OIL SPILL CONTINGENCY PLAN FOR ANAHUAC NATIONAL WILDLIFE REFUGE

Prepared by Brian W. Cain

July 1993

Oil Spill Contingency Plan

For

Anahuac National Wildlife Refuge

Intent

This plan is intended to serve as a step by step guide for refuge personnel to minimize exposure of refuge land and wildlife to an oil spill that occurs in the Gulf Intracoastal Waterway (GIWW) or that enters East Bay (Fig.1).

Because it may take several hours before professional oil spill responders and cleanup crews arrive, the emergency efforts of refuge personnel may play a key role in reducing any impact to refuge land and wildlife resources. Appendix A is a list of the priorities for Service response as outlined in the Service's Contingency Plan (SCP).

This plan pertains **only** to spills of petroleum products that may impact the Anahuac National Wildlife Refuge (ANWR). Because of the threat to human health involved in responding to hazardous material spills, evacuation may be the appropriate response. Service policy states that Service personnel will not enter hazardous waste sites without specific Regional clearance. There are many opportunities for hazardous material to be released from barge traffic in the GIWW so caution must be employed when responding to barge releases.

Following this introduction is a numbered, step by step, response sequence that should be followed in the event an oil spill is discovered or reported that will likely impact refuge land or resources. Three most likely oil spill scenarios are covered in this plan. These three scenarios (Appendix B) are:

- A. A pipeline rupture that enters the GIWW.
- B. A barge release within the GIWW.
- C. A spill that enters East Bay.

After completing steps one through eight proceed to the appropriate scenario for further response actions. Actions which should be taken in order to prepare for a spill are presented in Appendix C. Equipment needs are presented in Appendix D. Wildlife capture and rehabilitation instructions are presented in Appendix E. Other persons and their telephone numbers, that may need to be contacted, are listed in Appendix F.

Remember that all reasonable expenses incurred during this response will be reimbursed by the Oil Spill Fund or the responsible party.

Priority Response Sequence

- 1. Cease all non essential work. If more than one staff member is available, assign one to make the telephone contacts (step 2-6) while other personnel proceed immediately to step 7. If only one staff member is available, begin with the phone calls as listed (step 2-6). **Start recording all expenses.**
- 2. If the refuge management has not bee notified, call:

Andy Loranger: Home (281) 576-5218 Office (409) 267-3337 Kelly McDowell: Home (409) 359-2240 Office (409) 267-3337 Ed Bass: Home (409) 833-6497 Office (409) 267-3337

3. If they have not already been notified, call:

National Response Center 1 (800) 424-8802 Texas General Land Office 1 (800) 832-8224

> La Porte Field Office (281) 470-6597 Nederland Field Office (409) 727-7481

Marine Safety Office (409) 766-3687

Texas Railroad Commission (713) 460-0631 (pipeline spills)

U.S. FWS Coordinator - Brian Cain

Office (281) 286-8282 Home (281) 480-7418 Mobile (713) 542-1873

- 4. Tell them:
 - a. Your name and callback number.
 - b. Exact location, nature, and access to the incident.
 - c. Extent of personal injuries, fire, or major damage.
 - d. Wind speed and direction (if possible).
 - e. If identifiable, the type of material and any name of barge or pipeline visible. **ONLY trained personnel should ever approach a fire or spill.**
- 5. Call other refuge personnel that have the ability to operate heavy equipment or boats. **Keep accurate records of time.**
- 6. If responsible party is identified or known, call the emergency number of that company (see Appendix F). Get name of person responding and estimated time of arrival at the scene.
- 7. Call local air service for an overflight if refuge manager determines such a need. Funding is not an obstacle.

8. If possible, designate one person as the media contact. Advise the media they must remain out of refuge airspace when such activity will haze birds from clean to oiled areas (remind them gently that to do so is a violation of the Migratory Bird Treaty Act and could carry a stiff fine). The media will need a telephone and electricity.

GO TO STEP 9A, 9B OR 9C

A. An Oil Pipeline Rupture That Enters The GIWW

- 9A. Immediately go (or send someone) to Jackson Ditch and close the slots on the water control gates. Plugs for the slots are stored in the concrete storage barn on the East Unit. Carry hazing devices, propane cannons if available, in the vehicle. Be sure remote communication equipment is operable.
- 10A. If present, try to haze bird life from the marsh fringe associated with the East Bay Bayou oxbows.
- 11A. Deploy shallow draft boat, especially airboat, to help disperse birdlife from the area. If not available, then employ Texas Parks and Wildlife Department personnel with an airboat, or a local duck hunting guide.
- 12A. Determine if birds (cormorants, ducks, pelicans) have already been oiled. If so recontact Brian W. Cain and the **Wildlife Rehab & Education Group (281) 481-3528.**

B. A Barge Release Within the GIWW

- 9B. Same as 9A above. See more detail info in Appendix B.
- 10B. Determine if only oil has been released from the captain of the tug pushing the barge, if available. **Until known if one or more cargoes are involved, stay out of the immediate impact area.** Do not stay to haze wildlife until content of the spill is known.
- 11B. Same as 11A above, if material is known to be only oil.
- 12B. Same as 12A above. Be sure to indicate the material is oil. **Wildlife** rehabilitation will not be attempted if material is known to be a hazardous material.

C. A spill That Enters East Bay

- 9C. Determine direction of oil movement from the best information given to you. Get the refuge personnel available to close the tidal ditch along West Line Road. Use dirt, hay bales, or boom material. **See Appendix B for additional point closures.**
- 10C. Close or boom entrance to Coon Creek and new ditch flap gates.

- 11C. Deploy propane cannons at 1/2 mile intervals along the shoreline. **Be sure they are working.**
- 12C. Boom for holding oil should then be staged at Frozen Point. This would make an excellent point for holding the oil and using vacuum trucks for pickup. Be sure road surface will handle heavy trucks.

APPENDIX A

Priorities for Service Response

Each of the actions listed below should be provided for during advance planning and then carried out, where applicable, in the event of a spill. The actions are listed in order of priority should lack of manpower or other limiting factors constrain the level of response to a spill.

- 1. Protect threatened and endangered species and their habitats. Where advisable, rescue and rehabilitate individual animals.
- Minimize the direct and immediate impacts to fish and wildlife populations (i.e., dispersal of birds & other wildlife) and advise the On Scene Coordinator (OSC) of actions needed to minimize impacts to fish and wildlife habitats.
- 3. Assist State agencies or the OSC with collection of oiled wildlife and advise/assist group permitted to rehabilitate oiled wildlife (Wildlife Rehab and Education).
- 4. Provide the media and public with information on Service response activities only through the On Scene Coordinator. Avoid talking directly to the press " off the cuff".
- Perform other activities to minimize indirect impacts to fish and wildlife resources, as warranted. Identify nesting islands that could easily be boomed or fenced to keep oil off the shore or the young birds out of the oil.
- 6. Keep field notes on time to respond by contractors, air space violations by media helicopters (be sure of identification), and accurate log of time spent.

APPENDIX B

A. Pipeline Rupture That Enters the Gulf Intracoastal Waterway.

Oil may enter the GIWW from any of several pipeline sources near High Island, TX. On fig. 1 there are several places indicated for boom placement. The **first** step is to get the slots closed on the flap gates at Jackson Ditch. These slot closing pegs are stored in the concrete storage building on the East Unit. Pick them up on the way down. Point 7 on Fig. 1 is Jackson Ditch.

If notification of an oil spill is early enough, the **second step** is to deploy boom at the Tex Highway 87 bridge to keep oil from flowing westward in the GIWW (Fig.1, point 12). If notification is late, then boom should be deployed at points 8-10 (three openings at the oxbows of old East Bay **Bayou (1987 aerial photos frame 38).** The third step is to boom at point 11, the opening to East Bay Bayou.

The last point to boom is across the GIWW (point 6) at the mouth of East Bay (ONLY IF barge traffic has been stopped by the Coast Guard). Booming at this point will keep the oil from entering East Bay and the refuge shoreline.

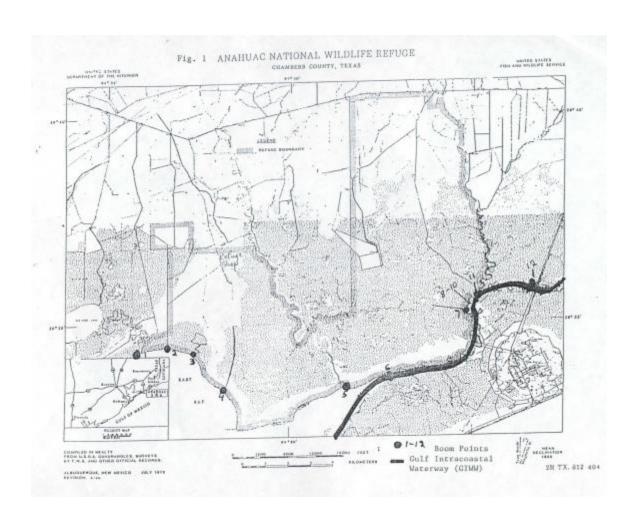
If personnel is available then propane cannons should be set up and begun functioning as soon as possible along the shoreline so the oxbows. Try to get herons, egrets, and cormorants out of the area.

B. Oil, or Other Material, Spill From A Barge in the GIWW.

Stay away from the material, especially downwind, until the contents are known to be non hazardous, then follow the same steps as in A. above. The main difference will be to get the name of the tug boat pushing the barge, the captain's name, and the content of the barge as soon as possible. If the material has already entered Jackson Ditch and the contents are not known, place the plugs in the slots ONLY IF YOU ARE UPWIND or there is no wind. If you smell the material you may be in danger unless it is known to be only oil.

C. Oil Approaching the Refuge Shoreline From East Bay.

A spill entering East Bay may have been a barge spill, a major offshore spill entering Rollover Pass, or a major spill in the Houston Ship Channel. This could also be a hazardous materials situation. In most instances however, there will be ample time to determine if the material is only oil before it reaches the shoreline. You will also have help form oil response contractors for boom deployment and other tasks suggested below.



The **first** step is to use the 1987 aerial photo (Frame 27) and determine how best to close Robinson Lake ditch, Robinson Bayou, and the ditch along West Line Road. See Fig. 1, points 1 and 2. Sheets of plywood can be anchored in front of the drain pipes along West Line Road which will effectively reduce the current.

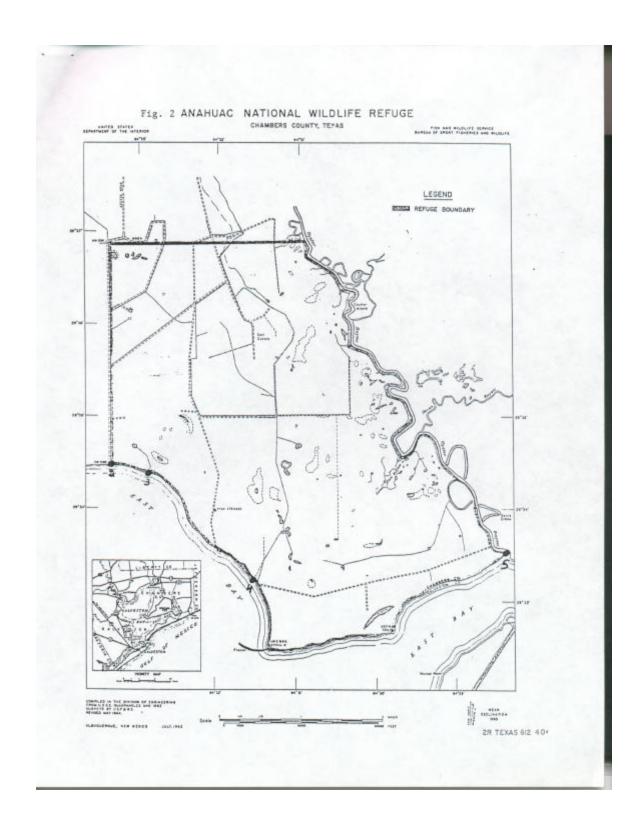
The **second** closure should be Coon Creek. This may be done with hay bales, dirt, or boom material. Point 3, on Fig. 2 is Coon Creek opening.

The **third** closure should be the flap gate which is about 100 yards up "new ditch". If possible, also plug this ditch at the road crossing. New ditch drainage is point 4 on Fig. 2.

The next step should be to deploy as much boom as possible from Frozen Point in an arch westward. This will hold oil that can be reached by vacuum trucks. **Know the condition of the road down to the East Bay shoreline.** This information will be asked for by the response community.

The last area to boom would be point 5 of Fig. 2, the mouth of Oyster Bayou. If the Bayou is draining there will be time. Oil will only enter if there is a flood tide. Boom should be placed just to the west of the mouth so that there is a catchment basin formed. With southeasterly winds, the oil should not get up that far.

In all cases of trying to close a tidally influenced area, it is best to stop the current so that the boom material will hold the oil. This is the reason for using dirt or plywood, or closing flap gates. Currents of 4cfs or greater will pull oil under floating boom. **Get the current slowed.**



APPENDIX C

Preparations Necessary Prior to an Oil Spill near the Refuge.

- 1. Locate a pilot with proper **DOI OAS** certifications for overflight surveys. Clarify personnel needs, billing instructions, availability of equipment, and a checklist of action items, so no time is lost when a situation arises.
- 2. Arrange for training of sufficient personnel.
 - a. Oil Spill Control School. Texas A&M at Galveston
 - b. OSHA 8 hours of safety training.
 - c. Oiled wildlife handling. Wildlife Rehab & Education, Sharon Schmalz (281) 332-8319.
- 3. Ensure that all staff have both the State and federal collecting permits.
- 4. Measure distances to be covered by fixed-position booms, taking into account sags and angular deflections. Acquire sufficient boom material. Designate a section of a storage facility for spill response equipment.
- 5. Determine the substrate suitability for deploying boom material by wading. If opening is too deep then fix a pulley system on permanent anchor points so the boom can be pulled across an opening by a rope.
- 6. Locate boom anchor points and set in two sets of 4" X 4" plastic poles with 3 feet of exposure. Drill holes and set in stainless steel eyebolts in the poles to tie the boom material in place. Funding for this project may be secured from the Bay & Estuary Program, Clear Lake Field Office.
- 7. Annual inspections and drills to see that equipment works, especially propane cannons and communications. Be sure someone knows how to set up and ignite the cannons.

APPENDIX D

Equipment On site and Its Condition

	Quantity	Items	Condition
1.			
2.			
3.			
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APPENDIX E

Oiled Wildlife Rescue and Rehabilitation Strategy

During an oil spill event, the U.S. Fish and Wildlife Service (Service) and the Texas Parks and Wildlife Department (TPWD) will jointly assume the responsibility for the rescue and rehabilitation of oiled wildlife. This decision s to IF, WHEN, and WHERE will be made on a case by case basis and will be coordinated with the National Wildlife Refuge manager. **NOTE:** Oiled wildlife can be dangerous, especially herons and egrets. Be sure you are properly prepared with protective eyewear, nets, gloves and holding boxes. Also many birds get oiled because they are sick, so be careful of infectious diseases, wear a mask.

Oiled wildlife attracts considerable media attention. However, the safety of personnel will direct when search and rescue for oiled wildlife will be attempted, not the emotionally charged public. In many cases on the Texas coast, search and rescue attempts will not be authorized if destruction of habitat is possible (NO TRAMPLING OF MARSHES). Search and rescue will also not be permitted if hazing of birds from clean areas will be a possible result.

In a spill event, volunteers and organizations with required State and federal permits and training in personal safety, as required by OSHA, will be contacted by the Service and TPWD to participate. These persons will be allowed to ride in boats as needed and to set up a cleaning station as required. Cleaned wildlife will then be transferred to permitted rehabilitator's facilities for proper long term care until they can be released back to a clean area.

Rescue: The rescue will be carried out by teams of 2-3 made up of agency personnel (TPWD & Service) with proper permits and OSHA training. Retrieval of oiled birds on the water will involve driving the swimming individuals into a net, shore, or picking up with long handle nets. Capture with throw nets, towels, or blankets; wrap up the bird in a towel, absorbent pad, or rags to prevent further oiling or preening; place the animal into a pet carrier and place the carrier in a shaded (if hot) or warmed (if cold) area. Transport to a rehabilitator or the cleaning station as soon as possible.

Transportation: Social birds such as ducks can be placed together in a carrier, larger aggressive birds will be kept separate. Avoid temperature extremes during transportation. Driver should be ready to drive straight through to the rehabilitation center (don't stop for long meals).

Rehabilitation Center: A triage priority should be implemented with the highest priority placed on listed (T&E) species, candidate species, and other migratory

species. Birds that are extremely weak or injured may be euthanized immediately on veterinary advice and the approval of an agency representative.

APPENDIX F

Oil Spill Contact List

National Pollution Response Center 1-800-424-8802

U. S. Coast Guard

Galveston - (409) 766-3680 Port Arthur - (409) 723-6506

Texas General Land Office

1-800-832-8224

LaPorte Office - (281) 470-6597

Nederland Office - (409) 727-7481

Texas Water Commission

Nederland Office - (409) ***-***

Houston Office - (713) 767-3579

Texas Parks and Wildlife Department (Resource Protection)

Clear Lake Field Office - 281-461-4071

Texas Parks and Wildlife Department (Enforcement)

Chambers County

Bobby Jobes - (409) 267-6022

Kelvin Ewell - (409) 389-2524

Hector Gonzales - (409) 267-4029

John Feist - (409) 389-2352

Galveston County

Barry Eversole - (409) 762-0732 Home: (713) 534-7991

Texas Parks and Wildlife Department -

J. D. Murphree Wildl. Mgmt Area (409) 736-2551

USFWS (Ecological Services)

Office - (281) 286-8282

Brian Cain - (281) 286-8282 Home: (281) 480-7418

USFWS (Regional Office)

Refuge Operations - (505) 248-6804

Oil Spill Response - (505) 248-6669

Texas Wildlife Rehabilitation & Education

Sharon Schmalz - (281) 332-8319 Stacy Huffman - (281) 576-6200 Michele Johnson - (281) 481-3528

Texas Department of Public Safety (409) 267-6383

Chambers County Sheriff's Department (409) 267-6761

Anahuac Fire Department (409) 267-3311

Chambers County Emergency Management Coordinator (409) 267-6371

Marine Extension Agent
Chambers/Jefferson Counties
Malon Scogin-Beaumont (409) 835-8461
-Anahuac (409) 267-3185

Galveston County
Julie Massey (409) 534-3413

Soil Conservation Service Jess Jackson - (409) 267-3581

National marine Fisheries Service (409) 766-3699

Galveston Bay Foundation (713) 332-3381

Joe Whitehead, Audubon Society Warden (409) 355-2252

S & S Energy, Inc.

Johnny Andrus - (409) 286-5360/Home (409) 781-1934/Mobile Steve Rector - (409) 694-3205

Hope Oil

Dick Nicar - (409) 286-5516 or 5517 Dave Cantwell - (713) 522-4673 William Hill - (713) 522-4673

Amax Oil & Gas, Inc.

Mark Wohl - (713) 368-1444 B.J. Drehr - (713) 368-1200 Ray Kilcoyne - (713) 368-1200

Wright Brothers Energy Craig Wright - (210) 981-4711

Amoco Pipeline Company High Island Office - (409) 286-5619 Beaumont Office - (409) 835-5381

Winnie Pipeline Company Steve Frankie - (409) 296-2155

Beaumont Wings, Inc. (OAS carded, Low level) (409) 866-0084, (409) 860-5831, (409) 796-1194

Weather Forecast (713) 228-8703