespread destruction actually helps the buyback's funding chances. There is an argument that Congress should be more willing to fully fund a post-hurricane buyback because it combines emergency relief with correction of fisheries problems, and in the wake of such a disaster, some might expect Congress to act more generously. Conversely, the extent of the hurricanes' destruction will likely spread federal aid money thin, and rebuilding fisheries might not be the first priority for many congressmen. In fact, as early as November 2005, Congress demonstrated signs of "Katrina fatigue" and appeared to scale back relief money for the hurricane afflicted areas.<sup>129</sup> Fisheries may simply lack the glamour or power as an industry to compete with other requests for federal money. Even though this buyback may be more urgent than those of the past, Congress may actually be less likely to approve full funding for this project.

For any post-hurricane buyback plan to be successful, then, its viability must not rely on complete federal funding. Realistically, any federally sponsored post-hurricane buyback would more likely resemble the buybacks of the past and involve a federal loan to be repaid by those remaining in the industry. Yet the extent of the hurricanes' damage casts doubts even on this time-proven funding formula. A loan to fund this buyback would require significant federal capital upfront, and the federal government, having already spent so much on post-hurricane efforts, may simply be unable or unwilling to loan that quantity of money for a buyback.

A buyback program relying on a loan might create other administrative problems as well, because any repayment scheme that would burden those remaining in the industry would likely require industrywide approval. Using the grouper buyback as an example, any federal buyback loan would ultimately have to be repaid by those remaining in the industry, so there would have to be industrywide consent for such a program. Gaining such consent would require a voting process similar to that in the grouper buyback, and the results could cause similar controversy. Additionally, since the hurricanes displaced so many residents, voting and even basic information gathering have proven difficult,<sup>130</sup> so by the time an effective vote could be taken a buyback program may be too late to provide hurricane relief.<sup>131</sup>

□ *Private Funding.* As an alternative to federal funding, the GMFMC might court private organizations to fund the buyback, similar to the Moro Bay trawler buyback program. Environmental Defense, one of the Moro Bay buyback funders, has publicized ideological support for buybacks as

a tactic for post-hurricane fisheries rebuilding,<sup>132</sup> so the GMFMC might seek their financial support as well. Additionally, the GMFMC could approach other organizations to help fund at least a portion of the capital needed for a Gulf buyback.

Such private funding may be as hard to come by as its federal counterpart, though. First, because of the size of the affected fleets, the Gulf buyback would likely be a much larger project than the Moro Bay program was, and private funding may not be sufficient to get this buyback off the ground. Also, similar to the federal government, private organizations might not prioritize fisheries issues in the face of so much post-hurricane need. For example, while Environmental Defense did publish support for a buyback, The Nature Conservancy, another key player in funding the Moro Bay buybacks, has not mentioned the possibility of such a fishery buyback.<sup>133</sup> In a plan proposing recovery efforts after the hurricanes, The Nature Conservancy recommended a buyback of land and habitat to restore the natural resources,<sup>134</sup> but never mentioned a similar fleet buybacks for the fishing industry. While fisheries concerns may have been beyond the scope of The Nature Conservancy's proposal, it is telling that an organization that sponsored such a recent and successful fisheries buyback did not even mention the option in the Gulf. So private funding, like federal funding, may be unavailable because it is already committed to other hurricane relief causes or because it does not recognize fisheries as a priority.

□ *Funding From Recreational Fishermen.* Recreational fishermen could represent one additional source of possible buyback funding. For example, if recreational fishermen were required to purchase a stamp along with their fishing licenses, the proceeds from the stamp could fund commercial buybacks. In fact, the FWC discussed such a plan but acknowledged that the program could result in conflicts between federal and state law.<sup>135</sup> Relying on recreational fishing interests to fund a hurricane-relief buyback may suffer from a number of other problems as well. Whether such a stamp program could generate sufficient funds for a large-scale buyback is doubtful, and recreational fishing interests, which also suffered damage from the hurricanes, might not be enthusiastic about any added burden. Also, if at all feasible, the proposed stamp program would likely only work for species like grouper that support both a recreational and commercial fishery; the already slim possibility for success almost disappears for fisheries like shrimping, which have few recreational components.<sup>136</sup> Still, a Gulf buyback may require creative funding sources like recreational fishermen, and even if a stamp program could not fund the whole

132. *Battered Gulf Fisheries*, *supra* note 7.

133. See THE NATURE CONSERVANCY, HURRICANES KATRINA AND RITA RECOVERY (2005), <http://www.clear.lsu.edu/clear/web-content/Testimonies/TNC.pdf> (last visited July 14, 2006).

134. *Id.* at 3.

135. The funds from stamp sales would go into the state treasury, but the permits to be bought back were federally issued. GROUPER BUYBACK PROGRAM UPDATE, *supra* note 88, at 12.

136. On the other hand, recreational fishermen, like those represented in the CCA, may support a shrimp industry buyback because the bycatch of the shrimping industry has had severe effects on the snapper fisheries, so a reduction in shrimping pressure could improve the recreational snapper fishery. See CCA Legal Action Demands Emergency Measures for Red Snapper, *supra* note 20.

129. See, e.g., Donna Brazile, *Don't Give In to Katrina Fatigue, There Are Still Millions of Gulf Coast Americans Who Need Our Help*, TIME, Nov. 28, 2005, available at <http://www.time.com/time/archive/preview/0,10987,1132809,00.html>.

130. Even civic elections have been postponed and absentee ballots have created a problem. See, e.g., People for the American Way, *The Obstacles Voters Face*, <http://www.pfaw.org/pfaw/general/default.aspx?oid=20879> (last visited July 14, 2006).

131. Such a program would still decrease the overcapitalization in the fishery, but would likely lose the added benefit of providing relief.

buyback, it could represent just one of many funding sources needed to raise the necessary capital.

## 2. Cooperative Participation in Design

The experiences of other buybacks, particularly the Moro Bay and grouper buybacks, demonstrate that cooperative involvement in program design and consensus building can greatly affect the success of a buyback program. For example, the Moro Bay buyback was greeted with wide support because various interests, both commercial and environmental, all participated in shaping the program. The opposite is true of the grouper buyback, which was plagued with distrust, suspicion, and allegation, even between and among members of the commercial fishing industry. Bearing in mind the very different experiences of these two buyback programs, naturally a Gulf buyback should try to mimic those aspects of the Moro Bay program that led to its success and avoid the failings of the grouper project. The most obvious way to do this is to consciously attempt, as the Moro Bay project did, to involve various stakeholders and interests in as much of the planning as possible. While attempting to reach an agreement between groups might make the planning aspects of the program more difficult, a cooperative design should make implementation much easier and pave the way for success.

Recommending that a program be based on a consensus agreement is easy; actually building the consensus is the challenge. Nonetheless, hopefully the GMFMC can repeat the success of the Moro Bay buyback by involving both large- and small-scale members of the industry in the design process. Additionally, the GMFMC should consciously manage any post-hurricane buyback program to avoid the criticisms that plagued the grouper buyback. Unfortunately, the need to act relatively quickly in administering hurricane aid might not allow time to build an ideal consensus arrangement. In that case, the next best technique seems to be involving stakeholders when possible and otherwise conducting the process in a highly transparent manner. By keeping the public informed, a Gulf buyback program may be able to avoid some of the pitfalls of the grouper program and instead foster trust, cooperation, and acceptance.

## 3. Bid Process

Though the bidding process may not be the biggest of the buyback challenges, it does raise important issues because it can work both to assure that fishermen are not bought out unfairly and to guarantee the maximum fishery impact per buyback dollar spent. Presumably, the basic bid system would resemble those in the buybacks discussed above, and each fisherman would propose the value of his business based on past landing records. Assuming this information is still available, such bidding could be simple, but the hurricanes may have destroyed landing records and otherwise created valuation problems. Thus, the GMFMC will have to decide what documents, if any, a fisherman will need to prove the value of his business.

Additionally, for a buyback program designed as a relief measure, it might not make sense to focus solely upon catch history or extraction levels to decide which bids are accepted. From a relief point of view, it may actually be most productive to buy back permits only from those who lost

their equipment. Such an approach would focus more on aiding those who lost their livelihoods. Conversely, if one really wanted to remove maximum harvesting capacity, only the largest extractors with the lowest bids should be bought out; this approach more closely resembles the model of other buybacks, which sought to maximize harvest capacity removed per dollar spent. So, the GMFMC must decide what balance of relief and capacity reduction the buyback wishes to strike. These concerns amount to policy choices that the GMFMC is fully competent to make. It is important, though, that such choices be considered before implementing a post-hurricane buyback.

## 4. Job Training

For many along the Gulf Coast, fishing is not only a livelihood but also a part of their culture and heritage.<sup>137</sup> For some fishing is all they know, for others fishing is all they want to know.<sup>138</sup> The fact that the proposed buyback is voluntary will, of course, allow those who wish to remain in the fishing industry to do so, but that does not solve the problem of those who leave the industry but know no other trade. Additionally, fishermen that are bought-out but not retrained are likely to merely relocate on the Gulf and return to the fishing industry, and such location shuffling will do little to solve the Gulf's fisheries problems. Thus, job training and transitional resources will be necessary for relocating former fishermen to other employment, and the success of this relocation will be a large factor in the success of any Gulf buyback.

Recognizing this challenge, the GMFMC's buyback proposal letter acknowledged the importance of job training. In fact, the GMFMC's proposal specifically called for "job retraining for fishermen who want to voluntarily leave the Gulf fishery" as well as for alternate work arrangements like "funding to contract with fishing vessels to remove hurricane debris from state and federal waters."<sup>139</sup> While the proposal calls for funding, it remains vague about what exactly these retraining programs might be. The letter suggests that former fishermen may be trained as "shrimp fishery observers and reef fishery observers,"<sup>140</sup> but these two options cannot represent the extent of the retraining program.

A socioeconomic report from 1999 did contemplate some other possible jobs for former fishermen: "aquaculture; special enrollment onto welfare; special incentives for community development; and others,"<sup>141</sup> but again this list seems merely an afterthought. Really, it appears that the GMFMC has not fully considered the job training or placement pro-

137.

Shrimping is part of southern culture, a trade that is passed on and binds generations and families. For Nguyen and the many other Vietnamese immigrants, many now subsisting on donated food, shrimping was their American dream . . . "You've got families displaced out of heritages and livelihoods . . . It's the only thing they've known," [said Joey Rodriguez, a shrimper from Alabama].

Associated Press, *Katrina Could Be End of Line for Gulf Shrimpers*, ST. PETERSBURG TIMES, Sept. 15, 2005, [http://www.sptimes.com/2005/09/15/Business/Katrina\\_could\\_be\\_end\\_shtml](http://www.sptimes.com/2005/09/15/Business/Katrina_could_be_end_shtml) (last visited Aug. 31, 2006).

138. *Id.* Many retirees from the industry even find it difficult to stop fishing.

139. Letter to Senators Thad Cochran and Trent Lott, *supra* note 118, at 3.

140. *Id.*

141. REPORT OF THE SOCIOECONOMIC PANEL, *supra* note 12, at 35.

grams that will be crucial to the success of a buyback. Again, the experience of the PFMC might provide some examples worth following in the Gulf.

Though not directly addressing buybacks, the PFMC has considered programs for job training and support for fishermen transitioning out of the industry.<sup>142</sup> For example, the PFMC has developed “Groundfish Disaster Outreach Programs” and “Groundfish Disaster Relief Programs” in Oregon and California, respectively.<sup>143</sup> These programs, designed to help families cope with local groundfish disasters, include information on transitioning from the fishing industry, a six-step process to help with the transition, some financial management counseling, and references to other job opportunities.<sup>144</sup> While the PFMC’s program may fall short of ideal, it does provide an example from which to work. By simply designing a resource similar to the PFMC’s programs, the GMFMC could provide a better organized and more comprehensive job training and transition program. More ambitiously, the GMFMC could attempt to improve upon the PFMC’s resource and greatly increase a buyback program’s likelihood of success.

### B. Political Feasibility

Because the GMFMC proposed a buyback, one can assume that a post-hurricane buyback is politically feasible. In fact, a buyback program might be very popular because it would provide both hurricane relief and improve fisheries. Still, it is worth considering the possible political impediments to a buyback program.

#### 1. General Concerns

One might imagine that the controversy surrounding the grouper buyback program would create a public relations problem for a post-hurricane buyback, but hopefully the situations are different enough that this is not an issue. Also, as discussed above, conscious efforts to include interested stakeholders in designing a post-hurricane buyback should be able to avoid many of the problems the grouper buyback encountered.

More likely, the political issues for a post-hurricane fisheries buyback will revolve around the question of what priority does commercial fishing deserve in the allocation of limited funding. Especially with a buyback, which requires such a heavy capital expenditure, it may be difficult to convince people that fisheries are of such immediate concern that they should trump the many other requests for aid.

#### 2. Concerns Among Fishermen

Again, hopefully cooperation and transparency will lead to a buyback program that can satisfy all interested parties. But counter arguments can be made against even the best-designed policy. This section attempts to anticipate some of the criticisms against the buyback that may be made by or on behalf of fishermen.

Some might argue that even though the buyback would be voluntary, reduction of Gulf fishing fleets amounts to de-

struction of cultural heritage. Such a point of view might equate supporting a buyback to underwriting cultural destruction. This viewpoint, if widespread, could lead fishing communities to resist the buyback. Given the circumstances, though, major resistance on these grounds seems unlikely. After all, it is not the buyback that will destroy livelihoods; it was the hurricanes that did. Hopefully, the buyback will be seen as assistance and improvement rather than a blow to the fishing community.

Another possible objection to the buyback is that it will create fishing cartels, leaving the fishing industry in the hands of a few major players rather than allowing it to be shared among small family operations.<sup>145</sup> Similar worries of creating fishing trusts arose in the criticism of the grouper buyback.<sup>146</sup> If the voluntary nature of the buyback does not alleviate these concerns (which it did not in the grouper buyback), then any hurricane relief buyback must take steps to avoid them. Of course, the first way to avoid these suspicions would be to have a transparent, participatory design process for the buyback. If criticisms persist, though, an industrywide referendum may ultimately be necessary to justify the program, and, as the grouper buyback demonstrated, such a vote would likely require an unweighted majority to pass. Such measures might add to the implementation time and complexity of the buyback plan, but would hopefully prove worthwhile by building support.

Finally, fishermen might hesitate to sell to a buyback program if they believe an IFQ program will soon follow and guarantee a profitable industry. People may make the economic decision to remain in the fishery in order to receive their allocated IFQ share. Because of the massive destruction to fisheries fleets, though, most fishermen may not be in a position to hold out for this economic speculation.

### V. Considerations to Ensure Effectiveness

If designed and implemented correctly, a post-hurricane buyback should help alleviate some of the pre- and post-hurricane fisheries problems. Most urgently, a buyback could provide relief to those whose livelihoods have been destroyed. Additionally, a buyback should reduce derby fishing by reducing the number of vessels in the fleets; this solution may only be temporary, though, and an IFQ will probably be necessary to eliminate derby fishing.<sup>147</sup> A buyback of shrimp vessels in the Gulf would also likely decrease bycatch, improving both the red snapper fishery<sup>148</sup> and the ecosystem in general.<sup>149</sup>

145. Similar criticisms have been made against IFQs. See, e.g., Pietro Parravano et al., *Can't We Just Get Along, It's Time for Fishing Groups to Find an Accord on IFQs*, FISHERMEN'S NEWS, Nov. 2002, available at <http://www.pcffa.org/fn-nov02.htm>.

146. See Tomalin, *Grouper Buyback Okayed in Weighted Vote*, *supra* note 117.

147. Actually, and IFQ will probably make derby fishing worse before it makes it better, but the long-term reduction should be beneficial. There are reports that implementation of an IFQ will actually increase derby fishing just before the IFQ is put in place because fishermen will want to maximize their allotted quotas. GROUPEL BUYBACK PROGRAM UPDATE, *supra* note 88, at 8.

148. See CCA Legal Action Demands Emergency Measures for Red Snapper, *supra* note 20.

149. For example, a reduction of the shrimp fleet might benefit the population of the endangered Kemp's Ridley Sea Turtles in the Gulf, which are often caught in shrimp nets that lack turtle exclusion devices. Carole H. Allen, *An Ill Wind Might Help the Shrimp Industry!*,

142. PFMC, *Disaster Relief and Assistance for Families and Businesses*, <http://www.pcouncil.org/communities/families.html> (last visited July 13, 2006).

143. *Id.*

144. *Id.*

Yet all of these benefits rely on a properly designed and implemented buyback program. Of course, no system will be perfect, but by relying on the lessons learned from other buyback programs and keeping the following points in mind, the GMFMC should be able to design a workable Gulf buyback.

#### A. Cooperation Can Make or Break a Buyback

The Moro Bay buyback showed some very successful design elements that any hurricane relief buyback (or any other buyback hoping for success) should strive to repeat. Though an obvious tactic that has been mentioned repeatedly, cooperation and understanding between interested parties cannot be overstressed.

#### B. A Buyback Is Not the Complete Solution

A post-hurricane buyback may be a popular solution for the Gulf fisheries and may be more easily accepted than the grouper buyback in the Gulf was. Managers of the Gulf fishery should not allow the popularity of a buyback plan to overshadow the limitations of the buyback, though. A buyback may represent an immediate form of aid to the Gulf, but it will not be the complete solution. Thus, any buyback plan should be designed with other management reforms in mind. A Gulf buyback program should follow the example of the Moro Bay success and should complement buybacks with new management techniques such as heightened gear requirements for bycatch reduction, lower TACs, improved scientific techniques for limit calculation, or even fishing closures or limitations in some critical habitat areas. Since a buyback would benefit those remaining in the industry by reducing competition, the GMFMC should tie this boon to the burden of stricter management.

Finally, the GMFMC should bear in mind that a buyback program should not end when the vessels are bought back. For example, the Moro Bay buyback program contained plans to continue monitoring and working with those fishermen who remained in the industry. Such continued monitoring also benefited the Pacific groundfish buyback program, which began considering IFQ programs after it determined that the buyback alone would not be sufficient. The GMFMC should embrace a similar plan of follow-up work and monitoring within the fisheries to assess the successes and remedy the failures of the buyback.

#### C. IFQ Programs

A variety of groups, from the PFMC to FWC to Environmental Defense<sup>150</sup> and even to the GMFMC,<sup>151</sup> have sug-

gested or employed IFQs in some capacity. From all these organizations, there appears to be a general agreement that IFQs are needed; unfortunately, there also seems to be agreement that IFQ programs will take time and study before being implemented. Since buybacks can be instituted more quickly, they make sense as an interim measure, but the GMFMC should maintain a commitment to working toward IFQs as soon as possible. Thus, the GMFMC should plan on a buyback that allows and prepares for an IFQ program to follow.

#### D. Address Neighboring States

The hurricanes destroyed many of the Gulf's commercial fishing fleets, but not all of them, and the GMFMC should keep this consideration in mind when designing and presenting a buyback plan. For example, some accounts state that "Texas shrimpers escaped unscathed," while the hurricanes destroyed fleets in Louisiana.<sup>152</sup> Also, even though the hurricanes reduced the size of the shrimp fleet, shrimp harvests have not decreased because enterprising fishermen from neighboring states have taken advantage of the reduced competition.<sup>153</sup> For purposes of equity and popularity, then, the GMFMC must be careful not to design a buyback that essentially removes the fishing industry from one state and hands it to another.

## VI. Conclusion

Buybacks are a logical first thought for dealing with the hurricane-ravaged Gulf fishery because they can potentially solve both pre- and post-hurricane problems. Fisheries managers must be careful, though, not to rely solely on this seemingly easy fix. A hurricane relief buyback does appear to be a beneficial tactic, but it must remain an interim tactic in order to cause any long-term benefit in the Gulf fishery.

While a buyback may appear to be a fix-all, it is really just a band-aid. There will be much more action needed for the Gulf fishery to recover. The road to sustainability in the Gulf fisheries will be a long one, and it will likely require great management and monitoring improvements over the next decades. Though a Gulf buyback would be just the first step of this journey, it appears to be a step in the right direction.

151. An IFQ program for the snapper fishery is already being established and the GMFMC is looking into establishing one for Grouper. See *IFQ Referendum Overwhelmingly Approved*, GULF FISHERY NEWS, Apr./May 2006, <http://www.gulfcouncil.org/Beta/GMFMCWeb/newslet/NEWSLTR-03-2006.pdf>; GROUPE BUYBACK PROGRAM UPDATE, *supra* note 88, at 5.

152. *Katrina Could Be End of Line for Gulf Shrimpers*, *supra* note 137.

153. E-mail correspondence with Jim Cowan, Professor, Coastal Fisheries Institute and Department of Oceanography and Coastal Sciences School of the Coast and Environment at Louisiana State University (Dec. 14, 2005) (on file with author).

HELP ENDANGERED ANIMALS RIDLEY TURTLES, Oct. 7, 2005, <http://www.ridleyturtles.org/> (last visited July 14, 2006).

150. Individual Fishing Quotas, An Important Management Tool to Promote Sustainable Fisheries, [http://www.environmentaldefense.org/documents/1969\\_IFQbrief4.pdf](http://www.environmentaldefense.org/documents/1969_IFQbrief4.pdf) (last visited July 14, 2006).