



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
646 Cajundome Blvd.  
Suite 400  
Lafayette, Louisiana 70506



May 18, 2016

Mr. Elliot B. Vega  
Assistant Secretary  
Office of Environmental Services  
Louisiana Dept. of Environmental Quality  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

Dear Mr. Vega:

Please reference our March 22, 1996, Memorandum of Understanding (MOU) with the Louisiana Department of Environmental Quality (LDEQ) regarding federally listed threatened and endangered species, and the Louisiana Pollutant Discharge Elimination System (LPDES) program. In accordance with the terms of that MOU, the Fish and Wildlife Service (Service) is pleased to provide LDEQ with the enclosed current list of sensitive areas (i.e., waters deemed important for the conservation of threatened and endangered species). In September 1996, our agencies developed an implementation strategy for the Scope-of-Work section of the subject MOU. That strategy (which has been updated annually since 1997) included a list of sensitive areas, types of permits, notices of intent, substances of concern, and listed species for which the Service has requested coordination, in accordance with provisions of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

As we have done in the past, the Service intends to continue that implementation strategy (enclosed) for this federal fiscal year (October 2015 through September 2016). We have also reviewed the revised subsegment boundaries LDEQ provided us on March 21, 2016. We have also enclosed some specific species information that should provide additional guidance in determining whether LDEQ should coordinate with the Service for certain permitted discharges to the listed sensitive waterbodies. In addition, please take note of the inclusion of selenium in the list of substances of interest in Section II.2.1.

The Service appreciates the continuing cooperation of LDEQ in the conservation of federally listed species. If you or your staff have any comments or require further information, please have them contact Ms. Amy Trahan (337/291-3126) of this office.

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RECEIVED

Sincerely,

A handwritten signature in black ink, appearing to read "Darryl Clark". The signature is fluid and cursive, with a large initial "D" and a long, sweeping underline.

Darryl Clark  
Acting Field Supervisor  
Louisiana Ecological Services Office

Enclosures

cc: Mr. Matt Hubner, EPA, 6WQ-EW, Dallas, TX  
Mr. Scott Guilliams, LDEQ-WQAD, Baton Rouge, LA  
Mr. Bruce Fielding, LDEQ, Baton Rouge, LA  
Ms. Heather Babin, LDEQ, Baton Rouge, LA  
Ms. Steph Braden, LDEQ, Baton Rouge, LA  
LDWF, Natural Heritage Program, Baton Rouge, LA

**2015-2016 Implementation Strategy for the  
Louisiana Department of Environmental Quality  
and the U.S. Fish and Wildlife Service  
Memorandum of Understanding**

Section II. Scope of Work

Section II.1 LDEQ and the Service will follow the procedures described in the MOU. The Service, by November 1, 2016, will provide LDEQ a list of all federally listed threatened and endangered species in Louisiana that are dependant on aquatic habitat.

<u>SPECIES</u>	<u>HYDROLOGIC SUBSEGMENTS</u>
Alabama (= inflated) heelsplitter mussel	040101, 040103, 040302
Fat pocketbook mussel	070101, 070201
Atlantic sturgeon, critical habitat*	040102, 040103, 040301, 040302, 040303, 040304, 040305, 040401, 040402, 040501-040503, 040505, 040601, 040602, 040604, 040701- 040704, 040801-040804, 040901, 040902, 040904, 040905, 040906, 040908, 040910, 040911, 041001, 041002, 041301, 041302, 041401, 041701, 041702, 041703, 041704, 041901, 042001-042004, 042201, 042202, 042203-042206, 042207, 042209, 070601, 090101-090107, 090201-090208, 090301, 090401, 090501, 090506
	<i>*See Addendum for additional information.</i>
Louisiana pearlshell mussel	060208, 060209, 101301, 101302
Louisiana quillwort	040804, 040904, 090501, 090506
Pallid sturgeon	010101, 010201, 010501, 010502, 010801-010803, 070101, 070103, 070201, 070301, 070502, 100101, 100201
Pink mucket pearly mussel	080101, 080401, 080701

Rabbitsfoot mussel	080101, 080401, 080701
Ringed map (= sawback) turtle	090101-090106 (excluding 090104), 090201-090207, 090501, 090502
West Indian manatee	040302, 040401, 040403, 040501, 040502, 040503, 040601, 040602, 040702, 040902, 040904, 040906, 040908, 040911, 041001, 041002, 041701, 041703, 041704, 042001, 042101, 042202

Section II.2 LDEQ and the Service will follow the procedures described in the MOU except that the Service will only request coordination on those permits that fall into one or more of the following seven categories:

1. The proposed permit occurs in a subset of sensitive waters defined as those subsegments where the following species occur, and the regulated discharge contains one or more of the substances listed below:

<u>SPECIES</u>	<u>HYDROLOGIC SUBSEGMENTS</u>
Alabama (= inflated) heelsplitter mussel	040101, 040103, 040302
Fat pocketbook mussel	070101, 070201
Atlantic sturgeon, critical habitat*	040102, 040103, 040301, 040302, 040303, 040304, 040305, 040401, 040402, 040501-040503, 040505, 040601, 040602, 040604, 040701- 040704, 040801-040804, 040901, 040902, 040904, 040905, 040906, 040908, 040910, 040911, 041001, 041002, 041301, 041302, 041401, 041701, 041702, 041703, 041704, 041901, 042001-042004, 042201, 042202, 042203-042206, 042207, 042209, 070601, 090101-090107, 090201-090208, 090301, 090401, 090501, 090506

\*See Addendum for additional information.

Louisiana pearlshell mussel	060208, 060209, 101301, 101302
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Louisiana quillwort	040804, 040904, 090501, 090506
Pallid sturgeon	010101, 010201, 010501, 010502, 010801-010803, 070101, 070103, 070201, 070301, 070502, 100101, 100201
Pink mucket pearly mussel	080101, 080401, 080701
Rabbitsfoot mussel	080101, 080401, 080701
Ringed map (= sawback) turtle	090101-090107 (excluding 090104), 090201-090206, 090501, 090502
West Indian manatee	040302, 040401, 040403, 040501, 040502, 040503, 040601, 040602, 040702, 040902, 040904, 040906, 040908, 040911, 041001, 041002, 041701, 041703, 041704, 042001, 042101, 042202

### Substances

Endosulfan  
 Hexachlorobenzene  
 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)  
 Arsenic  
 Chromium III  
 Chromium VI  
 Zinc  
 Cadmium  
 Copper  
 Lead  
 Mercury  
 Nickel  
 Cyanide  
 Pentachlorophenol (PCP)  
 Selenium; or

2. The proposed permit is for a major (i.e., flow of one million gallons per day or more) sanitary sewage treatment facility (not covered under a General Permit for Class I, II, III, or IV Sanitary Dischargers), and is located in the sensitive areas described in Section II.2.1; or
3. The proposed permit is for a landfill (other than those covered under Construction/Demolition Debris and Woodwaste Landfill [LAG780000] and

Municipal Solid Waste Landfill [LAG660000] General Permits) and is located in the subset of sensitive areas described in Section II.2.1; or

4. The proposed permit is for a facility applying for coverage under the General Permit for Cement, Concrete, and Asphalt Facilities (LAG110000) and is located in the sensitive areas described in Section II.2.1; or
5. The proposed permit is for an electrical generating facility located in the sensitive areas described in Section II.2.1; or
6. The proposed permit is for a sand and gravel operation (including those applying for coverage under the General Permit for Sand and Gravel Extraction Facilities [LAG490000]) and is located in a subset of sensitive waters expected to support the Louisiana quillwort (subsegments 040804, 040904, 090501, 090506), the Alabama heelsplitter mussel, the Louisiana pearlshell mussel, the fat pocketbook mussel, the pink mucket pearly mussel, the rabbitsfoot mussel, the Atlantic sturgeon, the pallid sturgeon, or the ringed map turtle; or,
7. The proposed permit is for a facility utilizing a cooling water intake structure that is regulated under §316(b) of the Clean Water Act and is located in the sensitive areas described in Section II.2.1.

If a proposed permit falls into one or more of the above categories, the proposed discharge may affect a listed species and coordination should be initiated with the Service to: (1) determine if an adverse effect exists, and (2) explore ways to remove the effect.

Because hydrologic subsegments often cover large geographic areas, it is expected (for species with restricted distributions) that some proposed permits located in sensitive areas may not affect a species because the species is not actually present at that proposed discharge site. However, if an effect exists and that effect can be removed, a “not likely to adversely affect” determination will be made by LDEQ on the modified permit and submitted to the Service for concurrence. If no agreement can be reached between the Service and LDEQ, procedures for consulting with EPA as outlined in the MOU will be followed.

Based on LDEQ effluent limitations established for the protection of aquatic life and maintenance of the receiving waters as aquatic habitat, proposed permits not falling into those above-described categories are not likely to adversely affect listed species; therefore, no coordination with the Service is required. Similarly, no further coordination with the Service is required for any permits (individual or general) that would be renewed under the LPDES program for which the Service has already reviewed and provided concurrence, provided that those permits contain more stringent limitations and/or do not contain any changes/modifications in permit limitations.

Section II.3 LDEQ and the Service will follow the procedures described in the MOU. Based on effluent limitations established for the protection of aquatic life and maintenance of the receiving waters as aquatic habitat, the Service has determined that the following general permits are not likely to adversely affect listed species; and therefore, no coordination is required:

- Automotive Facilities and/or Repair Shops (LAG470000)
- C & D Landfills (LAG780000)
- Concentrated Animal Feeding Operations (LAG010000)
- Dewatering Petroleum Tanks (LAG300000)
- Exterior Vehicle Wash Wastewater (LAG750000)
- Hydrostatic Test Wastewater (LAG670000)
- Light Commercial Facilities (LAG480000)
- Multi-Sector General Stormwater (LAR050000)
- Municipal Solid Waste Landfills (LAG660000)
- Oil and Gas Activities (LAG330000)
- Petroleum UST Systems Cleanup (LAG830000)
- Potable Water Treatment Plants (LAG380000)
- Sanitary Discharge Class I (LAG530000)
- Sanitary Discharge Class II (LAG540000)
- Sanitary Discharge Class III (LAG560000)
- Sanitary Discharge Class IV (LAG570000)
- Small Municipal Separate Storm Sewer Systems (LAR040000)
- Storm Water for Construction Activities (LAR100000)
- Storm Water for Small Construction Activities (LAR200000)
- Treated Groundwater (LAG940000)
- Vessel Cleaning and Repair and Shipyards (LAG030000)
- Oil and Gas (Territorial Seas) (LAG260000)
- Short Term General Permit (LAG420000)

Section II.4 LDEQ and the Service will follow the procedures outlined in this section. LDEQ will send a list of anticipated renewals for all permits falling in all sensitive areas as defined under Section II.1, and all other information as detailed in this section.

Section II.5 LDEQ and the Service will follow the procedures described in the MOU.

**Addendum to Sections II.1 and II.2 of the  
Implementation Strategy for the  
Louisiana Department of Environmental Quality (LDEQ)  
and the U.S. Fish and Wildlife Service (Service)  
Memorandum of Understanding (MOU)**

A. Species-specific information regarding the Gulf sturgeon:

The Atlantic sturgeon (*Acipenser oxyrinchus desotoi*), federally listed as a threatened species, is an anadromous fish that occurs in many rivers, streams, and estuarine waters along the northern Gulf coast between the Mississippi River and the Suwannee River, Florida. In Louisiana, Atlantic sturgeon have been reported at Rigolets Pass, rivers and lakes of the Lake Pontchartrain basin, and adjacent estuarine areas. Spawning occurs in coastal rivers between late winter and early spring (i.e., March to May). Adults and sub-adults may be found in those rivers and streams until November, and in estuarine or marine waters during the remainder of the year. Sturgeon less than two years old appear to remain in riverine habitats and estuarine areas throughout the year, rather than migrate to marine waters. Habitat alterations such as those caused by water control structures that limit and prevent spawning, poor water quality, and over-fishing have negatively affected this species.

On March 19, 2003, the Service and the National Marine Fisheries Service (NMFS) published a final rule in the Federal Register (Volume 68, No. 53) designating critical habitat for the Atlantic sturgeon in Louisiana, Mississippi, Alabama, and Florida. Portions of the Pearl and Bogue Chitto Rivers, Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, and Lake Borgne within Louisiana were included in that designation. The primary constituent elements essential for the conservation of Gulf sturgeon are those habitat components that support feeding, resting, sheltering, reproduction, migration, and physical features necessary for maintaining the natural processes that support those habitat components; those elements should be considered when determining potential project impacts. The primary constituent elements for Atlantic sturgeon critical habitat include:

- abundant prey items within riverine habitats for larval and juvenile life stages, and within estuarine and marine habitats for juvenile, sub-adult, and adult life stages;
- riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone, or hard clay;
- riverine aggregation areas, also referred to as resting, holding and staging areas, used by adult, sub-adult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths, believed necessary for minimizing energy expenditures during freshwater residency and possibly for osmoregulatory functions;
- a flow regime (i.e., the magnitude, frequency, duration, seasonality, and rate-of-change of freshwater discharge over time) necessary for normal behavior, growth,



and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging; and necessary for maintaining spawning sites in suitable condition for egg attachment, egg sheltering, resting, and larvae staging;

- water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages;
- sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and
- safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (e.g., a river unobstructed by a permanent structure, or a dammed river that still allows for passage).

In that critical habitat designation, responsibility for consultation with specific Federal agencies was also identified for the Service and for the NMFS. For estuarine and marine waters in Louisiana, the NMFS is responsible for consultations regarding impacts to the sturgeon and its critical habitat with all Federal agencies, except the Department of Transportation, the Environmental Protection Agency, the U.S. Coast Guard, and the Federal Emergency Management Agency, which consult with the Service. Therefore, please contact Dr. Stephania Bolden (727/824-5312) in St. Petersburg, Florida, for information concerning that species and its critical habitat within marine waters.

B. Specific information regarding listed subsegments for the Atlantic sturgeon:

In an effort to provide more accurate information for the Atlantic sturgeon and their known locations and potential habitats than what is listed in Sections II.1 and II.2 of the MOU, the Service offers the following specific information for individual subsegments that are listed for the Atlantic sturgeon.

1. For the following subsegments, the Service requests review of those permits that would discharge into either the primary waterbody or its perennial primary tributaries:

040301 – Amite River and perennial primary tributaries  
 040302 – Amite River and perennial primary tributaries  
 040303 – Amite River (Diversion Canal) and perennial primary tributaries  
 040304 – Perennial primary tributaries of the Amite River  
 040305 – Perennial primary tributaries of the Amite River  
 040401 – Blind River and perennial primary tributaries  
 040402 – Amite River Diversion Canal and perennial primary tributaries  
 040501 – Tickfaw River and perennial primary tributaries  
 040502 – Tickfaw River, Blood River, and perennial primary tributaries  
 040503 – Natalbany River and perennial primary tributaries  
 040505 – Ponchatoula Creek and River, and perennial primary tributaries

040701 – Tangipahoa River and perennial primary tributaries  
040702 – Tangipahoa River and perennial primary tributaries  
040801 – Tchefuncte River and perennial primary tributaries  
040804 – Bogue Falaya River and perennial primary tributaries  
040901 – Bayou Lacombe and perennial primary tributaries  
040902 – Bayou Lacombe and perennial primary tributaries  
040905 – Bayou Liberty and perennial primary tributaries  
040906 – Bayou Liberty and perennial primary tributaries

2. For the following subsegments, the Service requests review of those permits that would discharge into the primary waterbody only:

040102 – Comite River only  
040103 – Comite River only  
040601 – Pass Manchac and North Pass only  
040602 – Lake Maurepas only  
040604 – Owl Bayou only  
040703 – Big Creek and East Fork only  
040704 – Chappepeela Creek (both branches) only  
040803 – Tchefuncte River only  
040904 – All primary streams only  
040908 – Bayou Bonfouca only  
041702 – Bayou Sauvage and Chef Menteur Pass only

3. For the following subsegments, the Service requests review of those permits that would discharge into any waterbody within the subsegment:

040802, 040910, 041001, 041002, 041701, 041703, 041704, 041901, 042001,  
042003, 042201 – 042207, 042209, 070601, 090101 – 090107, 090201 – 090208,  
090301, 090401, 090501, 090506