

DUBIOUS DE-LISTINGS:

Louisiana's Push To Remove Protections For Polluted Waters

A report by the Gulf Restoration Network June 2002

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Introduction

Clean Water Act Requirements

The Clean Water Act of 1972 created the laws protecting this nation's rivers, lakes, and streams. For the first time, our government was required to clean up all unfishable and unswimmable waters in this country- waters that are contaminated with both polluted runoff and point source pollution. Nearly thirty years later, however, about 40% of the waters in this country are still polluted.

Section 305(b)

Section 305(b) of the Clean Water Act requires each state to assess the quality of the state's waters every two years and submit their findings, in the form of a report, to Congress. Until recently, the Louisiana Department of Environmental Quality (DEQ) was gathering water quality data in all areas of the state every year. Now, under a "rotating basin approach," the state monitors only a portion of the twelve basins in the state each year. This means that most water bodies in the state are only monitored once every five years.

Section 303(d)

Section 303(d) of the Clean Water Act calls on the state to list its polluted water bodies and to set priorities for their cleanup. This list, commonly referred to as the "303(d) list," is submitted to Congress every two years and is based on information in the state's 305(b) water quality assessment. For every water body on this list, DEQ is required to develop a cleanup plan, also known as a "Total Maximum Daily Load" or "TMDL." The TMDL is a calculation of the maximum amount of a pollutant that a water body can handle and still be safe for swimming and fishing, as well as a plan for cleaning up the water to meet water quality standards. The Environmental Protection Agency (EPA) is responsible for reviewing and approving TMDLs, and it is held responsible for the state's progress in addressing water pollution problems in a timely manner.

Litigation and Consent Decree

Unfortunately, until as recently as 1999, the state of Louisiana failed to develop cleanup plans for polluted waters listed on the 303(d) list. As a result of a lawsuit brought by Earthjustice Legal Defense Fund on behalf of the Sierra Club and the Louisiana Environmental Action Network (LEAN), EPA Region 6 in Dallas entered into a consent decree in April 2002, which sets forth a schedule for completing cleanup plans for all waters listed on the state's 303(d) list (see Table 1).

Water Basin	# Cleanup Plans	Date Cleanup Plans are Supposed to be Completed by DEQ
	Needed	
Barataria	154	03/31/04
Terrebonne	369	03/31/08
Sabine	10	03/31/08
Pearl	42	03/31/09
Atchafalaya	29	03/31/10
Red	174	03/31/08
Pontchartrain	309	03/31/12
Mississippi	64	03/31/11





Now that DEQ has started to develop these TMDLs, it is up to members of the public to make sure that these plans actually help clean up polluted waters throughout the state. It is also essential that the public take an active role in encouraging DEQ to include all polluted waters in the 2002 303(d) list, so that these waters will be in line for cleanup.

The 1998 303(d) List of Polluted Waters

Assessment Statistics¹

According to Louisiana's 2000 305(b) Water Quality Assessment, DEQ has monitored only 14% of a total of 66,294 miles of streams and rivers found in the state. Of the rivers and streams assessed, only 26% meet water quality standards. DEQ estimates that it has monitored only 62% of about 1,078,031 acres of freshwater lakes and reservoirs. Of the total acres assessed, only 57%, or 378,960 acres, are considered clean. DEQ has monitored 65% of the state's 7,656 square miles of estuaries. Only about 33% are considered safe for fish, wildlife, and recreation activities. Finally, DEQ has assessed only about 13% of the state's total 12,659 square miles of wetlands. Only about 52% of the wetlands assessed, or about 845 square miles, are safe for fish, wildlife, and human recreation.

Pollutant Types and Sources²

Louisiana has determined that about 1,650 water quality problems exist in streams, creeks, rivers, lakes, reservoirs, ponds, coastlines, and estuaries throughout the state. However, given that most of the water bodies in the state have not yet been assessed, the actual number of pollution problems in the state is probably much higher than this. The top ten pollutants that are contaminating the waters of Louisiana are listed in Table 2.

Pollutant Name	# Problems Reported	Percent of Total
Sediment/Siltation	264	16%
Metals	253	15%
Organic Enrichment/Low	211	13%
Dissolved Oxygen		
Nutrients	189	11%
Pathogens	186	11%
Oil and Grease	151	9%
Pesticides	94	6%
Salinity	91	6%
Priority Organics	54	3%
Noxious Aquatic Plants	45	3%

Table 2. Top Ten Impairments Found in Louisiana Waters

The sources of these pollutants range from agricultural farm runoff of sediment, nutrients, and pesticides to overwhelmed sewer treatment plants and faulty septic tanks that serve as a significant source of disease-causing bacteria and viruses (pathogens). Many of

¹ 2000 Section 305(b) Assessment Report. Louisiana Department of Environmental Quality. http://www.deq.state.la.us/planning/305b/2000/305b-3.htm.

² 1998 Section 303(d) List Fact Sheet for Louisiana. U.S. EPA Office of Water. <u>http://oaspub.epa.gov/waters/state_rept.control?p_state=LA</u>. May 9, 2002.

these pollutants threaten the health of both the humans who swim and fish in these waters and the aquatic environment.

Polluted Waters By Basin

According to DEQ's 1998 303(d) list, the largest number of pollution problems occurs in the coastal waters in the west central part of the state. Polluted water bodies in this area include the coastal bays of the Atchafalaya and Barataria basins, Bayou du Large, Bayou Grand Caillou, Bayou Lafourche, Bayou Terrebonne, the Houma Navigation Canal, the Intracoastal Waterway, and many others. The primary pollutants of concern in this region are oil and grease contamination, high nutrient levels, disease-causing bacteria, low dissolved oxygen, mercury, and pesticide contamination.

Coastal waters in the east central region of Louisiana were also identified as having a large number of pollution problems. Water bodies in this region include Barataria Bay, Lake Washington, Bayou Barataria, Bayou Des Allemands, Bayou Gauche, Bayou Segnette, and many others. Similar to the west central coastal region, the primary pollutants of concern in this region are oil and grease contamination, high nutrient levels, disease-causing bacteria, and low dissolved oxygen.

Eastern coastal Louisiana was also identified as a highly polluted region of the state. Water bodies in this region include Bayou Bienvenue, Bayou Labranche, Bayou Savage, Bayou St. John, Bayou Trepagnier, the Bonnet Carre Spillway, the Mississippi River Gulf Outlet, and many others. Pathogens, oil and grease, and low dissolved oxygen are identified as the top three water pollutants in this region of the state.

Table 3 documents the number of impairments found in the ten most polluted watersheds in the state of Louisiana.

Watershed Name	# Water Bodies Polluted	Percent of Total
West Central Louisiana	49	14%
Coastal		
East Central Louisiana	28	8%
Coastal		
Eastern Louisiana Coastal	24	7%
Bayou Teche	22	6%
Vermilion	20	6%
Lower Pearl	18	5%
Mermentau	14	4%
Liberty Bayou-Tchefuncta	14	4%
Lower Grand	13	4%
Atchafalaya	12	3%

Table 3. Top Ten Polluted Watersheds in the State of Louisiana

The 2002 303(d) List of Polluted Waters

As mentioned earlier, the Clean Water Act requires all states in the U.S. to submit a list of polluted waters (known as the "303(d) List") to EPA on April 1 of every evennumbered year. This means that the past two lists should have been submitted to EPA in April 2000 and April 2002. For various reasons, however, most states were not required to submit a 2000 303(d) list. In addition, EPA made the decision to delay the deadline for the states to submit their 2002 303(d) list to October 1, 2002. In short, Louisiana DEQ has not finalized a polluted waters list in about four years.

Currently, DEQ is in the process of compiling their new 2002 polluted waters list. It will be largely left up to the public to make sure that the 2002 list is an accurate listing of all known polluted waters in the state of Louisiana, based on the best available information and accurately reflecting changes in water quality (for the better or worse) that have taken place over the last four years.

While DEQ intends to meet the October 1 deadline imposed by EPA, they do not know when the list will be fully compiled and released for the required 30-day public comment period. Unfortunately, this 30-day comment period will be one of the only opportunities for members of the public to ensure that all polluted waters are listed and that no waters are inappropriately removed, or "de-listed," from this list.

Dubious De-listings

DEQ has publicly announced that they will be removing or "de-listing" as many waters from the 2002 polluted waters list as possible, claiming that many waters were inappropriately listed in the first place. It is very important that waters are not removed from this list if they are still polluted, as waters that are de-listed will not receive a cleanup plan. While de-listing might be warranted for some of the waters on the list, DEQ's justifications for removing many of these waters are questionable, as outlined in the five case studies discussed below.

Because local communities are often the most well-informed about local water quality problems, they should have a strong say in whether or not their local stream, creek, or lake is declared clean by DEQ and removed from the state's list of polluted waters. Therefore, it is important that members of the public be informed of DEQ's proposed delistings and be given ample opportunity to voice their concerns.

DEQ's Incentives for De-listing Polluted Waters

Developing cleanup plans, or TMDLs, for waters listed on the state's impaired waters list is quite costly. In fact, a recent study completed by the EPA estimates that the average cost of developing a cleanup plan is roughly \$52,000, with a range in cost between

\$26,000 and \$500,000³. This estimate does not include costs associated with implementation of the cleanup plan (e.g., erosion control activities, or installation of new technology that more effectively treats wastewater), which are supposed to be covered by the polluter. Needless to say, the development of cleanup plans for each water body listed on the state's impaired waters list represents a huge financial commitment by the state of Louisiana. Sadly, the lack of money to support DEQ's water quality program is an incentive for DEQ to de-list as many waters as possible.

However, DEQ is not justified in saving money at the expense of public health and poor water quality. It is DEQ's responsibility to cleanup all polluted waters in the state, no matter what the cost. Additionally, there is firm evidence that DEQ's claims of insufficient funds to address water pollution problems are unwarranted. According to a legislative audit of DEQ's performance completed in March 2002, DEQ neglected to collect nearly \$4.5 million in monetary penalties assessed in fiscal years 1999, 2000, and 2001.⁴ According to DEQ, the fines collected for penalties are one of the largest sources of money for DEQ's water quality program.⁵ If DEQ were to collect outstanding penalties from industries that are responsible for much of the water contamination problems, they would have ample monies to support a TMDL program that addresses all water pollution problems in the state of Louisiana.

Implications of De-listing Polluted Waters

As described earlier, a TMDL sets a pollution cap for a water body and sets out a plan for reducing levels of pollution to a safe level. If a water body is removed from the 303(d) list, it will not receive a cleanup plan, or TMDL. As a result, sources of pollution, such as industrial discharge and agricultural runoff, will not be reduced and the water will never be cleaned up.

Another, less obvious result of removing a polluted water body from this list is that the water body is, in effect, declared clean and is left open to receive additional pollution inputs from industries and development. For instance, if a water body is not listed on the list of polluted waters, it is much easier for new pollution sources to obtain permits to discharge pollutants into that water body. In short, inappropriately removing a polluted water from the 303(d) list can have dire consequences, both for the people who depend on these waters for their drinking water supply, recreation, and food, and for the ecosystem health at large.

Overview of Proposed De-listings in Each Basin

DEQ has not yet assembled a draft list of waters it intends to remove from the 2002 impaired waters list. During the past two years, however, DEQ and EPA Region 6 have

³ The National Costs of the TMDL Program (Draft report). August 1, 2001. U.S. EPA, Office of Water. Washington, D.C.

⁴ State of Louisiana Legislative Auditor. Department of Environmental Quality Performance Audit. March 2002. Baton Rouge, LA.

⁵ Deposition. Dale Givens, Secretary of DEQ. Page 82. Lines 14-22.

proposed over 300 de-listings in the Calcasieu, Mermentau, Vermilion-Teche, and Ouachita River Basins. These de-listings represent almost 60% of all the waters identified as polluted in these four river basins. Table 4 includes the number of delistings in each of these four river basins. At present, EPA has approved 304 out of the 305 de-listings that have been proposed by the state.

Unfortunately, these 300+ de-listings are only the tip of the iceberg. Large numbers of additional de-listings may be proposed during the upcoming months in watersheds throughout the state of Louisiana.

River Basin	De-listings Rejected	De-listings Approved by
	DY EPA	LPA
Calcasieu River Basin	-	32
Mermentau River Basin	-	50
Vermilion-Teche River Basin	-	81
Ouachita River Basin	1	141
Total	1	304

Table 4: De-listings in Each Basin (as of June 13, 2002)

Case Study 1: Calcasieu and Ouachita River Basin De-listings: Where's the Proof?

As DEQ and EPA endeavor to remove as many waters from the 2002 polluted waters list as possible, they are forgetting to provide members of the public with one key piece of information: the reason why these waters are no longer considered polluted.

In March 2002, EPA proposed 20 de-listings in the Calcasieu and Ouachita River Basins for dangerous pollutants such as priority organics (e.g., benzene and toluene) and dioxins. These proposed de-listings are included in Attachment 1. However, no data or information supporting 16 out of 20 of the proposed de-listings was provided to members of the public to review. Sadly, EPA approved all 20 of these de-listings from the state's 2002 303(d) list of impaired waters on June 13, 2002, despite the fact that adequate justification for the proposed de-listings was not provided to the public on EPA's website.

According to a federal TMDL advisory committee formed in 1998, waters should only be removed from the state 303(d) list when (1) new data show the listed water has attained water quality standards or (2) new information shows that the original listing was in error. In addition, all information and data used to show that the water is currently meeting water quality standards must be provided to the public for review. Without this information, it is impossible for members of the public to make detailed, informed comments on the validity of the proposed de-listings.

Until new information or data that support proposed de-listings are made available to the public for review, with an adequate opportunity for the public to comment,

the water segments should be considered impaired and TMDLs should be developed to address all pollutant concerns.

Case Study 2: Little River and the Calcasieu Estuary: Are they Really Clean?

Little River, Big Problem

Several water bodies that have been recently proposed for de-listing in the Calcasieu and Ouachita River Basins actually have documented pollution problems. For example, in February 2002 EPA proposed 150 de-listings in the Ouachita and Calcasieu River Basins (see Appendix 2), including a section of Little River in the Ouachita River Basin, a scenic river that stretches from Bear Creek to Catahoula Lake.

The justification provided for de-listing Little River was that no fish consumption advisory had been put into effect for this river segment. However, a careful review of the state's most recent mercury report, released in September 2001, shows that a fish consumption advisory is, in fact, in effect for this section of Little River because of dangerous levels of mercury found in fish tissue samples.⁶ According to the State's mercury report, each site in Little River that was tested for a potential fish advisory has eight or nine samples above the 0.5 ppm fish consumption advisory level, including several above the 1.0 ppm FDA level. In short, DEQ's own data show that Little River has serious mercury pollution problems, serious enough to warn people to limit their consumption of fish taken from this river. De-listing of this segment for mercury contamination is clearly not protective of human health and neglects to address a known water pollution problem.

Fortunately, EPA took a step forward in protecting human health and the environment by rejecting DEQ's proposal to de-list Little River on June 13, 2002.

Calcasieu Contamination not Considered

On June 13, 2002, EPA approved de-listing for several water bodies in the south central part of the state for dangerous pollutants, despite the fact that EPA's own research shows that the waters are polluted with these same pollutants. Earlier this year, EPA proposed that six water bodies in the Calcasieu River Basin, Lake Charles, Prien Lake, Moss Lake, Contraband Bayou, Calcasieu River (from below Moss Lake to the Gulf of Mexico), and Calcasieu Lake, be removed from the polluted waters list for pollutants known as "priority organics" (carbon-based substances that tend to attach to fats, oils, and suspended clay particles, and may pose a significant health risk to people, fish, and wildlife). However, EPA did not provide data to the public that support the removal of these waters from the list and, unbelievably, failed to consider data from its own study.

⁶ 2000 Annual Mercury Report: Mercury Contamination Levels in Louisiana Biota, Sediments, and Surface Waters 1994-2000. September 2001. LDEQ. Baton Rouge, LA.

<u>the Calcasieu Estuary Initiative</u>⁷, that indicate these waters are severely polluted with priority organics such as chlorobenzene, BEHP (a substance used to make plastics flexible), PCBs, and dioxin.

In addition, fish and sediment contamination advisories for priority organic pollutants are currently in place for the Calcasieu River and Estuary, Bayou d'Inde (which feeds directly into Prien Lake), and Bayou Olsen where it feeds into Lake Charles. These advisories are direct evidence that the Calcasieu River from below Moss Lake to the Gulf of Mexico, Prien Lake, and Lake Charles should not be removed from the 2002 list of impaired waters for priority organic contamination.

The data generated by the Calcasieu Estuary Initiative study come as little surprise. The waters in the Calcasieu Estuary, from northern Moss Lake to the salt water barrier at Lake Charles, have been exposed to the poisonous chemicals from chemical manufacturing and petroleum refining companies since the early 1920s, when nearby petroleum and gas reserves were discovered. This area now supports more than ten major petroleum refining and chemical operations that produce a wide range of industrial chemicals, petroleum products, and commercial feedstocks. Given the historical use of these waters as industrial dumping grounds, it is highly likely that the sediment and fish are contaminated with dangerous pollutants such as PCBs, mercury, lead, and other toxics that have been released into these waters for the past 80 years.

All available information and data that indicate a water contamination problem must be considered before DEQ or EPA propose to remove waters from the 2002 polluted waters list. Polluted waters that are inappropriately removed from the list as a result of inadequate consideration of all data will not be cleaned up and will continue to pose a threat to human health and the aquatic environment.

Case Study 3: De-listing Dirty Waters

Many waters throughout the state have already had cleanup plans, or TMDLs, developed for them. While TMDLs are *supposed* to outline a plan for cleaning up a water body for a particular pollutant, many of these plans do not describe detailed steps for achieving clean water goals. As a result, these plans are very hard to implement, and essentially do nothing to clean up polluted waters. Many states in the U.S., including Louisiana, believe that once a TMDL plan is completed, the water body can be removed from the polluted waters list (i.e., de-listed), despite the fact that the water may still be severely polluted. This policy makes it difficult to use the 303(d) list as an accurate measure of the status of water quality in the state; just because a TMDL plan was completed, doesn't mean it was successfully implemented to clean up the polluted water body.

To date, DEQ and EPA have prepared hundreds of TMDLs for polluted waters in the state of Louisiana. While this may sound like a lot of progress toward cleaning up our

⁷ Calcasieu Estuary Initiative. EPA Region 6. Superfund Division. <u>http://www.epa.gov/earth1r6/6sf/sfsites/calcinit.htm</u>. May 10, 2002.

state's waters, the effectiveness of these plans is very questionable. For instance, while many of these plans describe the pollution cap and reductions in pollution needed for a particular river or stream to be considered clean, the specific sources of pollution are often not identified, and a plan for achieving the necessary pollution reductions is seldom described. In short, these cleanup plans offer no assurances that the water will actually be cleaned up.

By de-listing waters that have received cleanup plans, but no actual cleanup, the DEQ is sending false signals to the public that the water is now clean and safe to use. Impaired waters for which TMDL plans have been developed but not successfully implemented should remain on the 2002 impaired waters list until they are clean and meeting water quality standards.

Case Study 4: Bacteria Contamination Overlooked by DEQ

When DEQ or EPA propose to de-list a river or stream from the list of impaired waters, the water must be shown to be in compliance with water quality standards. According to current Louisiana water quality standards, in order to show that a water is not contaminated with disease causing bacteria and viruses (i.e., "pathogens"), the following criteria must be met:

Based on a minimum of <u>not less than five samples taken over not more</u> <u>than a 30-day period</u>, the fecal coliform content shall not exceed a log mean of 200/100 mL, nor shall more than 10 percent of the total samples during any 30-day period or 25 percent of the total samples collected annually exceed 400/100 mL. These primary contact recreation criteria shall apply only during the defined recreational period of May 1 through October 31. During the nonrecreational period of November 1 through April 30, the criteria for secondary contact recreation shall apply (emphasis added).⁸

It is clear from the above criteria that at least five water quality samples taken in a 30-day time period are necessary to conclude that waters are not polluted with bacteria.

Despite this requirement, EPA recently approved the de-listing of nine water bodies in the Calcasieu and Ouachita River based on bacteria data that was only collected once per month. Clearly, the amount of data used by DEQ to justify these de-listings is inadequate. More alarming, however, is the fact that the limited data that DEQ *did* collect indicate that bacteria levels in some of these rivers are over 40 times the acceptable limit. Table 5 outlines the data taken for these water bodies, and the degree to which several of these waters violate state water quality standards.

⁸ Environmental Regulatory Code. Part IX: Water Quality. 2001. State of Louisiana. Department of Environmental Quality. Page 55.

Water Body Name	Maximum Bacteria Count Measured (MPN/100 mL)	Bacteria Criteria: Primary Contact Recreation (400 MPN/100 mL) and Secondary Contact Recreation (2,000 MPN/100 mL)	Exceedance of Louisiana Water Quality Criteria
Calcasieu River and	5,000	400	12.5 times higher
Ship Channel			
Bayou D'Inde	900	400	2.25 times higher
Bayou Lafourche	16,000	2,000	8 times higher
(near Oakridge)			
Castor Creek	9,000	2,000	4.5 times higher
(headwaters to Little			
River)			
Hemphill Creek	16,000	400	40 times higher
(headwaters to			
Catahoula Lake)			

Table 5: Bacteria Data and Criteria Violations for Waters DEQ Says Are Clean⁹

Bacteria contamination is a serious health concern that must be fully addressed by our state and federal environmental protection agencies. Limited data collected by the state show that serious bacteria contamination problems remain in waters proposed for delisting by DEQ and EPA, as illustrated in Table 5. A sufficient amount of bacteria data (i.e., at least five samples during a 30-day period, as required by the state standard) must be collected and determined to satisfy the state's current water quality standards, before DEQ or EPA can conclude that the water body is clean and can be removed from the state's list of polluted waters.

Case Study 5: The Dead Zone Dilemma

One of the most widely-known water pollution problems currently facing Louisiana is the heavy input of nutrients (e.g., nitrogen) into the Gulf of Mexico, which leads to the formation of the "Dead Zone," an area of extremely low oxygen levels where marine life cannot easily survive. The source of the large amount of nutrients entering the Gulf has been identified by the federal Hypoxia Task Force, which was formed to find solutions to the problem, as agricultural runoff from upriver states.

The potential environmental and economic impacts of the Dead Zone are, like the Dead Zone itself, enormous. Gulf fisheries alone produce almost 40% of the U.S. commercial fishing yield in the lower 48 states and support about one-third of recreational fishing trips in the nation. In 2000, three of the top five commercial fishing ports in terms of

⁹ Letter correspondence. From Robert P. Hannah, DEQ to Sam Becker, EPA Region 6. September 24, 2001. Table 3. Page 8.

landings and two of the top five ports in terms of value were located in the Gulf. Numerous scientific studies have linked the Dead Zone to reductions in catches of fish in the Gulf.¹⁰ Unfortunately, upriver states have expressed reluctance to address nutrient problems in their states, which contribute to the formation of the Dead Zone each spring in the northern Gulf of Mexico. It seems clear that these states will not take action unless, and until, Louisiana moves forward to address its own nutrient contamination problems.

Safe nutrient levels have not yet been set for waters in the state of Louisiana, or for any other state in the United States. Without this information, it is very difficult for Louisiana to determine whether the nutrient levels in a particular river, lake, or estuary are low enough for fish and wildlife survival and human recreation uses. State nutrient criteria are not expected to be adopted until the end of 2004, more than two years from now.

It is, therefore, essential that all nutrient impairments in waters throughout the state of Louisiana be taken seriously. As a precaution, water bodies that are currently listed as polluted with excess nutrients should not be de-listed until adequate data are collected that prove that nutrient pollution is not a problem. Despite this, DEQ has proposed to de-list at least 20 water bodies that were identified as polluted with high nutrient levels, basing their decision on very limited water quality data.

Given the magnitude of the problem that Louisiana faces with nutrient pollution, in combination with the fact that safe nutrient levels have not yet been set for Louisiana waters, nutrient de-listings should not be considered by DEQ and EPA during the formulation of the 2002 list of impaired waters. It is essential that no waters be removed from the state's impaired waters list that are currently identified as polluted with excess nutrients until science-based site-specific nutrient criteria are adopted for all the waters in the state of Louisiana and sufficient nutrient data are taken that show these waters are meeting these criteria.

Listing All Polluted Waters

As DEQ develops its 2002 list of polluted waters, it is essential that the state evaluate all available data and information when deciding which water bodies should be listed and receive clean up. While regulations require DEQ to consider *all* readily available data

¹⁰ Smith, J.W. Distribution of Catch in the Gulf Menhaden, Brevoortia patronus, Purse Seine Fishery in the Northern Gulf of Mexico from Logbook Information: Are There Relationships to the Hypoxic Zone? 2000. American Geophysical Union.

Zimmerman, R.J. and James M. Nance. Coastal Hypoxia: Consequences for Living Resources and Ecosystems, Effects of Hypoxia on the Shrimp Fishery of Louisiana and Texas. 2001. American Geophysical Union.

Grimes, Churchill B. Fishery Production and the Mississippi River Discharge. August 2001. Fisheries.

and information, DEQ does not make use of diverse data sources, such as citizen monitoring data, in its listing decisions. Data and information sources that DEQ should consider when developing the 2002 list include, but are not limited to, data from universities and research facilities; fish and shellfish consumption advisories; data collected by state and federal agencies (i.e., the U.S. Geological Survey and the Natural Resource Conservation Service are two federal agencies that collect a wealth of water quality data); citizen water quality monitoring data and information; sediment sampling data; scientific articles and reports; and any other quantitative and qualitative information that indicates a water body is not safe for humans, fish, and wildlife.

Previous attempts by DEQ to dubiously de-list dozens of water bodies cast a shadow of doubt over DEQ's development of the 2002 list of polluted waters. While DEQ has emphasized the fact that they intend to remove as many waters from the list as possible, they have not addressed the fact that hundreds of waters throughout Louisiana remain extremely polluted and need to be *added* to the list in order to receive proper cleanup. Table 6 includes the names of several water bodies that are *not* currently included on DEQ's list of polluted waters, as well as the data and/or information that supports listing of these waters. The GRN believes these waters should be added to DEQ's 2002 polluted waters list.

Water Body	Segment that	Pollutant	Other	Information or
Name	Requires	for Which	Pollutants	Data that Supports
	Listing	Segment	Segment is	Listing
		Should be	Already Listed	
		Listed	For	
Inner Harbor	Mississippi	Priority	Oil and Grease,	Sediment testing
Navigation	River Lock to	Organics	Low Dissolved	undertaken by Dr.
Canal	Lake		Oxygen,	Barry Kohl, which
	Pontchartrain		Pathogens,	found priority
			Salinity	organic
				concentrations that
				far exceed standards
New River	Headwaters to	Pathogens	Noxious	Observations of
	New River	_	Aquatic Plants,	sewage leaks by
	Canal		Oil and Grease,	members of the
			Priority	public
			Organics,	-
			Salinity	
Wham Brake	Ouachita River	Dioxin	None	Fish advisory listed
	Basin			in DEQ's 2000
				annual mercury
				report
Mississippi	From Old River	Nutrients	Mercury,	Dead Zone Action
River	Control		Pesticides,	Plan: identifies high
	Structure to		Dioxin,	levels of nitrogen

Table 6	· Water	Bodies	that Should	he Added t	DEC)'s 2002 List	of Polluted	Waters
	. water	Douics	that Should	UC AUUCU U		2 S 2002 LISU	of I offuture	vv aters

	Monte Sano		Siltation,	(N) and nitrate in the
	Bavou: Head of		Pathogens, Oil	lower Mississippi
	Passes to Mouth		and Grease	River (the total N
	of Passes: and			concentration in the
	the Mississippi			lower Mississippi is
	River Basin			estimated to have
	Coastal Bays			increased by a factor
	and Gulf			of 1.3 since 1905
	Waters to State			and the nitrate has
	three-mile limit			increased by a factor
	three mile milit			of 25) and calls for
				a 30% reduction in
				total N reaching the
				Gulf
Pearl River	Holmes Bayou	Mercury	None	Fish advisory listed
	to Lake Borgne	wiereury	1 VOIIC	in DEO's 2000
	to Lake Dorghe			annual mercury
				report
Bayou	Arkansas State	Mercury	Lead Other	Fish advisory listed
Bartholomew	Line to Dead	wiereury	Inorganics	in DEO's 2000
Darthololliew	Bayou		Pathogens	annual mercury
	Dayou		Pesticides	report
			Suspended	report
			Solide	
			Sullus, Turbidity	
West Fork	from the	Moroury	None	Fish advisory listed
Colossion	iunction of	wiercury	INOILE	in DEO's 2000
Divor	Hickory Crock			annual marcury
KIVEI	and Backwith			annual mercury
	Creals to			report
	Cleek to			
	the Colossien			
	lile Calcasleu			
Cataboula	Nivel Quachita Divar	Maraumy	Oil and Craaca	Fish advisory listed
Laka	Duacinta Kivei	wiercury	Solinity	in DEO's 2000
Lake	Dasin		Samily	annual marcury
				annual mercury
Waters in the	The Tickfow	Mercury	Tickfaw	Fish advisory
Tickfaw	River from	ivicicul y	Nitrogen	announced in a
River	Hwy 12 to Lake		Pathogens	$\frac{1}{07}$
watarchad	Mauranas the		Phoenhorus	Dicayuna articla
watersheu	Natalbany Divor		Solinity	i icayune article
	from the		Summerded	
	hoodwaters to		Suspended	
	the Tiels to		Natalhany	
	Divor the		Codmium	
1	Kivel, ule	1	Caumum,	

Blood River,	Copper, Lead,
Lizard Creek,	Low Dissolved
and	Oxygen,
Ponchatoula	Pathogens,
Creek	Phosphorus,
	Salinity,
	Suspended
	Solids
	Blood: none
	Lizard: none
	Ponchatoula:
	none

Recommendations

Nine recommendations for DEQ and EPA's development of the 2002 impaired waters list are provided below. These recommendations *must* be put into place if we are to ensure that all polluted waters in the state are cleaned up.

- 1. Waters should only be removed from the 303(d) list with accurate and adequate water quality data, which prove that they are clean and meeting water quality standards;
- 2. Sediment and fish tissue data need to be considered before a water body is proposed for de-listing for pollutants that tend to accumulate in the sediments and bioaccumulate up the food chain;
- 3. Data that represent a conflict of interest (i.e., data that are taken by a polluter) should not be considered when making de-listing proposals, unless the data are independently verified;
- 4. De-listing should not take place until the water body is meeting water quality standards, even when cleanup plans (TMDLs) have been developed;
- 5. Strict and accurate interpretation of the state's water quality standards must take place to ensure that only waters that are not in violation of standards are removed from the list of impaired waters;
- 6. The public must be provided with all data and information that supports delistings proposed by DEQ and EPA;
- 7. DEQ and EPA must take into consideration all available water quality data when making de-listing decisions;
- 8. Waters should not be de-listed for pollutants (e.g., nutrients) that have no established water quality criteria that can be used to demonstrate the water is clean; and
- 9. Water bodies included in Table 6 should be added to DEQ's 2002 list of polluted waters.