2018

Red River Waterway Action Plan

2018 Annex

USCG Sector Lower Mississippi River

RED RIVER ANNEX

Executive Summary

This annex provides general information and reference gauges to be used as a guideline for a high and low water events on the Red River between river miles marker 000 to 212. It is the responsibility of the US Coast Guard (USCG), US Army Corps of Engineers (USACE), and River Industry representatives to meet and discuss river conditions and possible restrictions on the Red River, as well as, ***annually*** review the actions specified in the plan. The Red River is broken down into 4 zones. Each zone is delineated by river mile and is characterized by river stage, with three phases (e.g., *Watch, Action, and Recovery Phases*) described in the plan. A combination of reference gauges, historical data and known impact areas were used to derive these zones.

The Waterways Action Plan (WAP) is a living document that should be frequently reviewed and updated. This plan establishes a framework for all parties to use when taking proactive or reactive steps to manage and respond to high water, high velocity, and low water conditions. The overall goal of this plan is to ensure safety of life and navigation, protection of infrastructure and property, and to prevent marine causalities.

The WAP also supports the Department of Transportation in its role in Emergency Support Function (ESF) #1 of the National Response Plan to coordinate the Emergency Management of the Transportation System (EMTS) in the prevention/mitigation, preparedness, recovery, infrastructure restoration, safety, and security of the nation, and its transportation system. EMTS is intended to report damage to the transportation infrastructure as a result of an incident, coordinate alternate transportation services, coordinate the restoration and recovery of the transportation infrastructure, and coordinating and supporting prevention, preparedness, and mitigation among transportation stakeholders at the state and local levels.

Conference calls between USCG, USACE, the Red River Valley Association, and industry stakeholders have proven critical throughout the years of response to river emergencies, and they remain useful tools to successfully manage river emergencies.

USACE, USCG, and industry leaders worked jointly to update the following information contained in the 2018 Red River Waterways Action Plan.

Red River MM 0.0 to MM 212.0

Section 1 – Geographic Description

This annex addresses Mile 0 to Mile 212 of the Red River and includes the Lower Old River. The following bridges are also contained within the geographic area for this annex:

- U.S. Highway 84 Bridge
  Coushatta, LA. (MM 177.8)
- Grand Ecore Highway Bridge
  Natchitoches, LA. (MM 152.1)
- Tennessee Gas Pipeline Bridge
  Natchitoches, LA. (MM151.9)
- Tennessee Gas Pipeline Bridge
  Natchitoches, LA. (MM151.6)
- Highway 8, Boyce Bridge
  Boyce, LA. (MM 105.8)
- MOPAC Railroad Bridge
  Pineville, LA. (MM 90.1)
- Curtis-Coleman Bridge (Hwy71/165)
  Pineville, LA. (MM 86.9)
- Jackson Street Bridge
  Alexandria, LA. (MM 88.6)
- Pineville Exp./Purple Heart Bridge
  Alexandria, LA. (MM 88.2)
- Kansas City Railroad Bridge
  Alexandria, LA. (MM 84.0)
- Gulf Central Pipeline Bridge
  Marksville, LA. (MM 60.4)
- Moncla Highway Bridge
  Marksville, LA. (MM 59.7)

LOCK AND DAM INFORMATION

LOCK NAME	RIVER MILE	NORMAL POOL HEADWATER	CLOSURE STAGE	LOCK DIMENSIONS
OLD RVR LOCK	0	- -	**60.5** **RR LNDG Gauge**	1185 FT X 75 FT
LOCK 1	43.8	40.0	**58.0 HW**	705 FT X 84 FT
LOCK 2	74.5	64.0	**72.5 HW**	705 FT X 84 FT
LOCK 3	116.5	95.0	**90.5 TW**	705 FT X 84 FT
LOCK 4	168.5	120.0	**119.0 TW**	705 FT X 84 FT
LOCK 5	200.0	145.0	**138.6 TW**	705 FT X 84 FT

All stages are measured in feet NGVD
Headwater (HW) is the stage upstream of the lock
Tailwater (TW) is the stage downstream of the lock

Section 2 – Parties and Roles

USCG SECTOR LOWER MISSISSIPPI RIVER (SEC LMR)			
POSITION	**DUTIES & RESPONSIBILITIES**	**Current Incumbent**	**Reports to:**
Officer In Charge USCGC GREENBRIER	Responsible for ATON services for Red River 0.0 to 43.5	BMCM Michael Ellis	ATON OFFICER
Officer In Charge Aid to Navigation Team Colfax	Responsible for daily ATON services for Red River 43.5 to 227	BMC Douglas Anglebrandt	ATON OFFICER
SECTOR STAFF (MEMPHIS, TN)			
Aids to Navigation Officer	Coordinate the short/long term activity of Cutter Fleet, Manage ATON inventory	CWO Bryan Hoffman	WATERWAYS MGMT DIVISION CHIEF
Waterways Management Division Chief	Coordinate the short/long term activity of Cutter Fleet, Manage Safety/Security Zones and Marine Permits.	LT Ryan Thomas	PREVENTION DEPT. HEAD
Prevention Dept. Head	Coordinate Commercial Vessel Safety Program including Waterways Management, ATON, Marine Inspection and Investigation.	LCDR Pedro Mendoza	DEPUTY SECTOR COMMANDER
Deputy Sector Commander	Second in Command Alternate Captain of the Port, Alternate Federal Maritime Security Coordinator, Alternate Federal On Scene Coordinator, Alternate Officer in Charge of Marine Inspections.	CDR Rebecca Walthour	SECTOR COMMANDER
Sector Commander	Sector Commander Captain of the Port, Federal Maritime Security Coordinator, SAR Mission Coordinator, Federal On Scene Coordinator, Officer in Charge of Marine Inspections	CAPT Roxanne Tamez	DISTRICT CHIEF OF STAFF
EIGHTH COAST GUARD DISTRICT STAFF (NEW ORLEANS, LA)			
Director, Western Rivers	Coordinates all CG Activity on Western Rivers	CAPT Paul Dittman	DISTRICT CHIEF OF STAFF
Chief of Staff	Second in Command	CAPT Andrew Sugimoto	DISTRICT COMMANDER

Section 2 – Parties and Roles (continued)

US ARMY CORPS OF ENGINEERS-Vicksburg District			
POSITION	**DUTIES & RESPONSIBILITIES**	**Current Incumbent**	**Reports to:**
Contact Pilot	Master for on water operations involving USACE assets. Primary liaison with USCG.	Mr. Michael Jensen	Mr. Chad Bounds
Master M/V STRONG	Primary MV for Channel, and Lock and Dam Maintenance	Captain Roger Gaston	Mr. Jimmy Coldiron
Master T/V FRED LEE	Master for on water operations involving USACE assets. Primary liaison with USCG.	Captain Adam Scruggs	Mr. Jimmy Coldiron
USACE VICKSBURG DISTRICT STAFF			
Chief of Dredging Unit	Manager for Dredging Operations	Mr. Chad Bounds	Mr. Joel Brown
Chief of River Operations	Business line manager for navigation	Mr. Joel Brown	Mr. James Ross
Chief of Operations	District Engineer of Operations	James Ross	COL Michael Derosier
Deputy Commander	Deputy District Engineer for Vicksburg District	LTC Aaron Wolf	COL Michael Derosier
Commander	District Engineer for Vicksburg District responsible for flood risk management, navigation, environmental stewardship, emergency operations, other authorized civil works for seven major river basins, including 278 miles of the Mississippi River's main stem, in Arkansas, Louisiana, and Mississippi and about 800 miles of commercially navigable streams and rivers including the Ouachita-Black system, the Pearl, the Red, and the Yazoo rivers.	COL Michael Derosier	MG Richard Kaiser
US ARMY CORPS OF ENGINEERS – Mississippi Valley Division			
Commander	Commander USACE Activities within Mississippi Valley Division including St. Paul, Rock Island, St. Louis, Memphis, Vicksburg and New Orleans	MG Richard Kaiser	LTG Todd Semonite

Section 3 – Communications

Members will include representatives from: the US Coast Guard (USCG), Army Corps of Engineers (USACE), Red River Valley Association (RRVA), Red River Waterway Commission and Industry. All individuals within the Communications Matrix identified in bold type shall participate in the conference call or provide a replacement that has the decision making authority to act on their behalf. Initial notification for conference call to interested parties will be through the use of RRVA Chairman's email distribution list. Unless otherwise stated, the Conference Phone Number will be provided by RRVA Chairman.

Initial Incident Notification Teleconference:
If any

The format of the Waterways Action Plan/Red River Conference is as follows, coordinated by the Red River Chairman:

Opening: Red River Chairman/Call to Order.

By Agency:

1. National Weather Service
    a. Current Rainfall predictions
    b. Short and Long term forecast
2. USACE (by lead District Representative): General Overview of River Conditions
    a. Current Situation
    b. River Forecasts
3. USCG (by Sector LMR):
    a. Assessment
    b. Actions Taken ((e.g., Broadcast Notice to Mariners (BNMs)) including current status of WLR Tenders/Areas worked
    c. Anticipated Future Actions Based on River Forecasts
4. Industry (by lead Committee Representative):
    a. Assessment
    b. Actions Taken
    c. Future Actions Based on River Forecasts
5. General Discussion/Future Plans and Recommendations for Implementation

Closing: Next Meeting: Discussion of the focus and participants in future meetings (based on projected river conditions).

Section 4 – Contact Information

COMPANY / ORGANIZATION	DESIGNATED CONTACT	PHONE NUMBER		E-MAIL ADDRESS	WHEN CONTACTED
Red River Valley Association	Richard Brontoli Executive Director	Office- 318-2215233 Cell- 318-393-6207	Fax: 318-425-0516	rrva@rrva.org	All Situations
Red River Waterway Commission	Colin Brown Executive Director	Cell- 318-663-0003	Fax: 318-352-8156	colinbrown@redriverwaterway.com	All Situations
Terral River Service	Gabe Gattle Vice President of Transportation	Office-318-228-1961 Cell- 318-282-6236	Fax: 318-559-1524	gabeg@terralriverservice.com	High Water
Pine Bluff Sand and Gravel	Jay McDaniel Manager Transportation Division	Office-318-448-0536 Cell - 225-978-2984	Fax: 318-442-6297	Jay.mcdaniel@pbsgc.com	High Water
Luhr Bros. Inc	Lonnie Dunn Marine Supervisor	Office- 318-487-9263 Cell- 318-729-7588	Fax: 318-442-8645	Lonnie@luhralex.com	High Water
Kirby Inland Marine	Jimbo Giddens Navigation Port Captain-River Operations	Office- 225-201-3006 or 800-569-2925	Fax: 225.201.3090	jimbo.giddens@kirbycorp.com	High Water
Canal Barge Company, Inc.	Greg Wood	Office- 504-584-1567	Fax: 504-584-1505	gwood@canalbarge.com	High Water
Blessey Enterprises Inc.	Clark Todd	Office- 504-734-1156	Fax: 504-648-1960	ctodd@blessey.com	High Water
LeBeouf Bros. Towing Company	Cecil Neil	Office- 985-594-6691	Fax: 985-594-5253	ceciln@lebeouftowing.com	High Water
Southern Towing Company	Pete Ciaramitaro	Office- 901-386-2644	Fax: 901-386-1119	pciaramitaro@southerntowing.net	High Water
Genesis Marine	Shane Bird	Office- 832-280-3062 Cell- 985-773-3590	Fax:	shane.bird@genlp.com	High Water

Section 4 – Contact Information (Continued)

Omni Marine Transportation (Crescent Marine)	Warren Waguespack	Office- 504-340-9293	Fax- 504-348-3005	wagueswo@bellsouth.net	High Water
Florida Marine Transportation	Keith Lofton	Office- 985-629-2082 Cell- 985-377-3924	Fax- 985-629-0110	keith.lofton@flmarine.com	High Water
	Timmy Callias	Office- 985-629-0102 Cell- 985-264-5885		timmy.callais@fmtdry.com	
McKinney Harbor Towing	Steve McKinney	Office- 225-388-9846	Fax- 225-343-9603	steve@McKinneyweb.com	High Water
Vidalia Dock	Albert Smith	Office- 318-336-4707 Cell- 318-393-8699	Fax- 318-336-4710	albert@vidaliadock.com	High Water
Oakley	Robert Berry	Office- 318-798-1728 Cell- 318-393-8699	Fax- 318-798-8422	agarrity@bruceoakley.com	High Water
Annex Marine	Gani Browsh	Office- 215-880-5128	Fax- N/A	gbrowsh@aol.com	High Water
Mississippi Sand	Rob Meyer	Office- 314-678-7844 Cell- 314-378-6459	Fax- N/A	rmeyer@mississippi-sand.com	High Water
CHS	Jeffrey Hess	Office- 318-445-7559	Fax- 318-445-1503	jeffrey.hess@chsinc.com	High Water
Savage	Josh Knichel	Office- 281-673-1098 Cell- 713-539-4823	Fax- 281-673-1086	joshknichel@savageservices.com	High Water

Section 4 – Contact Information (Continued)

Lock and Dam Contractor

Rig Master (L&D Contractor)	Ricky Patten, Project Manager	Office- 318-386-2721 Ext:203 Cell- 318-386-7493	Fax- N/A	rigmastersrp@aol.com	High Water

Weather Service

Shreveport National Weather Service NOAA	Craig S. Ross Hydrologist	Office- 318-631-3669	Fax 318-636-9620	Craig.ross@noaa.gov	High Water

Port Directors

Caddo-Bossier Port	Brenda Levinson, Deputy Director	Office- 318-524-2272	Fax-318-524-2273	brenda@portsb.com	High Water
Natchitoches Parish Port & Red River Parish Port	Travis Tyler, Director	Office-318-356-9686	Fax- 318-354-2622	nat-port@cp-tel.net	High Water
Central LA Regional Port (Alexandria)	Blake Cooper, Director	Office- 318-229-7627 Cell-318-229-7627	Fax- N/A	bcooper@clrport.com	High Water

Federal Contacts

Coast Guard Command Center	Duty Watch Stander	Office - 901-521-4822	STL-SMB-SECLMR-CC.USCG.MIL
Coast Guard Waterways Manager	LT Ryan Thomas	Office - 907-521-4825 Cell - 901-833-0290	Ryan.C.Thomas@uscg.mil
USACE Chief of River Ops	Mr. Joel Brown	Office: 601 631-7549 Cell: 601 618-7900	joel.t.brown@usace.army.mil
USACE Chief of Dredging Unit	Mr. Chad Bounds	Office: 601-631-5267 Cell: 601-630-7637	Chad.R.Bounds@usace.army.mil

Section 5 – Internet References

INTERNET SITE PURPOSE	ADDRESS
USACE Mississippi Valley Division-Navigation Connection	http://www2.mvr.usace.army.mil/nic2/default.cfm
USACE Vicksburg District	http://www.mvk.usace.army.mil/
CG Sector Lower Mississippi River Homeport	http://homeport.uscg.mil/ http://www.uscg.mil/d8/sector/lwrmsrvr (**Select Port Directory and Sector Lower Mississippi River.)**
River Gages.com	http://www.rivergages.com
River Industry Bulletin Board	http://www.ribb.com/index.php
NWS -- Quantitative Precipitation Forecasts (forecasted rainfall)	http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml
USGS – Current Flow Gages for Louisiana	http://waterdata.usgs.gov/la/nwis/current/?type=flow
NWS – Red River Forecast	http://water.weather.gov/ahps/rfc/rfc.php

Section 6a – Action Plan (Grounding/Casualty)

CRITICAL AREA DESCRIPTION	TIMING	PHASE	ACTION
Grounding inside navigable channel resulting in impact to safe navigation (Sunken barges Unreported shoaling) or Bridge/Lock and Dam Allision or Casualty I=time incident occurred	I	Initial Actions	▪ Responsible Party completes mandatory notifications to USCG command center (901-521-4822). ▪ SLMR Command Center notifies Waterways Chief. ▪ Waterways Chief notifies other principles: 1. USACE Chief River Ops (appropriate District) 2. Red River Valley Association Chairman ▪ Issue advisory for hazard to navigation. All vessels within 2 hours of casualty site required to report position and ETA to site to SLMR CC for additional traffic information ▪ SLMR Response Team deployed
	I+4hours	Action	▪ SLMR Chief, Waterways Management notifies the Red River Valley Chairman and initiates principal conference call to assess status of hazard to navigation, impediments to safe passage by all vessels, need for traffic control, etc. ▪ Assess need to activate communications plan. ▪ Notification to USACE. ▪ Responsible Party (RP) arrange for site survey.
	I + 12 hours	Action	▪ Establish battle rhythm for teleconferences/ information sharing. ▪ RP to provide Salvage Plan in writing.
		Recovery	▪ Test tow verification to confirm channel integrity.
		Normal Ops	▪ Cancel Safety Zone and resume normal traffic patterns and tow sizes. ▪ Hotwash actions and update annex as appropriate within 48 hrs.

Section 6b – Action Plan (HIGH WATER)

<table>
<tr><th>CRITICAL AREA DESCRIPTION</th><th>TRIGGER READING</th><th>TREND</th><th>DESCRIPTION</th><th>PHASE</th><th>ACTION</th></tr>
<tr><td rowspan="6">Pools Four and Five
RED RIVER
MM 212 to 168.5
Reference Gages: Coushatta, LA.
Pool Stage 24.2</td><td>29 feet</td><td>Rising</td><td>Normal Operations</td><td>Watch</td><td>▪ Initiate communications plan.
▪ Issue advisory; indicate high water, exercise extreme caution; discuss voluntary horsepower and tow size restrictions and possible daylight only restriction due to water covering dikes.
▪ Assess need for daylight/visibility/one way traffic restrictions.</td></tr>
<tr><td>31 feet</td><td>Rising</td><td>High Water</td><td>Action</td><td>▪ Assess need for safety broadcasts/zones concerning high velocity currents/drafts in specific areas.
▪ Daylight only
<table><tr><th>UTV Horsepower</th><th>HP/Barge</th><th>Max Tow Limit</th></tr><tr><td>Less than 3000hp</td><td>500hp/loaded barge (ALL)</td><td>6</td></tr></table></td></tr>
<tr><td>30 feet</td><td>Falling</td><td>High Water</td><td>Action</td><td>▪ Test tow verification to confirm channel integrity.</td></tr>
<tr><td>29 feet</td><td>Falling</td><td>High Water</td><td>Recovery</td><td>▪ Relax HP/loaded barge restriction/daylight only ops
▪ Cancel safety broadcasts/zones and resume normal traffic patterns and tow sizes.</td></tr>
<tr><td>27 feet</td><td>Falling</td><td>Normal Operations</td><td>Recovery</td><td>▪ USCG performs ATON survey (boat/aircraft).</td></tr>
<tr><td>25 feet</td><td>Falling</td><td>Normal Operations</td><td>Normal Ops</td><td>▪ Hotwash actions and update annex as appropriate within 48 hrs</td></tr>
</table>

Section 6b – Action Plan (HIGH WATER Continued)

<table>
<tr><th>CRITICAL AREA DESCRIPTION</th><th>TRIGGER READING</th><th>TREND</th><th>DESCRIPTION</th><th>PHASE</th><th>ACTION</th></tr>
<tr><td rowspan="6">Pool Three
RED RIVER
MM 168.4 to 117
Reference Gages: Grand Ecore, LA.
Pool Stage 20.0</td><td>25 feet</td><td>Rising</td><td>Normal Operations</td><td>Watch</td><td>▪ Initiate communications plan.
▪ Issue advisory; indicate high water, exercise extreme caution; discuss voluntary horsepower and tow size restrictions
▪ Assess need for daylight/visibility/one way traffic restrictions.</td></tr>
<tr><td rowspan="3">27 feet</td><td rowspan="3">Rising</td><td rowspan="3">High Water</td><td rowspan="3">Action
Action</td><td>▪ Assess need for safety broadcast/zone concerning high velocity currents/drafts in specific areas.</td></tr>
<tr><td><table><tr><td>UTV Horsepower</td><td>HP/Barge</td><td>Max Tow Limit</td></tr><tr><td>Less than 3000hp</td><td>500hp/barge</td><td>6</td></tr></table></td></tr>
<tr><td></td></tr>
<tr><td>27 feet</td><td>Falling</td><td>High Water</td><td>Action</td><td>▪ Test tow verification to confirm channel integrity.</td></tr>
<tr><td>26 feet</td><td>Falling</td><td>High Water</td><td>Recovery</td><td>▪ Relax HP/loaded barge restriction/daylight restriction
▪ Cancel safety broadcast/zone and resume normal traffic patterns and tow sizes.
▪ Daylight only</td></tr>
<tr><td>25 feet</td><td>Falling</td><td>Normal Operations</td><td>Normal Ops</td><td>▪ USCG performs ATON survey (boat/aircraft).
▪ Hotwash actions and update annex as appropriate within 48 hrs</td></tr>
</table>

Section 6b – Action Plan (HIGH WATER Continued)

<table>
<tr><th>CRITICAL AREA DESCRIPTION</th><th>TRIGGER READING</th><th>TREND</th><th>DESCRIPTION</th><th>PHASE</th><th>ACTION</th></tr>
<tr><td rowspan="5">Pools 1 and 2
RED RIVER
MM 43.5 to 116
Reference Gages: Alexandria, LA.
Pool Stage 19.0</td><td>23 feet</td><td>Rising</td><td>Normal Operations</td><td>Watch</td><td>▪ Initiate communications plan.
▪ Issue advisory; indicate high water, exercise extreme caution; discuss voluntary horsepower and tow size restrictions.
▪ Assess need for daylight/visibility/one way traffic restrictions.</td></tr>
<tr><td rowspan="2">24 feet</td><td rowspan="2">Rising</td><td rowspan="2">High Water</td><td rowspan="2">Action</td><td>▪ Assess need for safety broadcasts/zone concerning high velocity currents/drafts in specific areas.
<table><tr><th>UTV Horsepower</th><th>HP/Barge</th><th>Max Tow Limit</th></tr><tr><td>Less than 3000 hp</td><td>500hp/loaded barge (ALL)</td><td>6</td></tr></table></td></tr>
<tr><td>24feet</td><td>Falling</td><td>High Water</td><td>Action</td><td>▪ Test tow verification to confirm channel integrity.</td></tr>
<tr><td>23feet</td><td>Falling</td><td>High Water</td><td>Recovery</td><td>▪ Cancel safety broadcast/zone and resume normal traffic patterns and tow sizes.
▪ Relax HP/loaded barge restriction/daylight only operations
▪ USCG performs ATON survey (boat/aircraft).</td></tr>
<tr><td>22 feet</td><td>Falling</td><td>Normal Operations</td><td>Normal Ops</td><td>▪ Hotwash actions and update annex as appropriate within 48 hrs</td></tr>
</table>

Section 6b – Action Plan (HIGH WATER Continued)

<table>
<tr><th>CRITICAL AREA DESCRIPTION</th><th>TRIGGER READING</th><th>TREND</th><th>DESCRIPTION</th><th>PHASE</th><th>ACTION</th></tr>
<tr><td rowspan="7">Lower Red River

RED RIVER

MM 43.5 to 0.0

Reference Gages:
Lock 1 Lower (tail)
Acme, LA.

*Regardless of River Stages, if there is greater than a 4 foot difference between the Acme and Lock 1 Lower Tail stages, the 30ft High Water actions may be taken.</td><td>24 feet</td><td>Rising</td><td>Normal Operations</td><td>Watch</td><td>▪ Initiate communications plan.
▪ Issue advisory; indicate high water, exercise extreme caution; discuss voluntary horsepower and tow size restrictions.</td></tr>
<tr><td rowspan="2">26 feet</td><td rowspan="2">Rising</td><td rowspan="2">High Water</td><td rowspan="2">Action</td><td>▪ Assess need for daylight/visibility/one way traffic restrictions.
▪ Assess need for Safety Broadcasts concerning high velocity currents/drafts in specific areas.</td></tr>
<tr><td><table><tr><th>UTV Horsepower</th><th>HP/Barge</th><th>Max Tow Limit</th></tr><tr><td>Less than 1800 hp</td><td>250hp/loaded barge (ALL)</td><td>6</td></tr></table></td></tr>
<tr><td rowspan="2">30 feet</td><td rowspan="2">Rising</td><td rowspan="2">High Water</td><td rowspan="2">Action</td><td>▪ Assess need for daylight/visibility/one way traffic restrictions.
▪ Assess need for safety broadcasts/zone concerning high velocity currents/drafts in specific areas.</td></tr>
<tr><td><table><tr><th>UTV Horsepower</th><th>HP/Barge</th><th>Max Tow Limit</th></tr><tr><td>Less than 3000 hp</td><td>500hp/barge</td><td>6</td></tr></table></td></tr>
<tr><td>36 feet</td><td>Rising</td><td>High Water</td><td>Action</td><td>▪ Monitor situation.
▪ Dikes are underwater at this stage.</td></tr>
<tr><td>36 feet</td><td>Falling</td><td>High Water</td><td>Action</td><td>▪ Test tow verification to confirm channel integrity.
▪Cancel safety broadcast/ zone and resume normal traffic patterns and tow sizes.</td></tr>
<tr><td>30 feet</td><td>Falling</td><td>High Water</td><td>Recovery</td><td>▪ Downgrade HP/loaded barge restriction.</td></tr>
<tr><td rowspan="2"></td><td>26 feet</td><td>Falling</td><td>High Water</td><td>Recovery</td><td>▪ Relax HP/loaded barge restriction.</td></tr>
<tr><td>24 feet</td><td>Falling</td><td>Normal Operations</td><td>Normal Ops</td><td>▪ Hot wash actions and update annex as appropriate within 48 hrs</td></tr>
</table>

Section 6c – Action Plan (LOW WATER)

CRITICAL AREA DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Lower Red River RED RIVER **MM 43.5 to 0.0** Reference Gages: **Lock 1 Lower** (tail) Acme, LA.	Above 8 feet		Normal Operations		▪ Normal Operations. ▪ No restrictions on traffic.
	8 feet	Falling	Low Water	Watch	▪ Initiate Communications Plan. ▪ Issue Low Water Advisory. ▪ Discuss voluntary draft and tow size restrictions. ▪ Assess/survey shoaled areas
	6 feet	Falling	Low Water	Action	**Consider:** ▪ Where channel is less than 600 feet in bends: - Activate pre-established Safety Zone with broadcasts (pages 18-19) restricting transits to daylight only or one way traffic. Where shoaling is reported ▪ Redirect USACE dredge/survey services ▪ Redirect USCG ATON services
	6 feet	Rising	Low Water	Recovery	▪ Continue Safety Zone. ▪ Assess ATON status ▪ USACE surveys of channel following dredging to identify build-ups.
	8 feet	Rising	Normal Operations		▪ Employ test tow(s) pushing non-regulated cargo loaded to gain sense of channel's ability to support limited navigation. If favorable results from test tow(s), cancel safety zone and any restrictions. ▪ Report hazardous conditions to Coast Guard ▪ Schedule hot wash of activity within 48 hrs to refine actions. ▪ Cancel Safety Zone

****Acme at 4 feet loses a 9' channel**

Section 7 –Broadcast Notice to Mariners Examples

HIGH WATER BROADCAST NOTICE TO MARINERS (BNM)

THE COTP LOWER MISSISSIPPI RIVER IS ISSUING A SAFETY ADVISORY DUE TO THE EXPECTED RAPID INCREASE IN RIVER LEVELS ON THE RED RIVER OVER THE NEXT SEVERAL DAYS. MARINERS ARE ADVISED TO TRANSIT THE AREA WITH CAUTION DUE TO THE HAZARDOUS CONDITIONS ASSOCIATED WITH STRONG CURRENTS, SEVERE OUT DRAFTS, MISSING/OFF STATION ATON, AND DIVING BUOYS. FLEET OPERATORS SHOULD REGULARLY CHECK THEIR FLEETS AND IMMEDIATELY REPORT BARGE BREAKAWAYS TO THE USCG.

HIGH WATER BNM 500 HP RESTRICTION

1. THE COTP LOWER MISSISSIPPI RIVER IS ISSUING A HIGH WATER SAFETY ADVISORY FOR THE RED RIVER FROM MILE MARKER xxx TO xxx.
2. MARINERS ARE ADVISED TO TRANSIT THE RED RIVER WITH CAUTION DUE TO THE HAZARDOUS CONDITIONS ASSOCIATED WITH STRONG CURRENTS, SEVERE OUTDRAFTS, MISSING/OFF STATION ATON AND DIVING BUOYS.
3. THE COTP WITH THE CONCURRENCE OF THE RED RIVER VALLEY ASSOCIATION RECOMMENDS THE FOLLOWING LIMITS FOR TOWS WHEN THE ALEXANDRIA GAUGE REACHES 24.0' FT AND/OR GRAND ECORE GAUGE REACHES 27’ FT AND/OR COUSHATTA GAUGE REACHES 31’ FT AND WILL BE TRANSITING THE RED RIVER FROM MILE MARKER xxx TO MILE MARKER xxx.
4. ALL DOWN-BOUND TOWS:

A. TOWING VESSELS MUST HAVE AT LEAST 500 HP PER LOADED BARGE WITH A MAXIMUM TOW SIZE OF 6 BARGES.

5. FLEET OPERATORS SHOULD REGULARLY CHECK THEIR FLEETS AND IMMEDIATELY REPORT BARGE BREAKAWAYS TO THE U.S. COAST GUARD.
6. MARINERS ARE REQUESTED TO CONTACT SECTOR LMR ON CH 16 VHF-FM OR 1-866-777-2784 FOR FURTHER INFORMATION OR THE REPORT AREAS OF CONCERN.

Section 7 –Broadcast Notice to Mariners Examples (Continued)

HIGH WATER CANCELLATION BNM

CANCEL BNM _____ DUE TO IMPROVING WATER CONDITIONS. REPORT ANY HAZARDOUS CONDITIONS TO THE U.S. COAST GUARD.

LOW WATER BROADCAST NOTICE TO MARINERS

1. LOW WATER CONDITIONS ARE FORECASTED IN THE RED RIVER VALLEY. US ARMY CORPS OF ENGINEERS MAINTAINED DEPTH AND WIDTH MAY NOT BE OBTAINABLE ON ALL BUOY LINES. IT IS ADVISED THAT ALL MARINERS MONITOR ALL GAUGE READINGS FOR SAFE NAVIGATION.