MISSISSIPPI RIVER AND TRIBUTARIES WATERWAYS ACTION PLAN

ILLINOIS WATERWAY ANNEX 2014

ILLINOIS WATERWAY ANNEX

Introduction

This appendix provides general information and target gauges to be used as a guideline for a crisis on the Illinois Waterway (ILWW). Like a crisis on the Upper Mississippi River (UMR), it is the responsibility of the United States Coast Guard, Army Corps of Engineers, and River Industry representatives to meet and discuss conditions on the Illinois Waterway and to ***annually*** review the actions specified in the plan. In Section 4 of this annex, the entire Illinois Waterway is broken into fourteen zones. Each zone is delineated by river mile and is characterized by river stage, with three action phases (e.g., *Watch, Action, and Recovery Phases*) described in the plan. A combination of reference gauges, historical data & known impact areas were used to derive these zones.

Section 1 – Geographic Description

At approximately 272 miles long, the Illinois Waterway is one of the principal tributaries of the Mississippi River. The river drains a large section of central Illinois, with a drainage basin of 40,000 square miles. It is formed by the confluence of the Kankakee and Des Plaines rivers approximately 10 miles southwest of Joliet. It flows west across northern Illinois, where it is joined by the Fox River and later La Salle, by the Vermillion River. It then turns south, flowing southwest across western Illinois, past downtown Peoria the chief city on the river. South of Peoria it is joined by the Mackinaw River. South of its confluence with the La Moine River, it turns south, flowing roughly parallel with the Mississippi across southwestern Illinois. For the last 20 miles of its course, it is separated from the Mississippi by only 5 miles. It joins the Mississippi near Grafton, approximately 25 miles northwest of downtown St. Louis and approximately 20 miles upstream from the confluence of the Missouri and the Mississippi.

HYDROLOGY AND IMPACT CONCERNS

Flooding on the Illinois Waterway is normally caused by high flows on the ILWW, by backwater from the Upper Mississippi River or a combination of both. The ILWW is said to "flood from the bottom up on most occasions." Potential for damage is usually associated with extreme or prolonged high water conditions which reduce levee freeboard, saturate levees and increase seepage, while restricting access for repair. Along the middle section of the ILWW, damage to homes is of concern when the impact of high water is multiplied by the surge and suction caused by large commercial tows passing within close proximity of flooded homes. All of these issues must be taken into consideration when deciding to implement operating restrictions or cease traffic. Additionally, not all areas of concern are consistent throughout the entire length of the ILWW. In the upper reaches, safe navigating conditions for tows and locks operating restrictions are the predominant considerations. In the mid-reaches, the concerns are safe navigation and wake damage while, in the lower reaches, concern for levee conditions is paramount.

FLOOD PATTERNS

The floods of 1993 and 1995 were typical events for the ILWW. The ILWW experienced normal spring floods caused by rain and snow run off. Both floods were magnified by abnormally high rainfall throughout the ILWW basin and the UMR system. The Great Flood of 1993 caused the cessation of river traffic on the ILWW and reached near record levels on the lower portion. In 1995, high water levels on the UMR created a "plugging effect" and ILWW flood waters rose to record levels. The river rose to near record levels in Beardstown, IL at 29.3 on June 1,1995,15.3 feet above flood stage. The ILWW flood in February and March, 1997 was unusual in that it started from the top of the river and caused a wave to ride down the ILWW. On February 20, 1997, the entire upper ILWW basin received in

excess of 4 inches of rain overnight. This rain not only caused the river to swell but melted the snow base which usually melted over a prolonged period of time in the spring. At the height of this flood, the slope over the middle portion of the ILWW was over 30 feet compared to the normal slope of near 11 feet. Major considerations were the safe passage of commercial traffic under bridges, increased out drafts at locks and wake damage to levees and homes. Operating and tow size restrictions were placed into effect to minimize wake damage while continuing the movement of commerce on the ILWW. Ultimately, commercial traffic had to be ceased in critical areas of the system. As water levels dropped, these restrictions were removed as conditions permitted to allow for the safe passage of tows.

ILWW LOW WATER & ICE CONDITIONS

Waterway management concerns also occur during low water and ice conditions on the ILWW. Low water is of particular concern on the ILWW below Starved Rock Lock & Dam. This section of river is pooled by two wicket dams designed to hold the river to pool level or slightly above. These dams do not have the capability of holding more water in the pools. These pools are susceptible to rapid water level changes when a dam is placed into operation or is dropped to allow for open passage. Groundings during low water conditions delay commercial traffic, cause substantial damage to the navigation channel and can necessitate dredging. Ice condition not only reduces water levels but causes ice to build up underneath barges causing them to "ground" without ever touching the river bottom. Ice navigation can be very difficult as the ice removes navigation buoys, causes ice gorges and damages the hulls of towing vessels and barges.

CONTROLLING FACTORS & WATERWAYS MANAGEMENT PLANNING

Under flood conditions, controlling factors are gauge readings at specific locales and locks. These are general elevations at which water levels may cause impact upon levee conditions, damage homes or create unsafe navigation conditions, as described in the “narrative” section of each zone. Well before water levels near or reach these levels, the Coast Guard in conjunction with Army Corps of Engineers (USACE), and industry shall implement the “Watch Phase” of the plan (which vary for each zone) e.g., establish communications to discuss the current and forecasted conditions. These discussions should include an analysis of data, weather history & forecast, impact upon river environment and commercial traffic requirements. Furthermore, general considerations such as levee conditions, wake damage, bridge clearances and lock operating restrictions/closures shall be discussed.

Section 2 – Parties and Roles

U.S. Coast Guard
The U. S. Coast Guard Sector Commander Upper Mississippi River, with its principal office in St Louis, MO and a smaller Marine Safety Unit office in Peoria, IL, is responsible for safety of navigation, security, and law enforcement along the Illinois Waterway as far as mile marker 187; from that point, the responsibility belongs to the Coast Guard Sector Commander of Sector Lake Michigan working through the Coast Guard Marine Safety Unit Chicago.

U.S. Army Corps of Engineers (USACE)

The USACE maintains eight Lock and Dam facilities along the Illinois Waterway, under the Supervision of their Rock Island District Office on Arsenal Island in Rock Island, IL, and a Project Office in Peoria, IL. To the extent possible, through management of these facilities, the USACE maintains pool levels that are sufficient to accommodate commercial traffic on the river.

RIAC
The River Industry Action Committee (RIAC) is an association of companies and organizations who are stakeholders in the commercial industry on the inland rivers. As the name suggests, they act in an advisory capacity on a wide range of issues affecting the activities of the industry on the rivers. They provide an industry perspective to the Coast Guard and the USACE on matters such as high and low water, ice conditions, shoaling, marine accidents, etc.

IRCA
The Illinois River Carrier's Association (IRCA) plays a similar role to that of RIAC, but keyed to only the ILWW, whereas RIAC may overlap the major inland rivers.

Fleeting Facility Managers
Fleeting facility managers have a direct commercial interest in navigation conditions on the Illinois Waterway, and any actions taken by the Coast Guard or Corps of Engineers in response to hazardous conditions that develop on the river. They can play a valuable role in providing feedback to other parties on both river conditions and impact of proposed actions of the Coast Guard and Army Corps of Engineers (USACE).

Designated Waterfront Facilities
Like the fleeting facility managers, the commercial interests of the designated waterfront facilities are directly impacted by navigation conditions on the Illinois Waterway, and any actions taken by the Coast Guard or Corps of Engineers in response to hazardous conditions that develop on the river. They can play a valuable role in providing feedback to other parties on both river conditions and impact of proposed actions of the Coast Guard and USACE.

State Emergency Managers
Hazardous conditions on the Illinois Waterway, particularly high water/flooding conditions, frequently involve state emergency managers, as they become involved in responding to affected communities, and take a direct interest in conditions or activities that can affect the levee systems that protect those communities.

USACE POSITION St. Louis District RM 0.0-80.0	**DUTIES & RESPONSIBILITIES**	**EQUALS**	**USCG POSITION**	**DUTIES & RESPONSIBILITIES**
Chief, Water Control Operations	River Stage Forecast & Control		Sector Upper Mississippi River Chief of Prevention	Manages daily waterway management and casualty operations
Operations Dredging Project Manager, St. Louis, MO	Channel Patrol & O&M Dredging Activities Illinois Waterway		Sector Upper Mississippi River Chief of Prevention	Manages daily waterway management and casualty operations
Operations Manager, Rivers Project Office, Alton, IL	Project Manager of Illinois Waterway		Sector Upper Mississippi River Chief of Prevention	Manages daily waterway management and casualty operations
REPORTS TO:				
Chief of Operations, St. Louis District	Supervises Operations Managers		Sector Upper Mississippi River Chief of Response	Supervises operational response issues
REPORTS TO:				
District Engineer, St. Louis District	Supervises Chief of Operations		Commander, Sector Upper Mississippi River	Senior USCG officer in area
REPORTS TO:				
Division Engineer, Mississippi Valley Division	Supervises District Engineer		Commander, Eighth Coast Guard District	Senior USCG officer in District

USACE POSITION Rock Island District RM 80.0-187.0	**DUTIES & RESPONSIBILITIES**	**EQUALS**	**USCG POSITION**	**DUTIES & RESPONSIBILITIES**
Chief Maintenance Section and Chief L&D Section	Day to day O&M Illinois Waterway		Sector Upper Mississippi River Chief of Prevention	Manages daily waterway management and casualty operations
Operations Manager, Illinois Waterway	Supervises Section Chiefs		Sector Upper Mississippi River Chief of Prevention	Manages daily waterway management and casualty operations
REPORTS TO:				
Chief of Operations, Rock Island District	Supervises Operations Manager		Sector Upper Mississippi River Chief of Response	Supervises operational response issues
REPORTS TO:				
District Engineer, Rock Island District	Supervises Chief of Operations		Sector Commander Upper Mississippi River	Senior USCG officer in area
REPORTS TO:				
Division Engineer, Mississippi Valley Division	Supervises District Engineer		Commander, Eighth Coast Guard District	Senior USCG officer in District for Marine Safety

USACE POSITION Rock Island District RM 187.1-327.0	DUTIES & RESPONSIBILITIES	EQUALS	USCG POSITION	DUTIES & RESPONSIBILITIES
Chief Maintenance Section and Chief L&D Section	Day to day O&M Illinois Waterway		Sector Lake Michigan Chief of Prevention	Manages daily waterway management and casualty operations
Operations Manager, Illinois Waterway	Supervises Section Chiefs		Sector Lake Michigan Chief of Prevention	Manages daily waterway management and casualty operations
REPORTS TO:				
Chief of Operations, Rock Island District	Supervises Operations Manager		Sector Lake Michigan Chief of Response	Supervises operational response issues
REPORTS TO:				
District Engineer, Rock Island District	Supervises Chief of Operations		Sector Commander Lake Michigan	Senior USCG officer in area
REPORTS TO:				
Division Engineer, Mississippi Valley Division	Supervises District Engineer		Commander, Ninth Coast Guard District	Senior USCG officer in District for Marine Safety

Section 3 – Communications Plan

Initiation of Communications Plan – This section provides guidance on the methods of communicating and receiving information. The Coast Guard and maritime industry all carefully monitor river conditions and levels. When any of the conditions warrant attention, (high water, low water, high flow, ice or any other hazardous condition), any ILWW stakeholder can request a conference call by contacting the USCG Sector UMR Chief of Response, USCG MSU Chicago or the Chair of IRCA. The Chair of IRCA and the USCG will discuss the concerns with the appropriate USACE contacts to decide if a phone conference is necessary. If further discussion is needed, the members listed on the following pages of this section, to include Industry and State personnel, will be contacted via email or phone call. The IRCA chair will contact those members of their respective organizations. A teleconference will be set up to confer with all parties on possible measures to take and joint courses of action using the guidance from this annex as a basis to make a determination. During times when zones have reached the "action" phase, the Captain of the Port of St. Louis and the CO (or XO) of MSU Chicago shall be present during telephone conference calls. By conferring frequently with all ILWW stakeholders a joint action plan to safely navigate during the condition that warranted initiating the communications plan will be developed. The action plan will then be communicated to all ILWW stakeholders and the public using Broadcast Notice to Mariners, , press releases if appropriate, and, if time permits, Local Notice to Mariners.

ALL AGENCIES & ORGANIZATIONS: To ensure effective interagency cooperation during periods of coordinated response to high and low water, or other hazardous river conditions, stakeholder organizations are advised to **maintain active and ongoing communications with one another during normal river conditions and while planning together for joint response activities**. This will greatly facilitate speedy and effective communications under the pressure of responding to an event. These communications will be facilitated by the Contact List provided on page 9. As an aid to those looking to

better understand Coast Guard and USACE internal notification procedures, a description of these procedures is provided starting on page 6.

VESSEL TO VESSEL AND VESSEL TO SHORE COMMUNICATIONS: VHF communications on the Illinois Waterway are handled by the communications center at the Sector Upper Mississippi River Integrated Command Center in the Robert A. Young Federal Building in St. Louis, MO 314-269-2332.

NOTIFICATIONS:

U. S. Coast Guard: The U. S. Coast Guard maintains a 24 x 7 live watch at its Command Center in St. Louis, MO. Hazardous river conditions are monitored by Command Center personnel, as well as the Sector Duty Officer at Sector Upper Mississippi River, St Louis, and reported as appropriate to the Sector Commander, Sector Upper Mississippi River. As conditions dictate, the Command Center will release Broadcast Notices to Mariners (BNM) or Urgent Marine Information Broadcasts (UMIB) with safety advisories, safety zones, or river closures. As noted above, these waterways control measures are determined in consultation with the USACE and representative of the river industry.

CORPS OF ENGINEERS: ROCK ISLAND DISTRICT

During Normal Work Hours

During periods of hazardous river conditions the Corps of Engineers (Corps) field offices work closely with river users and the basin communities. The field office staff reports the river conditions and impacts to their respective District Office and Mississippi Valley Division (MVD) Point of Contact. The Corps has two district offices responsible for the Illinois Waterway; the Rock Island District and the St. Louis District. The District boundaries split at RM 80. The field staff report to district staff persons within Operations Division and Emergency Management Division. Operations Division staff will inform the District Water Control or Water Management Offices, the district leadership and the District Commander. They will also notify Division Water Management. They will then contact appropriate staff person in the Division Office, who will notify, the appropriate Division leadership and the Division Commander. The District Operations staff will coordinate with the Coast Guard throughout the hazardous period. When river conditions become too hazardous for safe navigation or if continuing navigation causes an unsafe condition such as causing levee erosion or interfering with flood fighting, etc, the Corps through the appropriate District Commander will make recommendations to the Coast Guard to issue safety zone restrictions or river closures. Likewise as river conditions improve the Corps through the appropriate District Commander will make recommendations to remove the safety zone restrictions or reopen the river to navigation.

After Normal Work Hours, Weekends and Holidays

Any Corps staff person, field office, District or Division who becomes knowledgeable of a hazardous river condition will contact the St. Louis District or Rock Island District Emergency Management Office. Here the most up-to-date contact list with home and cell phone numbers are maintained of Corps staff responsible for emergency response to hazardous river conditions.

USACE Rock Island 24 Hour Phone Number: (309) 794-4200

CORPS OF ENGINEERS: ST. LOUIS DISTRICT

During Normal Work Hours

During periods of hazardous river conditions the Corps of Engineers works closely with river users and the basin communities. River users may report hazardous conditions to the nearest Lock and Dam. The Lockmaster will report the hazardous river conditions and impacts to their District Office Point of Contact. Once the report of the hazardous condition is received in the District Office the following persons will be informed: District Water Control Manager, Emergency Management Manager, Operations Dredging Project Manager, Rivers Project Office Manager, the Chief of Operations, District Deputy Engineer and the District Commander. The District Team including Water Control, Emergency Management and Operations staff will coordinate with the Coast Guard throughout the hazardous period. When river conditions become too hazardous for safe navigation or if continuing navigation causes an unsafe condition such as causing levee erosion or interfering with flood fighting, etc, the Corps through the District Commander will make recommendations to the Coast Guard to issue safety zone restrictions or river closures. Likewise as river conditions improve the Corps through the appropriate District Commander will make recommendations to remove the safety zone restrictions or reopen the river to navigation.

After Normal Work Hours, Weekends and Holidays

Any Corps staff person, field office, who becomes knowledgeable of a hazardous river condition, will contact the St. Louis District Emergency Management Office 24 hour phone number at 314-331-8567. Here the most up-to-date contact list with home and cell phone numbers are maintained of Corps staff responsible for emergency response to hazardous river conditions.

- River users may report hazardous conditions to the nearest Lock and Dam. The Lockmaster will report the hazardous conditions and possible impacts to Water Control Personnel and River Project Manager.

    1. Water Control Contact List:

	Work	Cell
Joan Stemler	314-331-8330	314-630-6292
Russel Errett	314-331-8337	314-681-7625
Liz Behrens	314-331-8351	314-277-5825
Leonard Hopkins	314-331-8348	314-799-3458

    2. River Project Contact List:

	Work	Cell
Andy Schimpf	636-899-0044	314-630-6280
Peg O'Bryan Lou Dell'Orcoo	314-331-8100	314-303-2571

- Corps of Engineers will report hazardous conditions to Coast Guard.

- Corps of Engineers will coordinate with Coast Guard for issuance of safety zones.

Illinois Emergency Management Agency (IEMA)

In the event of an incident occurring on the waterways which could involve the state of Illinois, you should immediately phone our telecommunications center. This will alert our Operations staff which enables the IEMA to monitor and pre-position resources if circumstances dictate. It is at this initial call number that the agencies equipped to provide a response; mitigation and recovery are quickly notified. Periodic status reports to the telecommunications center (IEMA) allows the IEMA staff time to prepare for management procedures.

IEMA Telecommunications Center: 1- 217-782-2589 or 1- 800 -782 -7860

CONTACT INFORMATION: In order to facilitate communications between ILWW stakeholders, a contact list is provided on the following pages.

INTERNET SITE PURPOSE	ADDRESS
USACE Rock Island District Division	http://www.mvr.usace.army.mil/
USACE St. Louis District Division	http://www.mvs.usace.army.mil/
Industry information	http://www.ribb.com
USCG MSU Chicago	http://www.uscg.mil/d9/wwm/mso/chicago/index.htm
USCG Sector Upper Mississippi River	http://www.uscg.mil/d8/sector/umr/index.html

Section 4 – Action Plan

The actions to be taken during High Water, Low Water, High Current, and Ice conditions are described in the following Action Plan Tables.

ACTION PLAN TABLE –

High Water Zone 1

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 1** **Miles 0.0 to 9.9** Reference Gauge: Grafton RM 0.0 Flood Stage: 18’ / 421.8’ MSL (Mean Sea Level) MSL Zero Gauge: 403.8’	Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	18’ to 20’	Rising	High Water Damage begins in Grafton, IL at 18’	Watch 18’ – 21.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	22’	Rising	Extreme High Water Rte 100 closed @ 24.7’, Nutwood levee overtopped @ 33.5’	Action 22’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	18’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 2

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 2** **Miles 10.0 to 49.9** Reference Gauge: Hardin RM 21.5 Flood Stage: 25’ / 425.0’ MSL MSL Zero Gauge: 400.0’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	25’	Rising	High Water Damage begins in Hardin @ 28.6’	Watch 25’ to 32.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	33’	Rising	Extreme High Water Flooding in Kampsville & Hardin, Eldred levee overtopped @ 35.4’	Action 33’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	25’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5 feet Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 3

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 3** **Miles 50.0 to 80.2** Reference Gauge: Meredosia RM 70.8 Flood Stage: 14’ / 432.0’ MSL MSL Zero Gauge: 418.0’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	14’	Rising	High Water Main Rd in Valley City overtopped	Watch 14’ to 22.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	23’	Rising	Extreme High Water Damage to buildings in Montezuma & Florence at 24’	Action 23’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** Consider setup of unified command with an ICP at Meredosia including Coast Guard, USACE, IEMA, and Industry.
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	14’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 4

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION

Illinois Waterway **Zone 4** **Miles 80.3 to 101.9** Reference Gauge: Beardstown RM 88.6 Flood Stage: 14’ / 433.9’ MSL MSL Zero Gauge: 419.9’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	14’ to 20’	Rising	High Water - Seepage problems initially, damage to buildings in Browning @ 22’	Watch 14’ to 21.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	22’	Rising	Extreme High Water Overtop Coal Creek Levee, damage in Frederick & Browning @ 27’	Action 22’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	14’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising. **Note: At LaGrange Lock:** **Lower wall elevation- 430.0** **If Open Pass is not allowed and the water elevation is at 16.5’ (430.0 MSL) lock out of operation until river falls to 429.5 MSL and to safe operating levels.**
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 5

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION

Illinois Waterway **Zone 5** **Miles 102 to 128.9** Reference Gauge: Havana RM 118.4 Flood Stage: 14’ / 438.4’ MSL MSL Zero Gauge: 424.4’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	14’ to 18’	Rising	High Water -No data on damage conditions	Watch 14’ to 19.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	20’	Rising	Extreme High Water Overtop Big Lake Levee @ 26.0’	Action 22’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, site inspection, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	14’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 6

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 6** **Miles 129 to 145.5** Reference Gauge: Copperas Creek RM 136.8 Flood Stage: N/A Normal Pool: 1.5'/429.5 MSL MSL Zero Gauge: 428.0'	5' Below Watch Phase	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	13'-16.3'	Rising	High Water - @16.4' Tow wave action may affect houses at Copperas Creek	Watch 13' to 16.3'	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake b/w MM 136-138 (Copperas Creek). Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	16.4'	Rising	Extreme High Water @ 18.2' Four houses surrounded by water. @ 20' 1st floor of houses impacted by tow wake Overtop Spring Lake Levee @ 26.6'	Action 16.4' and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**. At 20' river stage, the USACE, USCG, and IRCA will observe test tows transiting the area, in order to determine if a river closure is warranted.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	18'	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5' Below Watch Phase	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 7

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 7** **Miles 145.6 to 180.9** Reference Gauge: Peoria RM 164.6 Flood Stage: 18’ / 446.4’ MSL MSL Zero Gauge: 428.39’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	18’ to 20’	Rising	High Water	Watch 20’ to 21.9’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	22’	Rising	Extreme High Water Damage begins in buildings in Rome at 23’. Peoria Sanitary District Levee overtop at 27.5’	Action 22’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**. @ 22’ minimize wake b/w MM 166.5-178. @ 24.1’ minimize wake b/w MM 162-179. At 26’ river stage, the USACE, USCG, and IRCA will observe test tows transiting the area in order to determine if a river closure is warranted.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	18’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow. **Note: At Peoria Lock:** **Lower wall elevation- 440.0** **If Open Pass is not allowed and the water elevation is at 11.6’ (440.0 MSL) lock out of operation until water falls to 439.5 MSL and safe operating levels.**

High Water Zone 8

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 8** **Miles 181 to 199.9** Reference Gauge: Henry RM 196.1 Flood Stage: 23’ / 448.9’ MSL MSL Zero Gauge: 425.88’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	23’ to 24.5’	Rising	High Water - Damage begins to buildings in Sparland @ 28’	Watch 23’ to 27.4’	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	27.5’	Rising	Extreme High Water Homes in Henry begin to flood at 29.6’	Action 27.5’ and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.**
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	23’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 9

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 9** **Miles 200.0-230.9** Reference Gauge: La Salle RM 224.7 Flood Stage: 20' / 450.0' MSL MSL Zero Gauge: 430.0'	5' Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	20' Flood Stage	Rising	High Water - Damage begins due to agricultural flooding at 20'	Watch 20' to 22'	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	22.1'	Rising	Extreme High Water Hennipen Levee overtops at 27.4'	Action 22.1' and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** **At Starved Rock Lock: Ref: Lock Gauges** Outdraft sign out at 15.5' gate opening Upper wall elevation – 463.5 Lower wall elevation – 458.5 Restriction on doubles at 458.0 Water in bull gear pit at 461.5 Lock out of operation at 461.5 Dam out of operation at 240' gate Hydro plant out of operation at 455.0
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	20' Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5' Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 10

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 10** **Miles 231.0-244.6** **Starved Rock Pool** Reference Gauge: Marseilles RM 246.5 Flood Stage: 20’ / 472.9’ MSL MSL Zero Gauge: 452.9’	5’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	20.0’	Rising	High Water	Watch	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	22.1’	Rising	Extreme High Water Ottawa HS Levee overtopped at 476.0 MSL	Action	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** **At Marseilles Lock: (Ref Lock Gauges)** Outdraft sign out at 15’ gate opening Upper wall elevation – 486.0 Lower wall elevation – 466.7 Restriction on doubles at 466.7 (45’ gate opening) Water in bull gear pit at 483.5 Lock out of operation at 483.5 Dam out of operation at 72’ gate NOTE: For the area in the immediate vicinity of Marseilles Dam and the entrance to Marseilles Canal, RM 247.0 (see also High Flow Zones 1-12 footnote): a. When the dam gate opening reaches 20-25 feet, there is a very strong out draft and mariners need to use extreme caution when transiting the area. Some larger tows consider options to approaching this area, such as holding transit until flows reduce or changing pilots. b. When the dam gate opening reaches higher than 25 feet there is an extremely strong out draft and mariners need to use extreme caution when transiting the area, ensuring adequate expertise and resources are available to safely accomplish transit.
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.

	20’ Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5’ Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 11

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 11** **Miles 244.7-271.5** **Marseilles Pool** Reference Gauge: Morris RM 263.1 Flood Stage: 16'/ 494.5MSL MSL Zero Gauge: 478.5'	5' Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	13.0'	Rising	High Water	Watch 13.0'-16.0'	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	16.0'	Rising	Extreme High Water Roads flood at 16'. Damage to homes at 20' at RM 263	Action 16.0' and up	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** **At Dresden Island Lock: (Ref lock Gauges)** Out draft sign out at 14' gate opening Upper wall elevation – 509.44 Lower wall elevation – 496.53 Restriction on doubles at 496.53 Water in bull gear pit at 505.44 Lock out of operation at 505.44 Dam out of operation at 99' gate * NOTE: See footnote regarding Marseilles Canal under High Flows, Zones 1-12.
	Crest	Stable or Falling	High Water Stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	16.0'	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	5' Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 12

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 12** **Miles 271.6 to 285.9** **Dresden Pool** Reference Gauge: Brandon Rd Lower MM 286 Flood Stage: 507' MSL Zero Gauge: 0	2' Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	1' Below Flood Stage	Rising	High Water	Watch	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	Above Flood Stage	Rising	Extreme High Water	Action	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** **At Brandon Road Lock:** No out draft sign used at Brandon Road Upper wall elevation – 542.7 Lower wall elevation – 513.5 Lock out of operation at 513.5 Dam out of operation at 60,750 cfs
	At or Below Flood Stage	Stable or Falling	High Water stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	Below Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	1.5' Below Flood Stage	Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 13

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 13** **Miles 286.0 to 291.0** **Brandon Road Pool** Reference Gauge: Lockport Lock Lower RM 291.0 Flood Stage: 541.0 MSL Zero Gauge: 0	2’ Below Flood Stage	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	1’ Below Flood Stage	Rising	High Water	Watch	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of downstreaming, and discuss mooring arrangements.
	Above Flood Stage	Rising	Extreme High Water	Action	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** **At Lockport Lock:** Out draft sign out at 7,000 cfs Upper wall elevation – 584.5 Lower wall elevation – 546.6 Restriction on doubles at (lower wall elevation) Lock out of operation at 565.0 (not enough depth over upper gate sill)
	At or Below Flood Stage	Stable or Falling	High Water stable or falling	Recovery	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions and levee conditions if and when to reopen the river (if a safety zone or closure was established). Determine what action advisories need to be removed or remain depending on river conditions.
	Below Flood Stage	Falling	High Water	Recovery	Issue advisory that indicates high water and to exercise caution; Users to report hazardous conditions to Coast Guard. Initiate comms plan if river level begins rising.
	2’ Below Flood Stage	Stable or Falling	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Water Zone 14

CRITICAL LOCATION DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zone 14** **Miles 291.1 to 333.4** **Lockport Pool & above** Reference Gauge: Lockport Lock Upper RM 291.1 Flood Stage: None Normal Pool: 577.5 Canal Wall Elevation: 584.5 MSL Zero Gauge: 0	Rising above normal pool	Rising	Normal Operations		As stage rises towards flood stage at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	Rising above normal pool	Rising	High Water Heavy Rainfall in Chicago	Watch	Initiate communication plan. Issue advisory that indicates high water and drift potential. Advise the use of caution and minimize wake. Consider tow restrictions, hp requirements, dangers of down streaming, and discuss mooring arrangements.
	Rising above normal pool	Rising	Extreme High Water Extremely Heavy Rainfall in Chicago	Action	Use watch stage along with high current reports, flood fighting reports, impacted river reach, towboat positions/levee conditions to determine establishment of safety zones/river closure. Discourage or prohibit recreational vsl transit, prohibit laying up on levees, allow local fleeting to continue, advise swift current caution**.** MWRD regulates dam opening for storm water storage and release. O'Brien Lock (River Mile 326.5) will shut down operations when the canal water level rises to near lake levels (the canal level must be maintained no higher than one-half foot below lake levels in order to eliminate potential of drinking water contamination).
	Falling to normal pool	Stable or Falling	High Water stable or falling	Recovery	Use watch stage along with high flow reports to determine what action advisories need to be removed or remain depending on river conditions.
	Normal Pool	Stable	Normal Operations		Issue final advisory that indicates return to normal operations. Users to report hazardous conditions to the Coast Guard. Cease all advisories if conditions allow.

High Flow Zones 1-12

CRITICAL AREA DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zones 1 - 12** **Miles 0.0 to 285.9**			High Flow conditions are not applicable to zones 1-12 along the Illinois Waterway. High flow conditions are dealt with under normal operating conditions regarding out draft signs at lock approaches and different operating conditions and approach methods at bridges and bend ways. Erosion/scour conditions along flood control levees during high flows are very site specific and are integrated into High Water conditions.		Some locks display out draft warning signs during certain dam gate openings; this is performed as part of normal operations at the navigation locks and dams * NOTE: The out draft warning sign for Marseilles Lock is located at the entrance to Marseilles Canal at RM 247.0. a. When the dam gate opening reaches 20-25 feet, there is a very strong out draft and mariners need to use extreme caution when transiting the area. Some larger tows typically consider options to approaching this area, such as holding transit until flows reduce or changing pilots. USCG will issue Broadcast Notice to Mariners (BNM) when Marseilles Dam gate opening reaches 20 feet to warn of strong outdraft – Marseilles Lock personnel will notify USCG of dam gate conditions. b. When the dam gate reaches 25 feet or higher, there is an extremely strong out draft and mariners need to use extreme caution when transiting the area, ensuring adequate expertise and resources are available to accomplish transit. USCG will issue BNM when Marseilles Dam gate opening reaches 25 feet to warn mariners of extremely strong out draft conditions – Marseilles Lock personnel will notify USCG of dam gate conditions

High Flow Zones 13 & 14

CRITICAL AREA DESCRIPTION	TRIGGER READING	TREND	TRIGGER FLOW	DESCRIPTION	PHASE	ACTION
Illinois Waterway **Zones 13 & 14** **Miles 286.0-333.4**		Rising	below 1,000 cfs	Normal operations	Watch	Monitor flow and traffic. Continue standard communication practices to keep a good understanding of flow conditions.
		Rising	below 5,000 cfs	High Flows	Watch	Establish or monitor normal communications between USACE, MWRD, Industry and USCG as needed to discuss specific flow problem(s), potential impacts and possible solutions. All tows entering Joliet harbor should call MWRD at 312-751-5133 for the current flow and/or anticipated changes.
		Rising	7200 cfs	Very High Flows - Traffic stops at 10,000 cfs in portions of the canal system	Watch / Action	Continue normal communications (e-mails, conference calls or others) – consider establishing notices, advisories and/or safety zones as needed using standard communication links between USACE, MWRD, Industry (IRCA/RIAC/fleeters), and USCG. Coast Guard will release broadcast at 7,000 cfs and again at 10,000 cfs to alert mariners. When flows reach 7200 cfs a helper boat is recommended for vessels transiting southbound through Joliet bridges.
		Falling	below 5,000 cfs	High Flows	Recovery	Continue normal communications between USACE, MWRD, Industry (IRCA) and USCG.
		Falling	below 1,000 cfs	Normal operations	Watch	Monitor flow and traffic. Continue standard communication practices to keep a good understanding of flow conditions.

ACTION PLAN TABLE – LOW WATER CONDITIONS ILLINOIS WATERWAY, ALL ZONES

CRITICAL REACH DESCRIPTION	TRIGGER READING	TREND	TRIGGER FLOW	DESCRIPTION	PHASE	ACTION
CRITICAL REACH DESCRIPTION	**TRIGGER READING**	**TREND**	**TRIGGER FLOW**	**DESCRIPTION**	**PHASE**	**ACTION**
ALL ZONES ILLINOIS WATERWAY <u>Normal Pool</u> Zone 1: 15.2'/ 419.0' Zone 2: 19.0'/419.0' Zone 3: 2.0'/ 420.0' Zone 4: 9.1' / 429.0'* Zone 5: 4.8' / 429.2' Zone 6: 1.5' / 429.5' Zone 7: River mile 145.6-157.6: 1.7' / 429.7' River mile 157.7-180.8: 11.6' / 440.0* Zone 8: 14.0' / 440.0' Zone 9: 10.2' / 440.2' Zone 10: 458.5' Zone 11: 4.7' / 483.2' Zone 12: 504.5' Zone 13: 538.5' Zone 14: 577.5 Footnote: Normal Pool levels based on USGS data and not from USACE River Charts.	Normal pool	Stable		Normal Operations		If stage lowers towards normal pool at a gauge or series of gauge locations consider the need to initiate communications plan with USACE, RIAC, IRCA, and USCG. Monitor river gauges frequently.
	Normal pool	Falling		Low Water Channel narrows in various conditions	Watch	Initiate communication plan. Issue advisory that indicates low water. Advise the use of caution. Corps initiates increased channel reconnaissance surveys. Identify and monitor potential problem areas and reason for pool dropping. Advise deep draft vessels to depart the area of low water. Vessels need to transit at a slow speed near fleeting areas to minimize impact due to narrow channel width. Place heavy barges in middle of tow. Establish normal communications between USACE, USCG and Industry as needed to discuss specific problem areas, potential impacts and possible solutions. Notify water intake stations down river in anticipated affected zones. Mariners should identify fleeting areas in the event of river closure.
	Below Normal Pool	Falling		Extreme Low Water Channel problems, both width and depth, increase	Action	Issue advisory that indicates extreme low water. Coast Guard will reset buoys in those narrow channel locations within reach. Corps will continue increased level of channel reconnaissance. Establish draft limits, limit barge widths, req. helper tugs, determine if fleeting can continue, pre-identify areas to lay up in event of closure, Emergency Dredging may be required at some locations. Be aware of shifting channels. Develop recovery plan Continue normal communications (e-mails, conference calls or others) – consider establishing notices, advisories and/or safety zones as needed using standard communication links between USACE, USCG and Industry (IRCA and others as needed).
	Below Normal pool	Rising		Channel returning to normal	Recovery	Continue advisory that indicates extreme water. Coast Guard will monitor buoys in those narrow channel locations within reach. Corps will continue increased level of channel reconnaissance. Emergency dredging may be required at some locations. Continue normal communications conditions as needed. Cancel any notices, advisories and safety zones as channel conditions improve. Conduct casualty assessments, clearing of channel, and assess rail bedding.

* Water levels typically fall 1 ½ feet below these readings at LaGrange Lock and Dam (Zone 4) and Peoria Lock and Dam (Zone 7) during normal operations prior to raising the wicket dams.

ACTION PLAN TABLE – ICE CONDITIONS ILLINOIS WATERWAY, ALL ZONES

CRITICAL REACH DESCRIPTION	TRIGGER READING	TREND	DESCRIPTION	PHASE	ACTION
ALL ZONES ILLINOIS WATERWAY	No Ice		Normal Operations		Corps distributes informational navigation notice in early winter, prior to ice season.
	Ice Build-Up in Channel and Sheet Ice Formation	Predicted weather forecast indicates extreme temperatures. Ice build up begins in the creeks and tributaries.	Mariners consulting with lock masters for indications of ice build up. Ice Interferes with Normal Navigation. Sheet ice will at times prevent opening of the upper and lower lock gates and Thomas J. O'Brien, Dresden Island, Marseilles, Starved Rock, Peoria, and LaGrange Locks. When the lock gates cannot be fully opened into recesses, they are highly vulnerable to extensive damage from tows entering or departing the lock chamber. Sheet ice may be expected throughout the length of the waterway downstream from about mile 280.0 and in the Marseilles Canal and that reach of the waterway between mile 321.0 and Thomas J. O'Brien Lock, mile 326.5 on the Calumet River.	Watch	Consider advisories on missing buoys and safety zone restriction for tow width and length. Ice couplings for entering locks. Single-file traffic in ice-narrowed channels. Navigators are cautioned to exercise extreme care when entering or departing the lock chamber to avoid damage to the lock gates. When ice builds up to the extent that full usage of the lock chamber is prohibited, length and/or width restrictions may be imposed on lockages.
	Heavy Ice Gorges	Prolonged extreme temp.	Channel blocked in some locations. River reach impassable. Gorged ice becomes a particular hazard when attempts are made to drive barges through the formation. Barges forced through or over gorged ice may be damaged. Ice gorges can most frequently be expected to form between miles 86.5 and 95.5 (Grape Island to Sugar Creek), between miles 127.0 and 137.0 (Liverpool to Copperas Creek), between miles 213.8 and 216.9 (Penn Central, Marquette Bar and Clark Island area), at mile 237.2 (Mayo Island), between miles 240.6 and 241.5 (Bulls Island), at mile 242.5 (Milliken Creek Light and Daymark) and at mile 243.7 (Marseilles Lock Light and Daymark).	Action	Consider river closure, restriction of types of traffic, or allow single lane traffic in open areas only. Navigators are advised to exercise due caution to avoid damaging barges and unusual currents and high localized flow or out draft conditions due to water bypassing the temporary dam formed by the gorge. Navigators approaching an ice gorge should make certain that the towboat has sufficient power to properly control the number of barges in tow under such unusual conditions of flow.
	Rotting ice, increased flow softening ice	Rising temperatures and rain flushing ice out.	Ice softening, water noticeable on top of the ice flow, channel conditions improving, and ice receding from channel.	Recovery	ATON checks, locks and dams flush ice, lock personnel will notify USCG to release a broadcast prior to prolonged flushing at the locks.

Sector Upper Mississippi River

Marine Casualty Risk Assessment Tool Assumptions for Data

1. In the WAP process Marine Casualty Data is the starting point for discussion.
2. The data is not a complete record.
3. Since 1990 there are over 5,000 Coast Guard investigation data records for Sector Upper Mississippi River's area of responsibility. These records were screened and 370 met the following criteria:
    a. From May 1998 to May 2005
    b. A risk factor as identified in the WAP process (High water, low water, high flow, and Ice) was a contributing factor to the marine casualty.
4. It is important to note that the WAP guidelines did not provide any definition for the risk factors.
5. Five individuals conducted a review of the data and made decisions concerning each record.
6. As data was reviewed, individuals conducting the reviews noted several important issues:
    a. Shoaling could occur at any stage. In light of this, grounding occurring during a low river level condition were sought to populate the low water risk assessment.
    b. Low Water Reference Plane, is the position relative point at which the USACE maintained its mandated channel depth. Vessel drafts were not considered, nor are they included in the records.
    c. High flow could have several different affects on vessels (i.e. Eddy's may push vessels up stream. L&D outfalls may push vessels toward a bank.)
    d. Cubic Foot/Second (CFS) is a shaky at best determination of high flow rate. As water flows down river, the differentiating depths and widths of the river are constantly affecting current flow rates. Furthermore, some CFS readings are proportionally based on the river stage at the same gauge and are not a separate reading. Also, CFS readings were limited mainly to gauges located at Lock and Dams.
7. Initial review of records relied on the incident narrative to make a determination risk factor contribution.
8. Where information was incomplete, a review of river stage, current, other casualties at the same time were viewed for clues to determine if one of four risk factors contributed to casualty.
9. Once data was screened, Risk Assessment Tools were populated.

10. For WAP uniformity, High, Medium, Low definitions for each of the five formula elements (obstructions to navigation, channel width, bend radius, congestion, and casualty history count) and their corresponding point value could not be changed. Also, the format of the tool could not be altered.
11. Variables that could be changed in the Risk Assessment Tool are:
    a. The length of river sections
    b. The Acceptable Risk Score
12. Although narrowing the casualty data record may have eliminated some pertinent casualty data REMEMBER ITEM NUMBER 1: The casualty data is the starting point. The natural working group is not bound to the tool when determining appropriate operational protocols.
13. Dissection of data may have masked problem areas which could be more visible by looking at geographic points with all casualty data available. If parties are interested in further casualty data analysis or discussions apart from the WAP forum they may contact LCDR Patrick Clark of Sector Upper Mississippi River's Prevention Department.

Footnote: Gauge readings used for risk assessment were from the RCAP and not from USACE River Charts.

How Sector Upper Mississippi River obtained Data for the Risk Assessment

	Action Description	Approximate Incident Count /Personnel Hours
1	USCG HQ provided a download of every investigation from 1990 till present filed by Sector Upper Mississippi River.	5000/9 Hours
2	Data was refined to included only marine casualties for the last seven years ending May 2005.	N/A
3	Review of each record and eliminated all marine casualties that were plainly not the result of ice, high water, low water, or high flow (i.e. fire, mechanical failure, pollution, etc…) and did not occur on one of the three rivers included in the Waterway's Action Plan.	N/A
4	Every narrative was read to determine if the incidents were plainly stated as being the result of ice, high water, low water, or high flow.	N/A
5	River levels and flow rates (when and where available from USACE and NOAA records) were assigned to each remaining record. Then, a common sense approach was made with regard to river characteristics in place at the time of the incident in order to either eliminate or include each record in a particular assessment: • If the river level was not relatively low for the locality then the record was eliminated from the low water assessment. Groundings that occurred during high water or out of the channel (i.e. pushed in to allow other vessel to transit) were eliminated from the low water assessment. This included a thoughtful look at groundings due to shoaling (which is capable of occurring regardless of river stage). • Allisions occurring during low water were eliminated from high water or high flow assessments. • Groundings on submerged objects (dikes, timbers, unknown items) were eliminated. A close look at each casualty to ensure that ice, high water, low water, or high flow was a direct contributor to the casualty. (I.e. a bridge allision during high water may have been caused by high winds and had nothing to do with river stage.) * Steps 1-5 completed for zones 1-8, raw data without screening used for zones 9-14	400/200 Hours
6	The risk assessment was completed and validated with extensive participation from all members of industry, Coast Guard Sector Upper Mississippi River, and MSU Chicago. In addition to the data described above, the Midland (April 2001) document for the Illinois Waterway, as well as a review of Coast Guard Cutter Officer in Charge summaries based on buoy placement, and a compilation of pilot data from several industries were extensively used.	NA/22 Hours

Legend

	Risk Factors				
Need for Precise Control	**Navigational Complexity**			**Congestion**	
	Obstructions to Nav	**Channel Width (Full Banks)**	**Bend Radius**		**Casualty History (7 yr period)**
High	Multiple Obstructions	Narrow (single passage)	sharp bend(>180 deg)	Traffic always present	>10
Medium	Single Obstruction	Medium (dual passage possible/likely)	gradual bend (btn 90 and 180 or	Traffic sometimes present	6>x>10
Low	No Obstructions	Wide (more than 2 vsl passage possible)	no bend (>90 deg) or no river crossing	Traffic rarely present	<6

Casualty Count (*Summary*)

MM	Description	High Flow Casualties	High Water Casualties	Low Water Casualties	Ice Casualties
291.1 – 333.4	Zone 14 Lockport Pool and above				
286.0 – 291.0	Zone 13 Brandon Road Pool	2	0	1	0
271.6 – 285.9	Zone 12 Dresden Pool	0	0	1	0
244.7-271.5	Zone 11: Marseilles Pool	0	0	3	0
231 - 244.6	Zone 10: Starved Rock Pool	0	0	4	0
200 - 230.9	Zone 9: La Salle	0	0	6	3
181 - 199.9	Zone 8: Henry	0	0	1	1
145.6 - 180.9	Zone 7: Peoria	5	6	8	0
129 - 145.5	Zone 6: Copperas Creek	0	0	9	0
102 - 128.9	Zone 5: Havana	0	0	2	0
80.3 - 101.9	Zone 4: Beardstown	0	3	9	0
50 - 80.2	Zone 3: Meredosia	0	8	8	1
10 - 49.9	Zone 2: Hardin	1	3	4	1
0.0 - 9.9	Zone 1: Grafton	0	0	0	0

High Flow Marine Casualty Data

Casualty Count

MM	Description	Casualties
291.1 – 333.4	Zone 14 Lockport Pool and above	
286.0 – 291.0	Zone 13 Brandon Road Pool	2
271.6 – 285.9	Zone 12 Dresden Pool	0
244.7-271.5	Zone 11: Marseilles Pool	0
231 - 244.6	Zone 10: Starved Rock Pool	0
200 - 230.9	Zone 9: La Salle	0
181 - 199.9	Zone 8: Henry	0
145.6 - 180.9	Zone 7: Peoria	5
129 - 145.5	Zone 6: Copperas Creek	0
102 - 128.9	Zone 5: Havana	0
80.3 - 101.9	Zone 4: Beardstown	0
50 - 80.2	Zone 3: Meredosia	0
10 - 49.9	Zone 2: Hardin	1
0.0 - 9.9	Zone 1: Grafton	0

Risk Assessment

Calculate Risk Score	Factors to Increase Likelihood of Casualty								Score
		Channel Width	Bend Radius	**Congestion**	**Casualty History**	**Risk Score**		**High**	**100**
MM 291.1 – 333.4 Zone 14 Lockport Pool and Above									
MM 286.0 – 291.0 Zone 13 Brandon Road Pool	High	High	Low	High	Low	**303**			
MM 271.6 – 285.9 Zone 12 Dresden Pool	Medium	Medium	Medium	Medium	Low	**42**			
MM 244.7-271.5 Zone 11: Marseilles Pool	High	High	Medium	Medium	Low	**222**		Medium	10
MM 231-244.6 Zone 10: Starved Rock Pool	Medium	Medium	Medium	Medium	Low	**42**		Low	1
MM 200-230.9 Zone 9: La Salle	Low	Medium	Medium	Medium	Low	**33**			
MM 181-199.9 Zone 8: Henry	Medium	Low	Medium	Low	Low	**24**			
MM 145.6-180.9 Zone 7: Peoria	Medium	High	High	High	Low	**312**			
MM 129-145.5 Zone 6: Copperas Creek	Low	Medium	Medium	Medium	Low	**33**			
MM 102-128.9 Zone 5: Havana	Medium	High	High	Medium	Low	**222**			
MM 80.3-101.9 Zone 4: Beardstown	Medium	Medium	Medium	Medium	Low	**42**			
MM 50-80.5 Zone 3: Meredosia	Medium	Medium	High	Medium	Low	**162**			
MM 10-49.9 Zone 2: Hardin	Low	Medium	Medium	Medium	Low	**33**			
MM 0-9.9 Zone 1: Grafton	Low	Low	Low	Low	Low	**6**			

High Water Casualty Data

Casualty Count

MM	Description	Casualties
291.1 – 333.4	Zone 14 Lockport Pool and above	
286.0 – 291.0	Zone 13 Brandon Road Pool	0
271.6 – 285.9	Zone 12 Dresden Pool	0
244.7-271.5	Zone 11: Marseilles Pool	0
231 - 244.6	Zone 10: Starved Rock Pool	0
200 - 230.9	Zone 9: La Salle	0
181 - 199.9	Zone 8: Henry	0
145.6 - 180.9	Zone 7: Peoria	6
129 - 145.5	Zone 6: Copperas Creek	0
102 - 128.9	Zone 5: Havana	0
80.3 - 101.9	Zone 4: Beardstown	3
50 - 80.2	Zone 3: Meredosia	8
10 - 49.9	Zone 2: Hardin	3
0.0 - 9.9	Zone 1: Grafton	0

Risk Assessment

Calculate Risk Score	Factors to Increase Likelihood of Casualty								Score
	Obs to Nav	Channel Width	Bend Radius	Congestion	Casualty History	Risk Score		High	100
MM 291.1 – 333.4 Zone 14 Lockport Pool and above									
MM 286.0 – 291.0 Zone 13 Brandon Road Pool	High	High	Low	High	Low	**303**			
MM 271.6 – 285.9 Zone 12 Dresden Pool	Medium	Medium	Medium	Medium	Low	**42**			
MM 244.7-271.5 Zone 11: Marseilles Pool	High	High	Medium	Medium	Low	**222**		Medium	10
MM 231-244.6 Zone 10: Starved Rock Pool	Medium	Medium	Medium	Medium	Low	**42**		Low	1
MM 200-230.9 Zone 9: La Salle	Low	Medium	Medium	Medium	Low	**33**			
MM 181-199.9 Zone 8: Henry	Medium	Low	Medium	Low	Low	**24**			
MM 145.6-180.9 Zone 7: Peoria	Medium	High	High	High	Medium	**330**			
MM 129-145.5 Zone 6: Copperas Creek	Low	Medium	Medium	Medium	Low	**33**			
MM 102-128.9 Zone 5: Havana	Medium	High	High	Medium	Low	**222**			
MM 80.3-101.9 Zone 4: Beardstown	Medium	Medium	Medium	Medium	Low	**41**			
MM 50-80.5 Zone 3: Meredosia	Medium	Medium	High	Medium	Medium	**150**			
MM 10-49.9 Zone 2: Hardin	Low	Medium	Medium	Medium	Low	**33**			
MM 0-9.9 Zone 1: Grafton	Low	Low	Low	Low	Low	**6**			

Low Water Casualty Data

Casualty Count

MM	Description	Casualties
291.1 – 333.4	Zone 14 Lockport Pool and above	
286.0 – 291.0	Zone 13 Brandon Road Pool	1
271.6 – 285.9	Zone 12 Dresden Pool	1
244.7-271.5	Zone 11: Marseilles Pool	3
231 - 244.6	Zone 10: Starved Rock Pool	4
200 - 230.9	Zone 9: La Salle	6
181 - 199.9	Zone 8: Henry	1
145.6 - 180.9	Zone 7: Peoria	8
129 - 145.5	Zone 6: Copperas Creek	9
102 - 128.9	Zone 5: Havana	2
80.3 - 101.9	Zone 4: Beardstown	9
50 - 80.2	Zone 3: Meredosia	8
10 - 49.9	Zone 2: Hardin	4
0.0 - 9.9	Zone 1: Grafton	0

Risk Assessment

Calculate Risk Score	Factors to Increase Likelihood of Casualty								Score
	Obs to Nav	Channel Width	Bend Radius	Congestion	Casualty History	Risk Score		High	100
MM 291.1 – 333.4 Zone 14 Lockport Pool & above									
MM 286.0 – 291.0 Zone 13 Brandon Road Pool	Low	Low	Low	Low	Low	**6**			
MM 271.6 – 285.9 Zone 12 Dresden Pool	Low	Low	Low	Low	Low	**6**			
MM 244.7-271.5 Zone 11: Marseilles Pool	High*	High	Low	Low	Low	**204**		Medium	10
MM 231-244.6 Zone 10: Starved Rock Pool	Low	Low	Low	Low	Low	**6**		Low	1
MM 200-230.9 Zone 9: La Salle	Low	Low	Low	Low	Low	**6**			
MM 181-199.9 Zone 8: Henry	Low	Low	Low	Low	Low	**6**			
MM 145.6-180.9 Zone 7: Peoria	Medium	Medium	Medium	Medium	Medium	**60**			
MM 129-145.5 Zone 6: Copperas Creek	Low	Low	Low	Low	Medium	**24**			
MM 102-128.9 Zone 5: Havana	Low	Low	Low	Low	Low	**6**			
MM 80.3-101.9 Zone 4: Beardstown	Low	Low	Low	Low	Medium	**24**			
MM 50-80.5 Zone 3: Meredosia	Low	Low	Low	Low	Medium	**24**			
MM 10-49.9 Zone 2: Hardin	Low	Low	Low	Low	Low	**6**			
MM 0-9.9 Zone 1: Grafton	Low	Low	Low	Low	Low	**6**			

*** E.J. and E. RR Bridge**

Ice Casualty Data

Casualty Count

MM	Description	Casualties
291.1 – 333.4	Zone 14 Lockport Pool and Above	
286.0 – 291.0	Zone 13 Brandon Road Pool	0
271.6 – 285.9	Zone 12 Dresden Pool	0
244.7-271.5	Zone 11: Marseilles Pool	0
231 - 244.6	Zone 10: Starved Rock Pool	0
200 - 230.9	Zone 9: La Salle	3
181 - 199.9	Zone 8: Henry	1
145.6 - 180.9	Zone 7: Peoria	0
129 - 145.5	Zone 6: Copperas Creek	0
102 - 128.9	Zone 5: Havana	0
80.3 - 101.9	Zone 4: Beardstown	0
50 - 80.2	Zone 3: Meredosia	1
10 - 49.9	Zone 2: Hardin	1
0.0 - 9.9	Zone 1: Grafton	0

Risk Assessment

Calculate Risk Score **cation**	Factors to Increase Likelihood of Casualty								Score
	Obs to Nav	Channel Width	Bend Radius	**Congestion**	**Casualty History**	**Risk Score**		**High**	**100**
MM 291.1 – 333.4 Zone 14 Lockport Pool & above									
MM 286.0 – 327.0 Zone 13 Brandon Road Pool	Low	Low	Low	Low	Low	**6**			
MM 271.6 – 285.9 Zone 12 Dresden Pool	Low	Low	Low	Low	Low	**6**			
MM 244.7-271.5 Zone 11: Marseilles Pool	Medium	Medium	Medium	Medium	Low	**42**		Medium	10
MM 231-244.6 Zone 10: Starved Rock Pool	Medium	Medium	Medium	Medium	Low	**42**		Low	1
MM 200-230.9 Zone 9: La Salle	Medium	Medium	Medium	Medium	Low	**42**			
MM 181-199.9 Zone 8: Henry	Medium	Medium	Medium	Medium	Low	**42**			
MM 145.6-180.9 Zone 7: Peoria	Medium	Medium	Medium	Medium	Low	**42**			
MM 129-145.5 Zone 6: Copperas Creek	Medium	Medium	Medium	Medium	Low	**42**			
MM 102-128.9 Zone 5: Havana	Medium	Medium	Medium	Medium	Low	**42**			
MM 80.3-101.9 Zone 4: Beardstown	Medium	Medium	Medium	Medium	Low	**42**			
MM 50-80.5 Zone 3: Meredosia	Medium	Medium	Medium	Medium	Low	**42**			
MM 10-49.9 Zone 2: Hardin	Medium	Medium	Medium	Medium	Low	**42**			
MM 0-9.9 Zone 1: Grafton	Medium	Medium	Medium	Medium	Low	**42**			

Coast Guard Raw Data Used For Casualty Analysis

Activity Date	Latitude	Longitude	Activity Title	River Mile	Notes
05/08/1999	N 39° 10' 30.00"	W 090° 36' 54.00"	MC99005762-COOPERATIVE VENTURE	21.5	M/V COOPERATIVE VENTURE was sthbd on the Illinois R., MM 21.5, w/15 loaded hopper barges. Pilot attempting to keep tow pointed away from the right descending bank as tug and tow were transiting bridge. Pilot stated that tow was drafting to stbd and he was having trouble holding vessel in position. The stbd stern barge contacted the bridge's protective cell. No apparent damage to bridge. Minor damage to barge ABC 912's starboard tanks (#1 & #2 tanks holed).
03/31/2002	N 37° 12' 35.00"	W 090° 35' 19.00"	M/V SARAH HUNTER Grounding MI 25.9 Illinois R.	25.9	On 31 March 2002, at approximately 2100, the M/V SARAH HUNTER was northbound on the Illinois Waterway (MI 25.9) with 15 loaded coal barges in tow. While navigating past the head of Diamond Island, running close to the black buoy line, the Captain (Mr. Johnie Counce) reported that the stern of the tow developed a suction with the bank of the island which caused maneuverability problems with the tug. The Captain stopped the tow and attempted to re-align the barges back into the channel, however, the current pushed the tow into the head of Diamond Island. After several attempts, the Captain was unable to back the tow off the island so he decided to wait for an assist vessel to help.
01/23/1999	N 39° 14' 24.00"	W 090° 35' 30.00"	MC99000992-UTV RON SHANKIN W/TOW: COLL.	28.3	On 23Jan99 @ approx. 0005hrs UTV HORNET pushing ahead 6 empty hoppers, N-Bound on Illinois Waterway @ approx MM28.3 followed by UTV RON SHANKIN pushing ahead 8 loaded red flag barges in clear WX/heavy ice conditions/4KT current/1-mile vis. Head of HORNET tow topped to port by ice pack as RON SHANKIN & tow was overtaking on port. Lead port barge of HORNET tow collided w/2nd stbd barge of SHANKIN tow and slid down 2 other barges. <<SEE MCNS>>
11/07/1999	N 39° 21' 12.00"	W 090° 37' 06.00"	MC99014778-RICHARD C. YOUNG 36 ILWW SLMMS	36	The M/V RICHARD C. YOUNGwas northboard with 12 loaded and 2 empty barges in tow. The tow was arranged 3 x 5 with the notch at the port string lead. While navigating inside marked channel in low water conditions the port lead barge VLB 1247 came in contact with the bottom. There was no reportable damage to barge VLB 1247.
10/31/1999	N 39° 22' 06.00"	W 090° 37' 12.00"	MC99014399-CRIMSON GLORY (GROUNDING)	37	M/V CRIMSON GLORY was northbound pushing 15 empty hopper barges on the Illinois Waterway at mile 37 when it bumped river bottom. No apparent damage to barges or towboat.
05/03/2002	N 39° 26' 16.00"	W 090° 36' 27.00"	M/V BADGER Allision MI 43 Illinois Waterway	43	M/V BADGER was southbound on the Illinois Waterway (MI 43) with fifteen loaded barges in tow. The captain reported that as the tug and tow approached the Gateway Western RaILWWoad Bridge (also known as Pearl RR Bridge), the lead barge on the port side (barge CC-7821) lightly bumped the bridge's starboard protection cell.
07/06/1998	N 39° 27' 06.00"	W 090° 36' 18.00"	MC98008635-RUSTY FLOWERS/43.2ILWW (SLMMS)	43.2	On 6 Jul 98, M/V RUSTY FLOWERS was s/b with 15 loaded barges, 3 wide and 5 long. While navigating the Pearl Bridge a very hard set to starboard forced the stern of the tow toward the right descending pier. Barge ACBL 4235, the stern barge in the starboard string, allided with the upriver right descending protection cell causing approximately $4,000 damage to the barge. There was no damage to the protection cell.
02/11/2003	N 39° 30' 16.00"	W 090° 35' 02.00"	M/V MYRA ECKSTEIN Grounding MI 47 Illinois R.	47	On 11 February 2003, at approximately 1650 hours, the M/V MYRA ECKSTEIN was southbound on the Illinois Waterway (MI 47) with fourteen loaded barges in tow when the captain (Mr. XXXXXXX XXXXXX) reported that a barge in the tow (RW 905) had grounded in mid-channel. The grounding took place during low river water conditions.
02/12/2003	N 39° 30' 16.00"	W 090° 35' 02.00"	M/V CINDY L. ERICKSON Grounding MM 47.5 Illinois R	47.5	On 12 February 2003, at approximately 2140 hours, the M/V CINDY L. ERICKSON was southbound on the Illinois Waterway (MM 47.5) with fifteen loaded barges in tow when one of the barges in the tow (CC-9204) grounded. The captain stated that the incident occurred because there were several channel markers missing and that the river levels were low.
11/06/2002	N 39° 32' 35.00"	W 090° 34' 17.00"	M/V THRUSTON B. MORTON Grounding MM 50 Ill. River	50	On 06 November 2002, at approximately 0430 hours, the M/V Thruston B. Morton was northbound on the Illinois Waterway (MM 50) with fifteen loaded barges in tow. The captain was positioning the tow along the buoy line so he could wait for southbound traffic to pass when the starboard lead barge (ACBL 4300) came in contact with the river bottom. The captain reported that there was low water

					conditions in the area and these conditions may have contributed to the incident.
11/27/2002	N 39° 59' 00.00"	W 090° 59' 00.00"	M/V ANDREA LEIGH GROUNDING MI51 ILWW	51	Reporting Party states: At 19:10 27NOV02 M/V Andrea Leigh was SB at MI51 ILWW w/9 LDS. The port string grounded 25 ft. from the green buoy line.
06/25/1998	N 39° 37' 30.00"	W 090° 36' 12.00"	MC98008524-BOB KOCH/56ILWW (SLMMS)	56	On 25 Jun 98, M/V BOB KOCH s/b w/15 loaded 3x5. High water & swift current set tow stbd between Florence Bridge piers. Barges ACBL 4069 & ACBL 1320, second & third from back of head in stbd string allided with the upstream right descending bridge protection cell. Damage to ACBL 4069 #4 wingtank flooded and ACBL 1320 #5 wingtank & stern tanks flooded.
06/29/1998	N 39° 37' 30.00"	W 090° 36' 12.00"	MC98009682-MARY ANN/56ILWW (SLMMS)	56	On 29 Jun 98, M/V MARY ANN s/b w/15 grain loaded approaching Florence Hwy Bridge. Stbd string barge MAC 624 allided with bridge protection cell due to high water and strong current. Repairs to barge: 12" x 12" patch to knuckle starboard #1 wing tank and a 12" crack in starboard #2 wing tank. Total cost $730. No reported damage to bridge pier.
03/21/2002	N 39° 59' 00.00"	W 090° 59' 00.00"	M/V PROSPERITY FLOODING MI 56 ILWW	56	M/V PROSPERITY WAS DOWNBOUND MI56 ILWW WITH TWO BARGES AHEAD. RRS 8182 WAS HEAD BARGE. AT172 WAS FIRST. DURING TRANSIT OF FLORENCE HWY BRIDGE THE STBD SIDE OF THE STERN OF RRS 8182 AND STBD SIDE OF AT172 ALLIDED WITH A BRIDGE PIER. NO DAMAGE TO THE BRIDGE PIER. RRS 8182'S STERN TANK WAS HOLED.
07/01/2002	N 39° 37' 30.00"	E 090° 36' 12.00"	M/V RAY WAXLER Allision Illinois Waterway mile 56	56	On the 1st of July 2002 at approximately 2320 the M/V Ray Waxler was south bound on the Illinois Waterway near mile 56. While traveling under the Florence Highway Drawbridge, barge WTC476 rubbed against the bridge protection cell. Proper notifications were completed.
08/30/2004	N 39° 37' 59.00"	W 090° 36' 26.00"	M/V SONNY IVEY ALLISION ILWW MI 56	56	REPORTING PARTY STATES: AT 04:15 10 MAR 20004 M/V SONNY IVEY WAS DOWNBOUND ON ILWW MM 56 W/12 BARGES DURING. THE TOW ALLIDED W/FLORENCE HWY PROTECTION PEIR, BARGE ACBL4090 MAKING CONTACT. NO APPARENT DAMAGE TO PIER. ACBL4090 EXPERIENCED FLOODING IN #3 & 4 WING TANKS. PUMPS WERE PLACED AND A DIVER RESPONDED TO LOCATE DAMAGE.
09/25/1999	N 39° 40' 12.00"	W 090° 37' 36.00"	MC99012570-JACK FLAHAUT, 59 ILWW, SLMMS	59	On 25 SEP 99, the M/V JACK FLAHAUT was southbound on the Illinois Waterway (MM 59) with 8 loaded & 5 empty barges. The pilot stated that as the vessel neared MM 59, the tow ran aground in mid channel causing the port string of barges to break loose. The loose barges drifted down aproximately 75 feet off the red bouy line. No apparent damage to tug or tow other than broken rigging lines. Barges were re-captured and southbound voyage continued.
10/28/2001	N 39° 41' 32.00"	W 090° 38' 26.00"	M/V HERMAN POTT Allision MI 61.2 Illinois Waterway	61.2	M/V HERMAN POTT was northbound on the Illinois Waterway (MI 61.2) with 16 barges in tow. As the captain was aligning the tow for a turn just below the Norfolk Southern Bridge, the stern barge (T 3014) on the port side rubbed the bridge. The allision caused the T 3014 to break free from the tow and float downriver until landing on the bank of the river. The captain retrieved the loose barge, re-built the tow, and proceeded on the northbound voyage.
12/19/1998	N 39° 45' 24.00"	W 090° 36' 18.00"	MC99004193-PENNY ECKSTEIN/66.2ILWW/PEOD	66.2	M/V PENNY ECKSTEIN W/ 16 MTS RPTD THE VSL'S STBD WHEEL HAD STRUCK GROUND AND BROKE OFF AT MILE 66.2 ILWW. DIVERS WERE DISPATCHED AND FOUND THAT THE WHEEL AND PUSHED FWD AND LODGED AGAINST THE RUDDER. DIVERS SLID WHEEL BACK AND SECURED IT IN PLACE. M/V WITH A SMALLER TOW(SWAPPED WITH M/V TITLETOWN) TURNED AND TRANSITTED TO SHIPYARD ON PORT MDE. SHALLOW WATER AND SHOALING CAUSE OF INCIDENT. NO OTHER DAMAGED NOTED.
05/10/1998	N 39° 48' 06.00"	W 090° 34' 24.00"	MC98009872-AMERICAN BEAUTY/70.6ILWW/PEOD	70.6	M/V AMERICAN BEAUTY W/ 12 LOADS RPTD ALLIDING WITH THE MEREDOSIA POWER STATION MOORING CELLS AT MILE 70.6 ILWW. PILOT STATED THAT AFTER TRANSITING S/B THROUGHT MEREDOSIA H/W BRIDGE AT MILE 71.1 THE TOW SUCKED TOWARDS THE RDB. TRYING TO FIGHT THE CURRENT AND THE BANK SUCTION, THE TOW LANDED ON THE MIDDLE MOORING CELL. FREIGHT BARGES XR 575B AND RRS 7928 SUSTAINED MINOR DAMAGES. NO POLLUTION NOTED
05/05/2002	N 39° 49' 35.00"	W 090° 34' 03.00"	JEFFBOAT/ALLISION/71-ILWW/PEOD	71	M/V JEFFBOAT W 15 LOADS. VSL WAS S/B AT 71-ILWW. IT WAS REPORTED THAT WHILE FLANKING THE MEREDOSIA HWY BRIDGE, STBD BARGE (ACBL 3104) CAME INTO CONTACT WITH THE LEAD CELL, AT MEREDOSIA POWER PLANT. IT
02/10/2001	N 39° 19' 18.00"	W 090° 34' 00.00"	MC01003534-MYRA ECKSTEIN/71.0 ILWW/PEOD	71	M/V MYRA ECKSTEIN W/ 15 DRY CARGO LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 71.0 ILWW. FREIGHT BARGE CC 8139 SUSTAINED DAMAGE IN THE WAY OF A #3 AND #4 PORT WING TANK FLOOR AND 1 PULLED CAVEL. CRACK IN FLOOR WAS SHINGLED TO STOP LEAK.

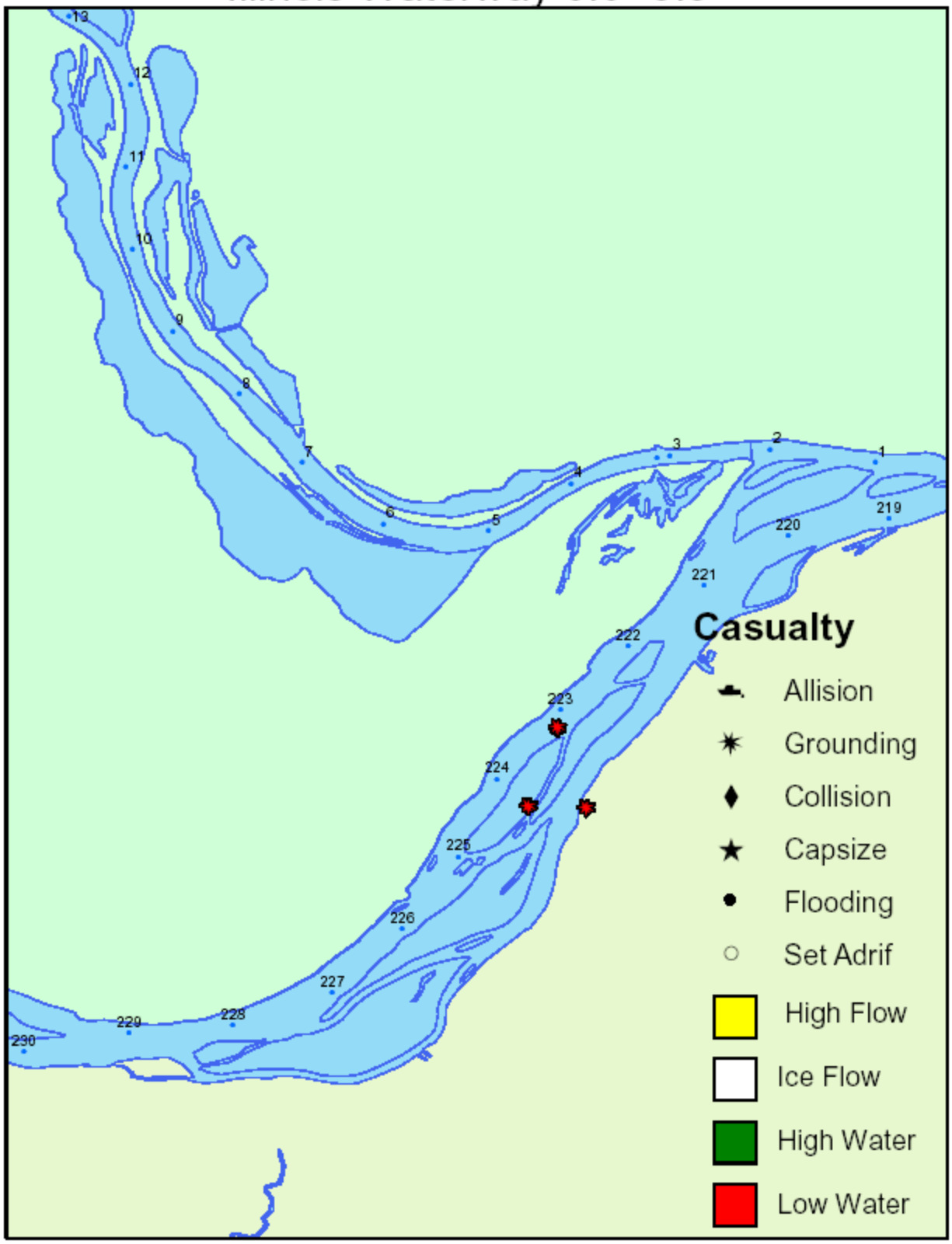
					ILLINOIS WATERWAY HAS NUMEROUS BOUYS MISSING OR OFF STATION AS RESULT OF HEAVY ICE FLOWS. RIVER OR BE REBOUYED IN MID TO LATE MARCH BY CGC SANGAMON.
11/06/2004	N 39° 49' 35.00"	W 090° 34' 03.00"	M/V MARY SCHEEL /ILWW-71 /GROUNDING	71	M/V MARY SCHEEL WAS RUNNING SLOW AROUND A BEND AND THRU A BRIDGE WHEN SHE RAN AGROUND ON UNFORSEEN OBJECT OR MUD.
11/03/2004	N 39° 51' 53.00"	W 090° 35' 07.00"	SIERRA DAWN/74.8-ILWW/GRND/PEOD	74.8	M/V SIERRA DAWN W 15 LOADS. VSL WAS N/B AT 74.8-ILWW. THE PORT STERN GROUNDED AND BROKE OUT OF THE TOW. THE BARGE STRUCK THE CORNER KNUCKLE OF THE TOW VSL.
02/01/2000	N 39° 52' 30.00"	W 090° 34' 36.00"	MC00002896-AMERICAN BEAUTY/75.6ILWW/PEOD	75.6	M/V AMERICAN BEAUTY W/ 15 LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 75.6 ILWW. FREIGHT BARGE AT 741B RECEIVED A PULLED TIMBERHEAD AS A RESULT OF THE GROUNDING. BARGE DRAFTS WERE 9'. SHOALING HAD BE REPORTED IN THE AREA. CGC SAGAMON TO REBOUY AREA ON NEXT TRIP.
01/08/2003	N 39° 59' 00.00"	W 090° 59' 00.00"	Coop Ambassador- grounding MI 75.7 ILWW	75.7	Reporting party states- On 8 Jan 03 at 04:00 M/V Coop Ambassador was s/b at MI 75.7 ILWW with 15 LDS below Moore's Island. Tow grounded in mud.
06/30/2001	N 39° 58' 30.00"	W 090° 30' 24.00"	MC01012683-GREENVILLE/ 83ILWW/ PEOD	83	M/V GREENVILLE was northbound with 12 loads and 2 empty barges in tow. While navigating in unclearly marked channel in low water, starboard string barge JT 37 came in contact with river bottom. No damage, no pollution.
04/02/2002	N 40° 28' 05.00"	W 089° 53' 45.00"	THRUSTON B. MORTON/ 84-ILWW/ GROUNDING	84	M/V T.B. MORTON WAS S/B W 13 LOADS & 2 EMPTIES IN TOW ARRANGED 3 x 5. "WHILE NAVIGATING BEND NEAR MM 84-ILWW, PORT LEAD EMPTY BARGE (DM 960) CAME IN CONTACT W RIVER BOTTOM APPROX. 30 FT. INSIDE RED BUOY LINE. AS A RESULT OF THIS EVENT, THE STERN OF THE TOW SWUNG TO STARBOARD. DESPITE EFFORTS TO STEER TO PORT, THE BOAT CAME IN CONTACT WITH THE RIGHT DESCENDING BANK".
10/17/1999	N 40° 00' 18.00"	W 090° 27' 24.00"	MC99015386-ROBERT Y. LOVE/87.0ILWW/PEOD	87	M/V ROBERT Y. LOVE W/ 2 EMPTY TANK BARGES RPTD GROUNDING IN THE CHANNEL AT MILE 87.0 ILWW. WHILE APPROACHING UPPER GRAPE ISLAND, M/V LIGHTLY GROUNDED AND TOW CAME TO STOP. TOW WAS AT CLUTCH SPEED DUE TO FLEETING OPS IN AREA. NO DAMAGES OR POLLUTION NOTED. DRAFT OF M/V WAS 8'9". USACE NOTIFIED AND SURVEY CREW TO SURVEY AREA AND DREDGE.
10/18/1999	N 40° 00' 18.00"	W 090° 27' 24.00"	MC99015424-LYDIA CAMPBELL/87.0ILWW/PEOD	87	M/V LYDIA CAMPBELL W/ 8 BARGES RPTD GROUNDING IN THE CHANNEL AT MILE 87.0 ILWW. 1 PIG IRON LOAD WITH DRAFT OF 9'4" GROUNDED W/O DAMAGE. 5 EMPTY TANK BARGES IN TOW. NO DAMAGE TO TANK BARGES.
03/07/2005	N 40° 00' 57.00"	W 090° 26' 43.00"	M/V TITLETOWN/Allision/88-ILWW/	88	M/V TITLETOWN allided with a Fleet Facility at Beardstown, IL. Three barges were damaged in the tow. The M/V TITLETOWN also allided with the M/V ELCO causing several barges to break out of the fleet and damaging several wooden clusters.
07/20/2002	N 40° 00' 30.00"	W 090° 26' 24.00"	M/V LAUREN D., Grounding Illinois Waterway Mile 88.2	88	On the 20th of July at approximately 1515 the M/V Lauren D. was south bound on the Illinois Waterway at mile 88, when it ran aground while in the river channel. The vessel was freed without damage.
08/02/2002	N 40° 00' 57.00"	W 090° 26' 43.00"	JAY BLUDWORTH/GRND/88-ILWW/PEOD	88	M/V JAY BLOODWORTH W 2 LOADS. VSL WAS S/B AT 88-ILWW. VSL CLEARED RR BRIDGE AND PROCEDDED S/B. MASTER REPORTS BEING APPROX. 41 FT OFF THE GREEN BUOYS. THE TOW HIT A "LUMP" AND GROUNDED THE TOW. AFTER WORKING THE TOW FOR ABOUT AN HOUR, BARGE (RBT 304) WAS FREED. A BOARDING WAS CONDUCTED BY MSD PEORIA (ACTIVITY # 1657517 LISTS NON STRUCTURAL DEFICIENCIES). VOIDS WERE INSPECTED AND NO DAMAGE WAS OBSERVED.
01/30/1999	N 40° 00' 36.00"	W 090° 26' 30.00"	MC99004198-MYRA ECKSTEIN/88.4ILWW/PEOD	88.4	M/V MYRA ECKSTEIN W/ 15 LOADS RPTD ALLIDING WITH THE LOGSDON FLEET AT MILE 88.4 ILWW. SEE MCNS FOR INVESTIGATORS NARRITIVE.
07/28/2002	N 40° 28' 05.00"	W 089° 53' 45.00"	DRU LIRETT/88.5-ILWW/GROUNDING/PEOD/	88.5	M/V DRU LIRETTE W 15 LOADS. VSL WAS S/B AT 88.5-ILWW. VSL REPORTED GROUNDING MID-CHANNEL DUE TO SHALLOW WATER.. A TUG FROM BEARDSTOWN ASSISTEDTHE DRU LIRETTE. NO REPORTED DAMAGE.
04/01/2005	N 40° 28' 05.00"	W 089° 53' 45.00"	Joyce Hale (Two Groundings & A Bridge Allision)	88.5	M/V Joyce Hale with a 15 barge tow grounded between the R/R and highway bridges in Beardstown, IL (approximately 88.5 on Illinois Waterway) and on the channel side of the right descending bank buoy line. Prior to the incident reports had been made concerning shoaling in area by both USACE and USCG. Several barges in tow were loaded over 10 feet. Master of Joyce Hale, with two assist tow boats, broke tow and proceeded down bound with 9 barges. Directly under the highway bridge, the tow grounded again and the tow topped toward the left descending bank and allided with the left descending, main channel, bridge pier,

					holing the barge that contacted the bridge pier. No other damage or groundings occurred.
07/25/2002	N 40° 01' 19.00"	W 090° 26' 01.00"	M/V STARFIRE, Grounding Illinois Waterway Mile 88.7	88.7	On the 25 of July 2002 the M/V Starfire pushing 14 loaded, and 1 unloaded barges, was southbound on the Illinois Waterway at mile 88.7, when it ran aground. The vessel was assisted off ground by M/V Sprig and M/V Cooperative Van Guard, No damage was reported to the barges or M/V Starfire.
03/05/2005	N 40° 03' 13.00"	W 090° 25' 46.00"	Wall Allission-ILWW 91 Raymond Grant Eckstein	91	Vessel struck a facility wall while backing down in correction of an over steering situation. There was no damage to the wall and the vessel sustained minor damage a barge that required temporary repairs.
02/22/2000	N 40° 12' 18.00"	W 090° 10' 12.00"	MC00006112-GORDON JONES/111.4ILWW/PEOD	111.4	M/V GORDON JONES W/ 12 LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 111.4 ILWW. LOW WATER AND KNOWN SHOALING AREA. LIGHT GROUNDING. WHEN M/V ATTEMPTED REFLOATING, STBD STERN KEVEL ON BARGE AGS 417 WAS PULLED. CGC SANGAMON TO CHECK AND REBOUY AREA IF NEEDED.
08/22/2001	N 40° 55' 30.00"	W 090° 06' 24.00"	MC01011827-JON J STRONG/113.8 ILWW/PEOD	113.8	ON J STRONG W/15 LOADS GROUNDED AT MILE 113.8 ILWW. WHILE FOLLOWING BLACK BOUY LINE AROUND TURN, 80 FT OFF THE BLACK THE VSL RAN AGROUND IN CHANNEL. NO DAMAGE NO POLLUTION.
12/06/1998	N 40° 19' 18.00"	W 090° 02' 30.00"	MC99002395-BADGER/122.0ILWW/PEOD	122	M/V BADGER S/B W/ 15 LOADS RPTD GROUNDING OUTSIDE THAT CHANNEL AT MILE 122.0 ILWW. NO DAMAGES OR POLLUTION NOTED. PILOT STATED VIA PHONE CON THAT WHILE NAVIGATING LEFT HAND BEND, CURRENT UNEXPECTEDLY SET HEAD OF TOW TOWARDS RDB. STBD LEAD BARGE GROUNDED IN SOFT MUD JUST OUTSIDE THE BOUY LINE. TOW CHECKED FOR DAMAGES, NONE FOUND. TOW WAS FREED FROM MUD AND CONTINUED NORMAL OPS.
11/03/2002	N 40° 26' 29.00"	W 089° 54' 46.00"	ANDREA LEIGH/GRND/134-ILWW/PEOD	134	M/V ANDREA LEIGH W 9 LOADS. VSL WAS S/B AT 134-ILWW. VSL REPORTED GROUNDING IN CHANNEL NEAR SPRING LAKE SLOUGH.
10/03/2002	N 40° 28' 01.00"	W 089° 53' 49.00"	ARDYCE RANDALL/GRND/136-ILWW/PEOD	136	M/V ARDYCE RANDALL W 15 LOADS. VSL WAS S/B AT 136-ILWW. VSL REPORTED THAT THE STBD LEAD BARGE RAN AGROUND. THE BARGE WAS "BROKE" OUT OF THE TOW AND PULLED OFF GROUND. THE TOW CONTINUED S/B WITH NO REPORTED DAMAGE.
08/28/2001	N 40° 28' 06.00"	W 089° 53' 30.00"	MC01012862-RED GRIFFIN / ILWW 163.9/ PEOD	136.9	THE M/V RED GRIFFIN WAS SOUTHBOUND. THE VSL OPERATOR REPORTED HE WAS STEERING AROUND A BEND (ILWW-136.9) WHEN HE CAUGHT A SUCTION & THE TOW WOULD NOT RESPOND. THE LEAD BARGE "COASTAL 2019-L" CONTACTED THE BANK. OPERATOR STATED THE SUCTION WAS THE RESULT OF LOW WATER. THE TOW REFLOATED WITHOUT INCIDENT. NO DAMAGE NO POLLUTION.
10/18/1999	N 40° 26' 24.00"	W 089° 53' 06.00"	MC99015421-ORLEANIAN/137.0ILWW/PEOD	137	M/V ORLEANIAN W/ 12 BARGES RPTD HAVING THE PORT STERN BARGE GROUND IN THE CHANNEL AT MILE 137.0 ILWW. FREIGHT BARGE WAS DRAFTING APPROX. 9'5". 8 EMPTY AND 1 LOADED RED FLAGS IN TOW. RED FLAGS WERE NOT INVOLVED IN THE GROUNDING.
10/30/1999	N 40° 28' 24.00"	W 089° 53' 06.00"	MC99015442-AUNT MARY/137.0ILWW/PEOD	137	M/V AUNT MARY W/ 15 DRY LOADS RPTD PORT LEAD BARGE GROUNDING IN THE CHANNEL AT MILE 137.0 ILWW. FREIGHT BARGE CC 95172 SUSTAINED NO DAMAGE AND HAD A DRAFT OF 9'6". INV. FROM MSD PEORIA O/S TO VERIFY NO DAMAGE AND INV. CAUSE OF MULTIPLE GROUNDINGS IN PREVIOUS 12 HOURS. INV. REVEALED FREIGHT BARGE CC 95172 HAD EXCESSIVE DRAFT OF 9'6" FOR CURRENT LOW WATER CONDITIONS. PILOT ADVISED TO TRANSIT KNOWN TROUBLE AREA WITH CAUTION.
10/17/1999	N 40° 32' 06.00"	W 089° 43' 00.00"	MC99015419-ORLEANIAN/143.0ILWW/PEOD	143	M/V ORLEANIAN W/ 12 BARGES RPTD THE 2 LOADS IN THE PORT STRING GROUNDING IN THE CHANNEL AT MILE 143.0 ILWW. LOADS WERE DRAFTING 9'5". 8 EMPTY AND 1 LOADED RED FLAGS IN TOW. RED FLAGS WERE NOT INVOLVED IN GROUNDING. NO DAMAGE OTHER THAN 5 BROKEN WIRES RPTD.
12/15/1999	N 40° 32' 12.00"	W 089° 49' 06.00"	MC99016455-GINGER GRIFFIN NEW/143.3ILWW	143.3	M/V GINGER GRIFFIN NEW W/ 3 LOADED TANK BARGES RPTD GROUNDING IN THE MARGKED CHANNEL AT MILE 143.3 ILWW. TANK BARGE COASTAL 3311 GROUNDED. NO DAMAGES OR POLLUTION NOTED. BARGES AND TOW DRAFTING 9'. LOW WATER EXISTS IN LAGRANGE UPPER POOL.
10/16/1999	N 40° 32' 12.00"	W 089° 49' 06.00"	MC99015384-OMAR/143.6ILWW/PEOD	143.6	M/V OMAR W/ 15 BARGES IN TOW RPTD GROUNDING IN THE MARKED NAV. CHANNEL AT MILE 143.6 ILWW. M/V MIDLAND ASSITED IN REFLOATING THE TOW. NO DAMAGES OR POLLUTION NOTED.
09/16/1999	N 40° 33' 00.00"	W 089° 44' 24.00"	MC99013464-GRANDMA GERT/147.0ILWW/PEOD	147	M/V GRANDMA GERT W/ 14 BARGES RPTD GROUNDING IN THE CHANNEL AT MILE 147.0 ILWW. F/B CC 308 SUSTAINED A SMALL HOLE ABOVE THE WATERLINE IN THE STERN BOX. NO OTHER DAMAGES RPTD. NO

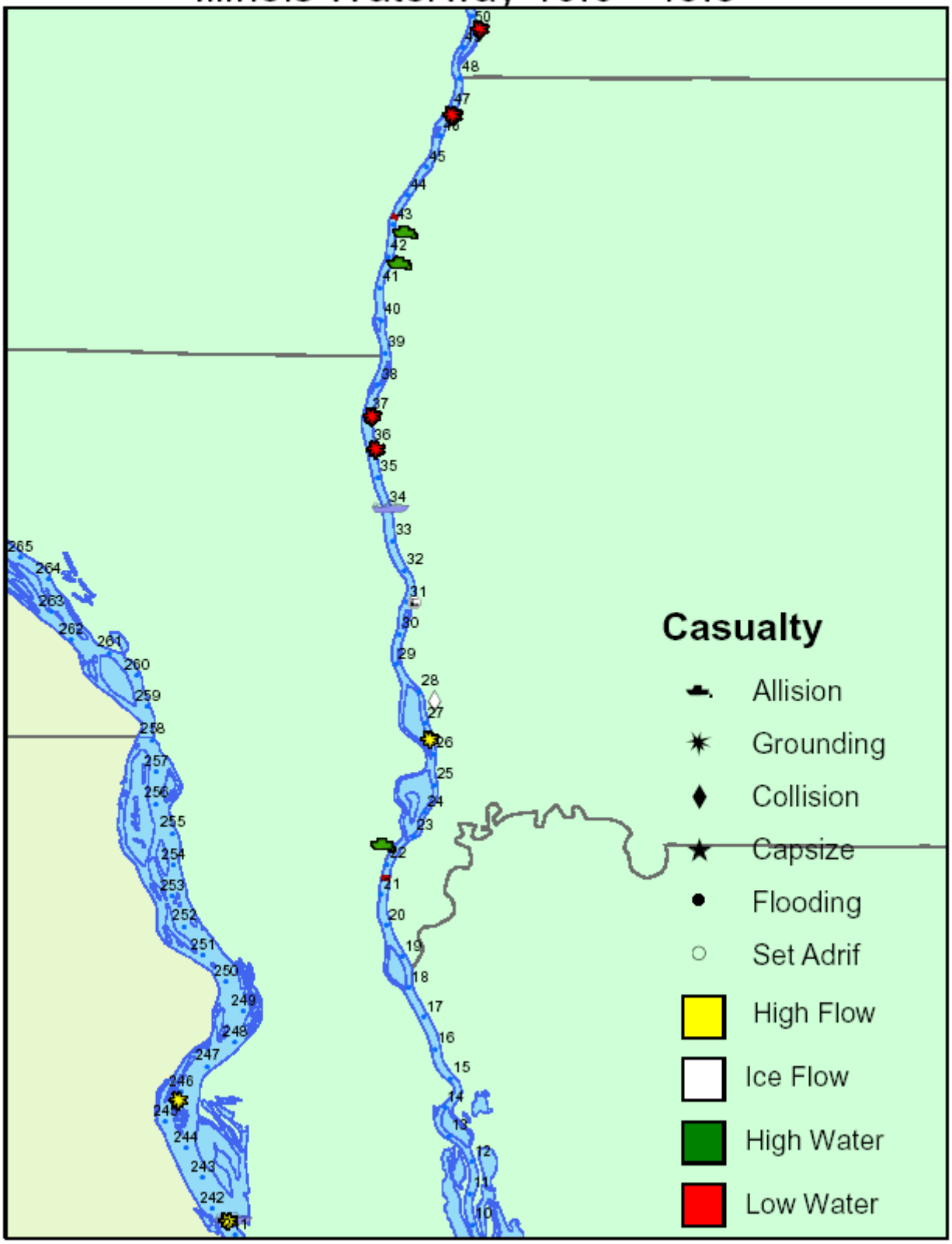
					POLLUTION. AREA HAS A HISTORY OF SHOALING. AREA IS ON THE LIST FOR OCTOBER DREDGING.
11/19/2002	N 40° 33' 03.00"	W 089° 44' 46.00"	COOP MARINER/GRND/147-ILWW/PEOD	147	M/V COOPERATIVE MARINER W 15 LOADS. VSL WAS S/B AT 147-ILWW. VSL REPORTED TOW GROUNDED AT 147-ILWW.
10/29/1999	N 40° 33' 06.00"	W 089° 43' 24.00"	MC99015435-AUNT MARY/148.2ILWW	148.2	M/V AUNT MARY W/ 15 DRY LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 148.2 ILWW. M/V EDMUND L ASSISTED IN REFLOATING VSL. NO DAMAGE NOTED. BARGE DRAFT WAS 9'6".
11/11/1999	N 40° 33' 18.00"	W 089° 41' 18.00"	MC99015744-AUNT MARY/149.5ILWW/PEOD	149.5	M/V AUNT MARY W/ 15 LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 149.5 ILWW. NO DAMAGES OR POLLUTION NOTED. M/V EDMUND L ASSISTED IN REFLOATING TOW. LOW WATER CONDITIONS EXIST.
10/20/1999	N 40° 33' 48.00"	W 089° 41' 18.00"	MC99015431-MICHAEL W/150.0ILWW/PEOD	150	M/V MICHAEL W WITH 15 DRY LOADS RPTD GROUNDING IN THE CHANNEL AT MILE 150.0 ILWW. WHILE ATTEMPTING TO REFLOAT TOW, VSL AND TOW SUCKED TO THE BANK. THE M/V EDMUND L ASSISTED IN PULLING VSL AND TOW INTO GOOD WATER. NO DAMAGES NOTED. DRAFT OF BARGES WAS 9'6".
01/16/2003	N 40° 33' 38.00"	W 089° 41' 34.00"	GEORGE KING/150-ILWW/GRN/PEOD	150	M/V GEORGE KING W 15 LOADS. VSL WAS S/B AT 150-ILWW. THE VSL WAS MAKING A TURN WHEN IT GROUNDED.
02/24/2002	N 40° 37' 50.00"	W 089° 37' 40.00"	FER 121 B/151-ILWW/ALLISION	151	M/V AFTON W 15 LOADS. VSL WAS S/B AT 151-ILWW. "WHILE NAVIGATING BRIDGE NEAR MILE 151 ILLINOIS WATERWAY, CURRENT SET TOW TO STBD. BARGE (FER 121 B) IN STARBOARD STRING CAME IN CONTACT WITH RIGHT DESECENDING BRIDGE PIER. NO DAMAGE TO PIER REPORTED.
05/28/2002	N 40° 33' 10.00"	W 089° 40' 44.00"	KARLA/ALLISION/151-ILWW/PEOD	151	M/V KARLA W 15 LOADS. VSL WAS N/B AT 151-ILWW. THE TOW WAS ARRANGED 3 x 5. WHILE NAVIGATING THE BRIDGE NEAR MILE 151-ILWW, THE CURRENT SET THE TOW TO STARBOARD.
09/25/2002	N 40° 33' 10.00"	W 089° 40' 44.00"	THRUSTON B MORTON/ALLISOIN/151-ILWW/PEOD	151	M/V THURSTON B MORTON W 8 LOADS.VSL WAS S/B AT 151-ILWW. THE TOW WAS ARRANGED 3 x 3 WITH NOTCH ON STBD STERN CORNER. WHILE NAVIGATING A RAILWWOAD BRIDGE, THE STBD LEAD BARGE PV 5995 CAME IN CONTACT WITH THE BRIDGE PIER. PV 5995 CRACKED THE # 3 WING TANK. NO REPORTED DAMAGE TO THE PIER.
06/11/2004	N 40° 33' 10.00"	W 089° 40' 44.00"	M/V JOHN H MACMILLAN, ALLISION, IL R-151	151	M/V JOHN H. MACMILLAN JR SOUTH BOUND @ IL R-151 PEKIN R/R BRIDGE, PORT # 2 & 3 BARGES STRUCK LEFT DESCENDING UPPER RIVER CELL.
05/21/1998	N 40° 33' 06.00"	W 089° 40' 24.00"	MC98009883-RALPH E. PLAGGE/151.2ILWW/PEOD	151.2	ALLIDING WITH THE RDB PROTECTION CELL OF THE CHICAGO AND NORTHWESTERN RR DRAWBRIDGE. CURRENT CAUSE OF INCIDENT.
02/06/1999	N 40° 33' 06.00"	W 089° 40' 24.00"	MC99009132-PETER FANCHI/151.2ILWW/PEOD	151.2	M/V PETER FANCHI W/15 LOADS RPTD ALLIDING WITH THE CHICAGO AND NORTHWESTERN RR BRIDGE AT MILE 151.2 ILWW. WITH HELPER BOAT ASSISTING TRANSIT TROUGHT BRIDGE. THE STBD STRING LANDED AND THE RDB PROTECTION CELL. FREIGHT BARGE T 3099 SUSTAINED DAMAGE IN WAY OF A SMALL HOLE #2 STBD WINGTANK KNUCKLE. DUE TO EXTREME HIGH WATER AND CURRENT, INDUSTRY WAS USING A HELPER BOAT FOR S/B TOWS.
06/19/1998	N 40° 33' 06.00"	W 089° 40' 24.00"	MC98013192-BROTHER COLLINS/ILWW151.2/PEOD	151.2	M/V BROTHER COLLINS W/15 LOADS RPTD RUBBING THE RDB PROTECTION CELL OF THE CHICAGO AND NORTHWESTERN RR DRAWBRIDGE AT MILE 151.2 ILWW. FREIGHT BARGE VLX 7744 SUSTAINED TWO MINOR HOLES IN THE #4 AND #5 PORT WINGTANKS. NO DAMAGE RPTD TO BRIDGE.
06/23/1998	N 40° 33' 12.00"	W 089° 40' 42.00"	MC98009802-BAXTER SOUTHERN/151.2ILWW(PEOD)	151.2	M/V BAXTER SOUTHERN SOUTH BOUND LANDED BARGE CF103 ON RIGHT DESENDING PILING OF CHICAGO AND NORTHWESTERN R/R BRIDGE. NO DAMAGE TO BARGE OR BRIDGE. NO POLLUTION, DAMAGE, OR INJURIES. NO EVIDENCE OF NEGLIGENCE OR MISCONDUCT ON THE PART OF ANY LICENSED PERSONNEL.
02/01/1999	N 40° 33' 06.00"	W 089° 40' 24.00"	MC99009146-BUTCH BARRAS/151.2ILWW/PEOD	151.2	M/V BUTCH BARRAS W/12 LOADS RPTD ALLIDING WITH THE CHICAGO AND NORTHWESTERN RR DRAWBRIDGE AT MILE 151.2 ILWW. VSL WAS USING HELPER BOAT FROM GARVEY MARINE TO TRANSIT BRIDGE. PORT LEAD BARGE STRUCK LDB PROTECTION CELL. SEE MCNS FOR DETAILS.
07/14/2000	N 40° 33' 06.00"	W 089° 40' 24.00"	MC00012047-STARFIRE/151.2ILWW/PEOD	151.2	M/V STARFIRE W/ 15 LOADS RPTD ALLIDING WITH THE RDB PROTECTION CELL OF THE PEKIN RR BRIDGE AT MILE 151.2 ILWW. FREIGHT BARGE SG 534 RUBBED PROTECTION CELL. TWO CRACKS WERE NOTED IN THE #3 STBD WINGTANK.

06/19/2004	N 40° 33' 10.00"	W 089° 40' 44.00"	M/V LYDIE CAMPBELL IL R 151.2 ALLISION	151.2	Vsl was S/B at 151.2-ILWW, Vsl involved in an Allison with Pekin RR Bridge. No damage reported to tow and the bridge.
11/04/2002	N 40° 36' 06.00"	W 089° 39' 21.00"	DARIN ADRAIN/GRND/155-ILWW/PEOD	155	M/V DARIN ADRAIN W 12 LOADS. VSL WAS S/B AT 155-ILWW. VSL REPORTED SHALLOW WATER. THE PORT STRING OF THE TOW BUMPED BOTTOM AND 3 BARGES BROKE AWAY. THE TOW WAS REASSEMBLED WITH NO DAMAGE TO THE BARGES OR VESSEL.
06/09/1998	N 40° 37' 30.00"	W 089° 38' 30.00"	MC98012982-THURSTON B MORTON/157.5ILWW/PEO	157.5	M/V THURSTON B. MORTON W/ 15 LOADS RPTD ALLIDING WITH A SUBMERGED OBJECT AT MILE 157.5 ILWW. FREIGHT BARGE VLX 7638 APPARENTLY CAME IN CONTACT WITH A SUBMERGED LOCK WICKET (PASS OPEN FOR TRAFFIC). BARGE SUSTAINED A HOLE IN THE STERN BOX AND HOPPER. BARGE WAS LIGHTERED (SCRAP METAL). PEORIA L/D RPTD THE INCIDENT CAUSED 3 LOCK WICKETS TO BECOME DISCONNECTED. LOW WATER CAUSE OF INCIDENT.
03/05/1999	N 40° 55' 30.00"	W 089° 27' 18.00"	MC99009651-S/R TENNESSEE/182.8ILWW/PEOD	182.8	S/R TENNESSEE W/8 LOADS GROUNDED IN THE CHANNEL AT MILE 182.8 ILWW. T/B SR 342 LIGHTLY GROUNDED ON A SANDBAR JUST INSIDE CAN BOUY LINE. TOW BACKED OF SANDBAR AND CONTINUED WITHOUT INCIDENT. NO DAMAGES NOTED TO BARGE OR TOW. UPPER POOL OF PEORIA LAKE APPROX. 1 FOOT BELOW NORMAL POOL. USUSACE TO SURVEY AREA FOR SHOALING.
12/20/2000	N 40° 56' 18.00"	W 089° 27' 12.00"	MC01000299-M/V J.P. WILKERSON/183.1ILWW	183.1	M/V JEFF P. WILKERSON WITH 3 LOADED TANK BARGES RPTD BEING ICE BOUND AT MILE 183.1 ILWW. WHILE TRYING TO BREAK THROUGH ICE GORGE, DAMAGE WAS SUSTAINED TO THE T/B JPW 159. DAMAGE WAS CONFINED TO CRACK PORT BOW KNUCKLE AND #5 WINGTANK. CRACKS WERE SHINGLED AND NO POLLUTION WAS NOTED. MSD PEORIA INSPECTORS ATTENDED VSL ON 22DECOO AND ISSUED ONE CG-835 TO MAKE PERM. REPAIRS AFTER OFFLOADING AND PROIR TO LOADING.

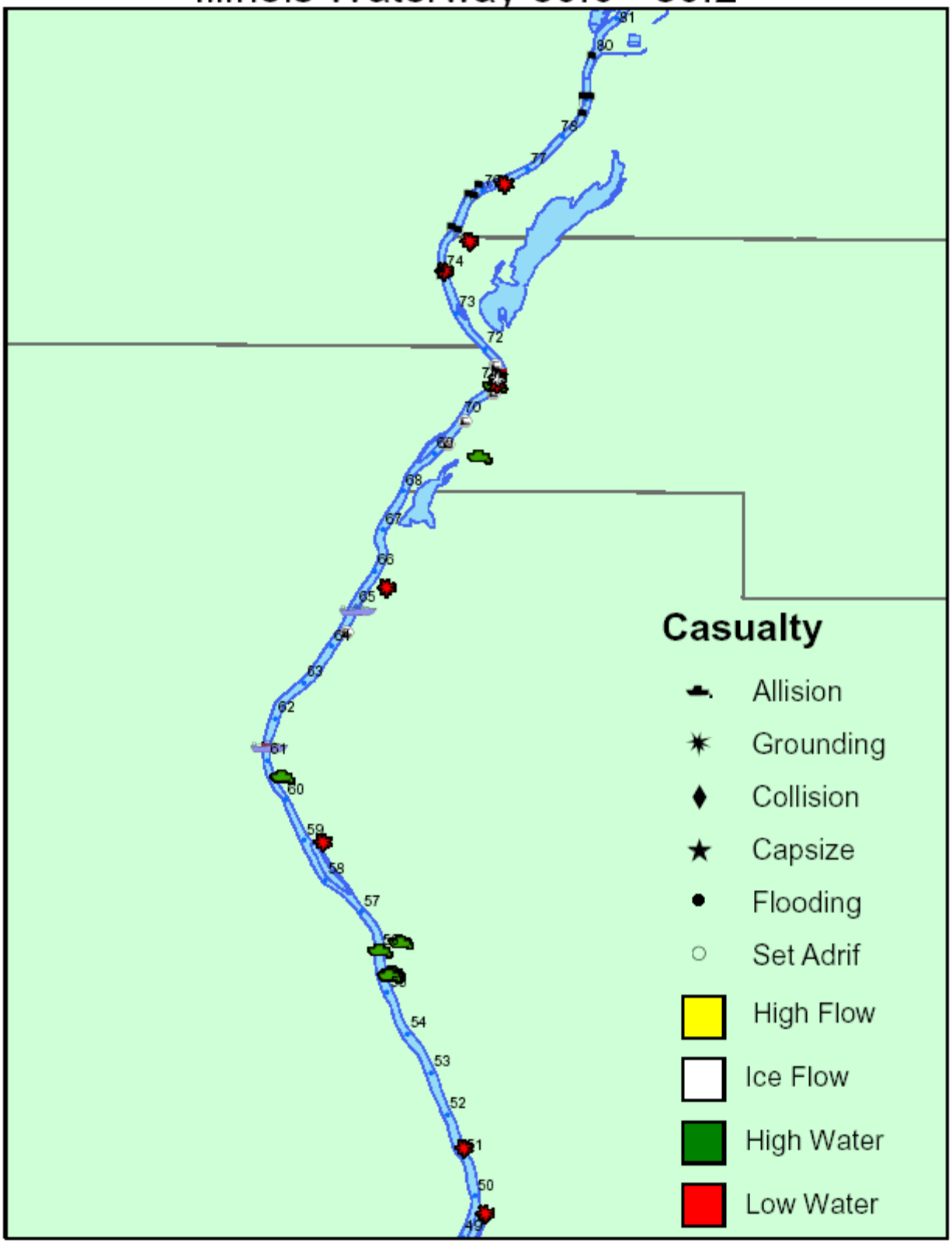
Zone 1
Illinois Waterway 0.0 -9.9



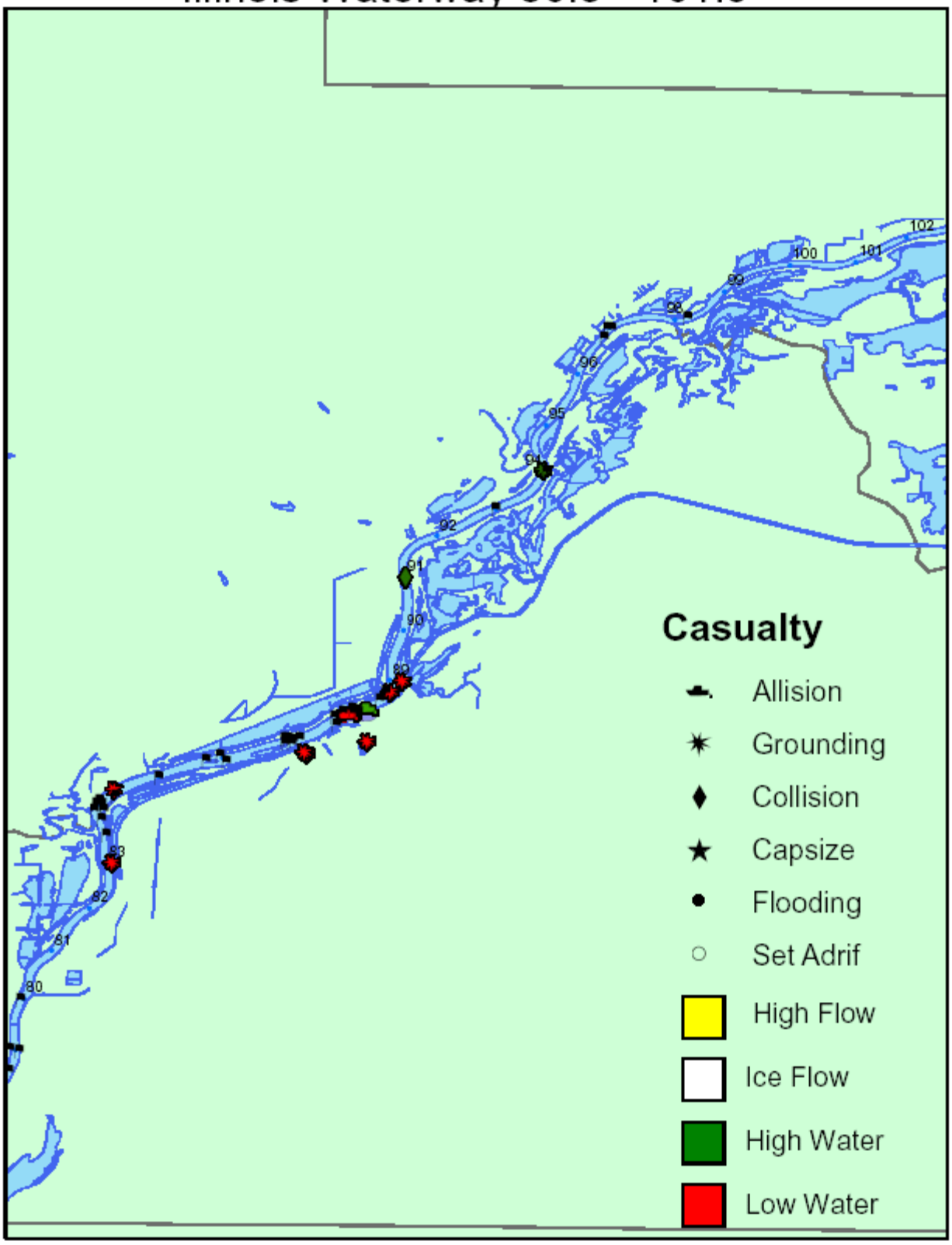
Zone 2
Illinois Waterway 10.0 - 49.9



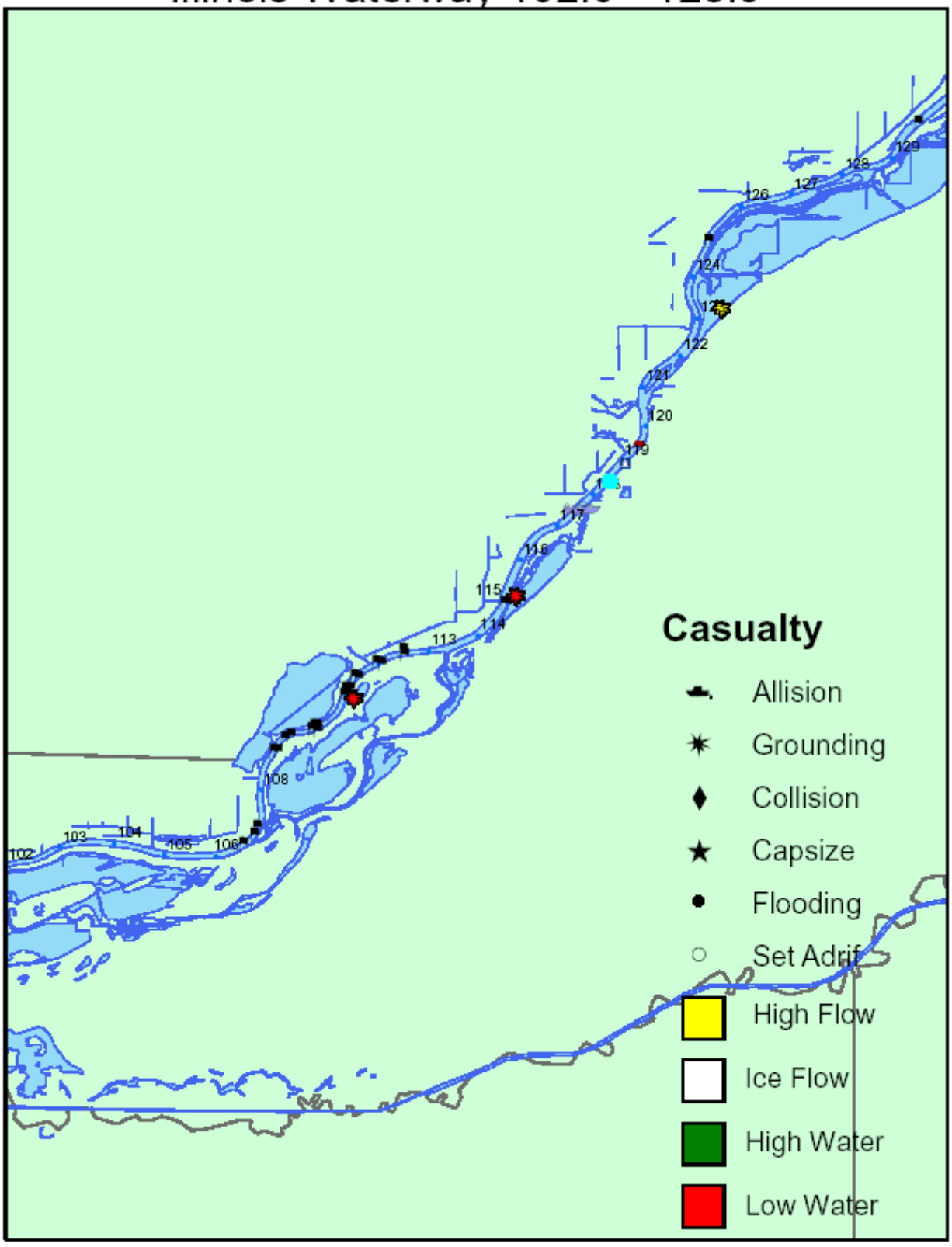
Zone 3
Illinois Waterway 50.0 - 80.2



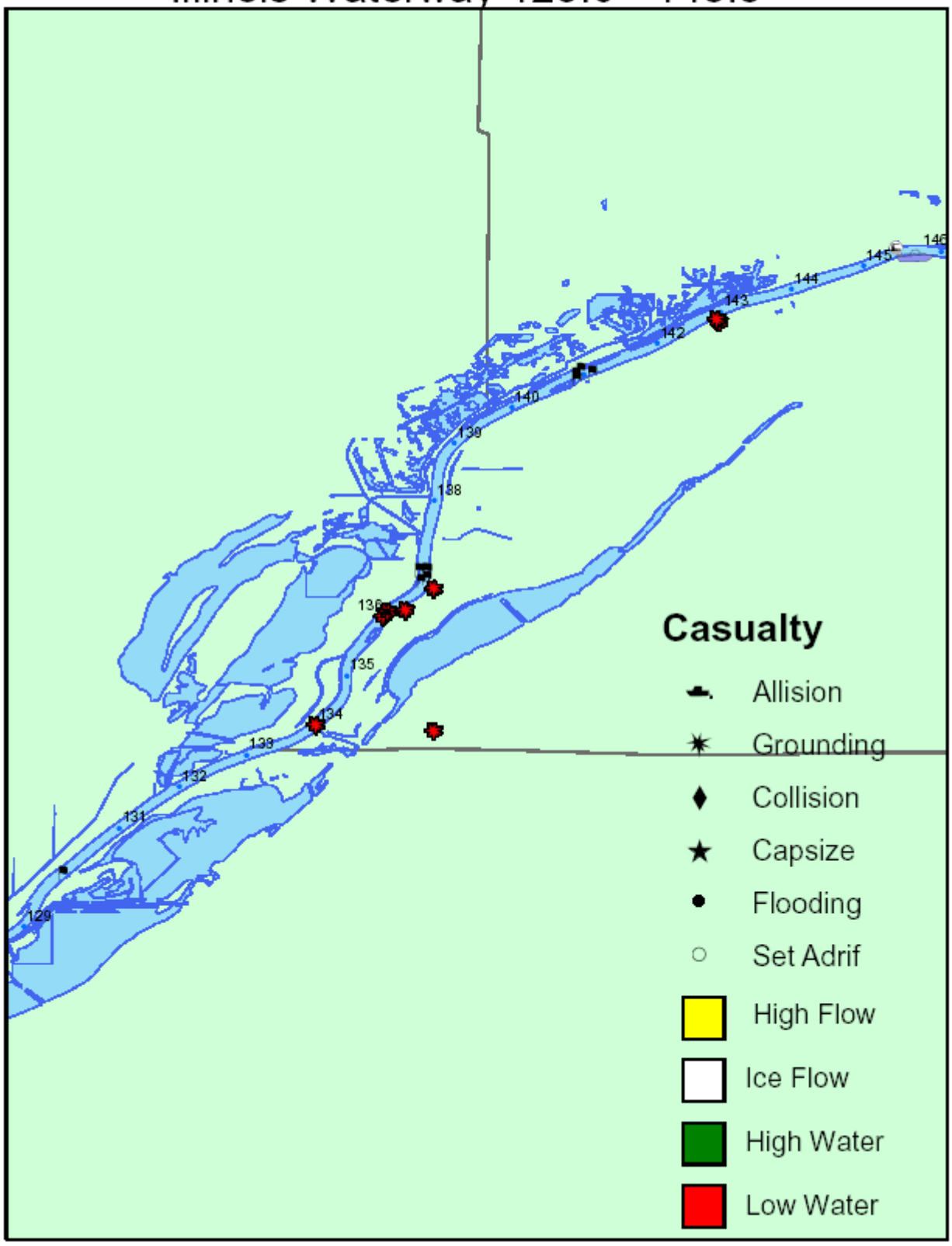
Zone 4
Illinois Waterway 80.3 - 101.9



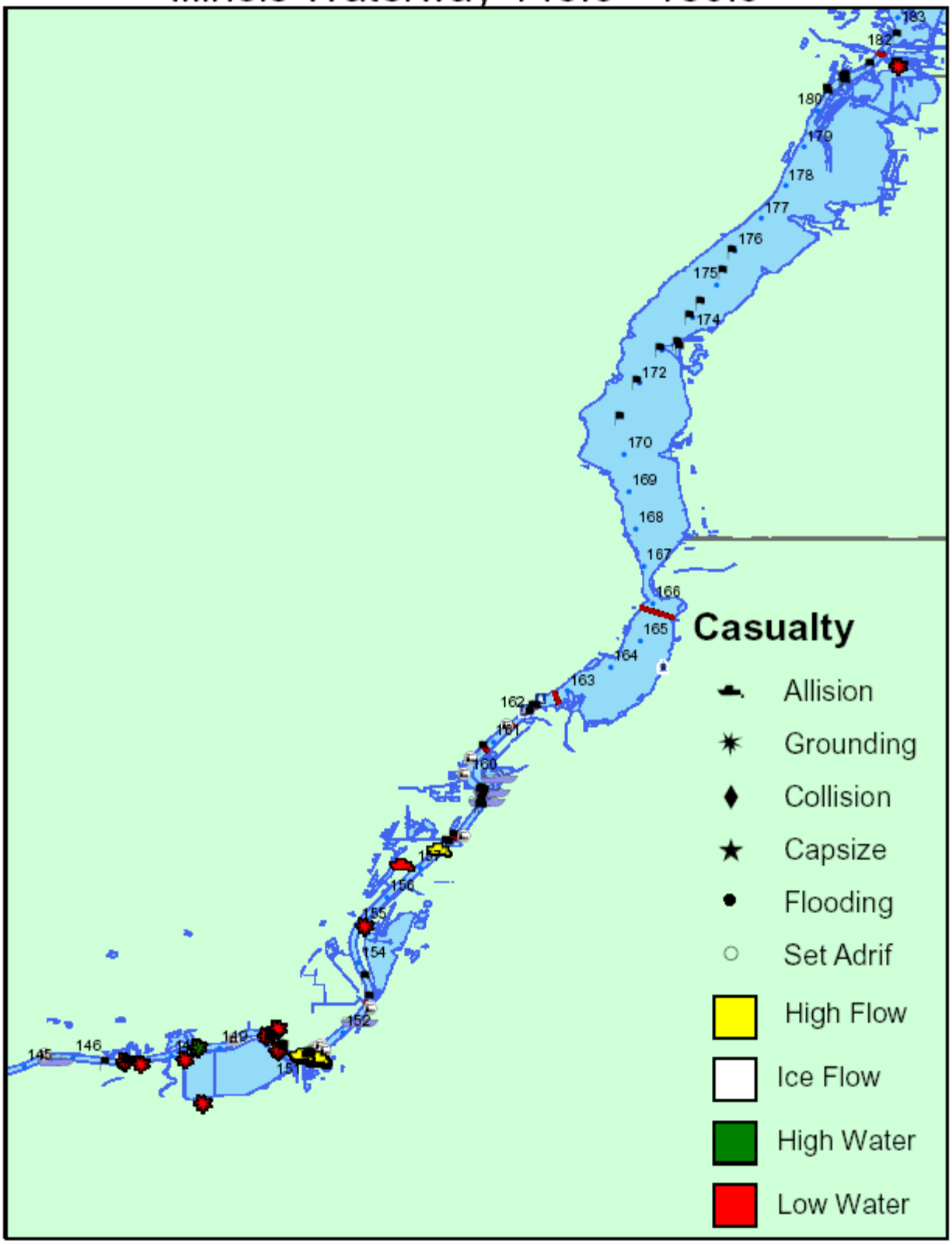
Zone 5
Illinois Waterway 102.0 - 128.9



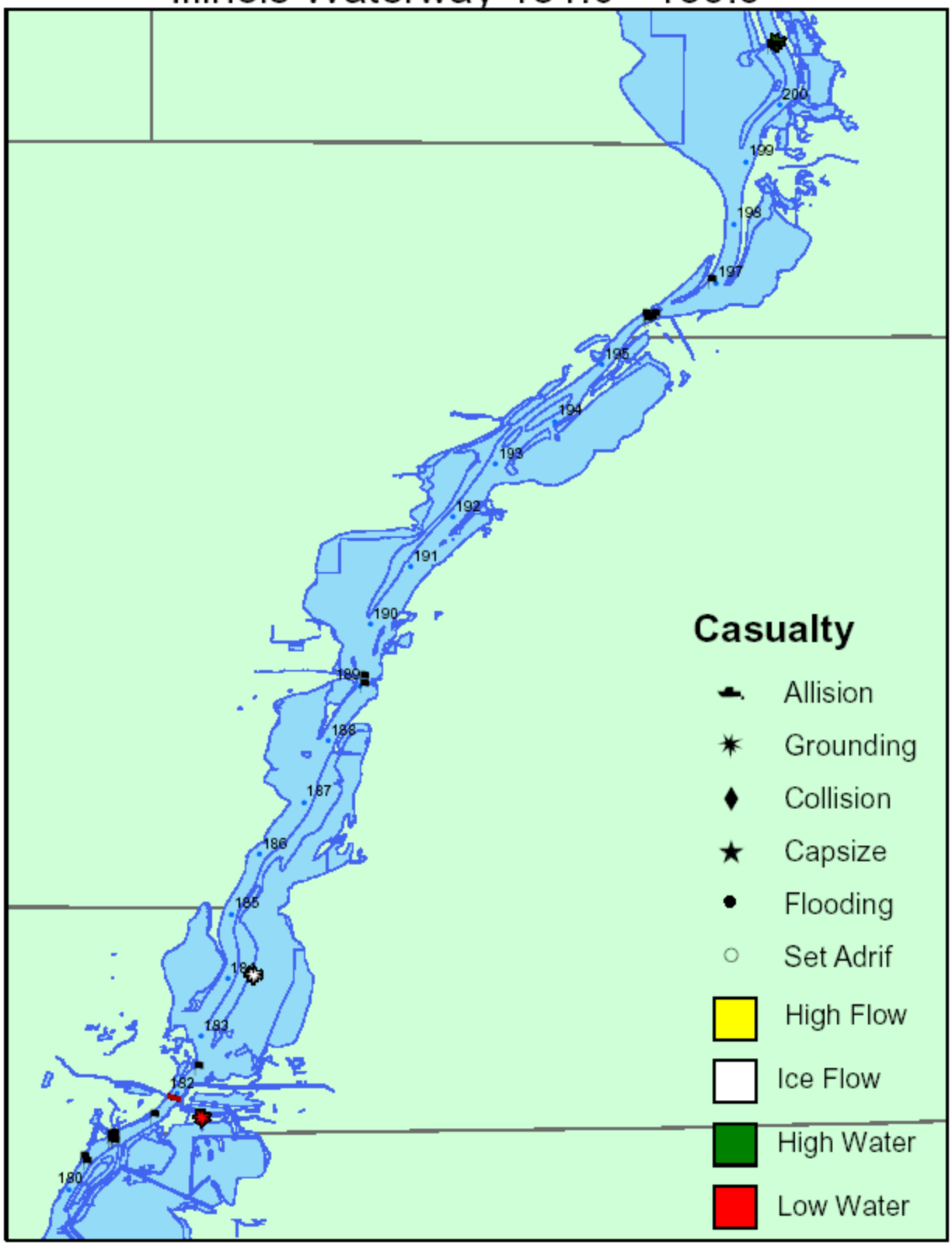
Zone 6
Illinois Waterway 129.0 - 145.5



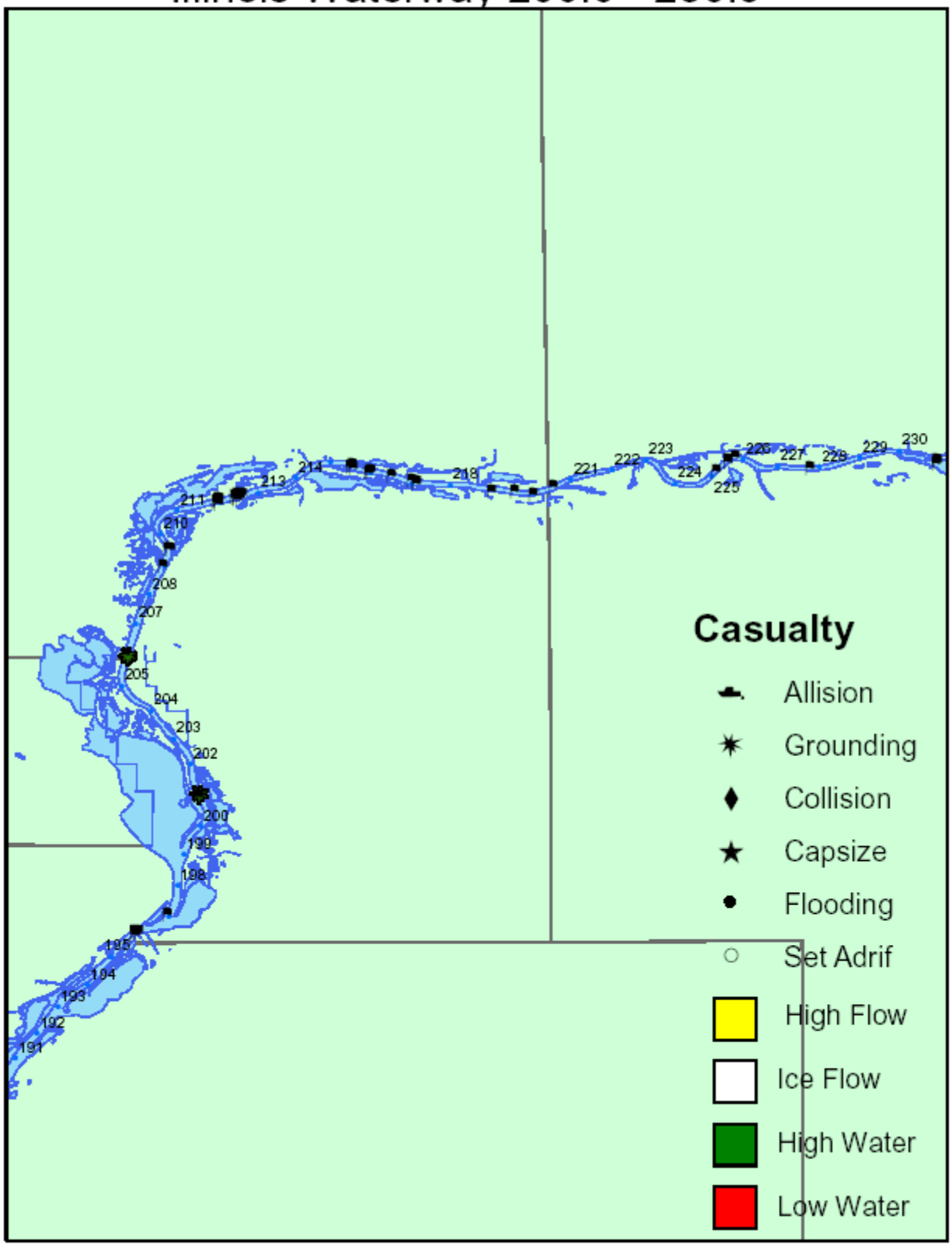
Zone 7
Illinois Waterway 145.6 - 180.9



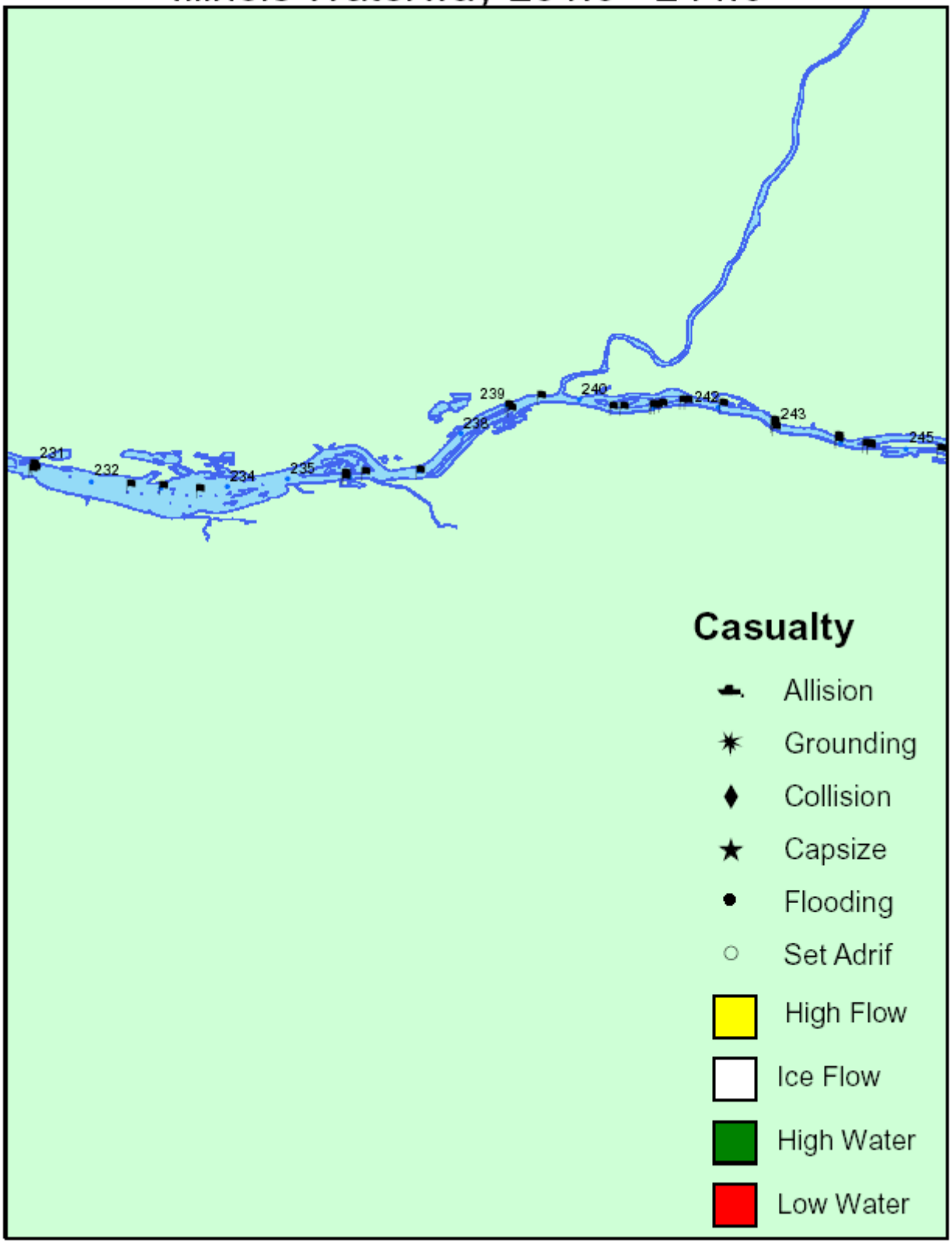
Zone 8
Illinois Waterway 181.0 - 199.9



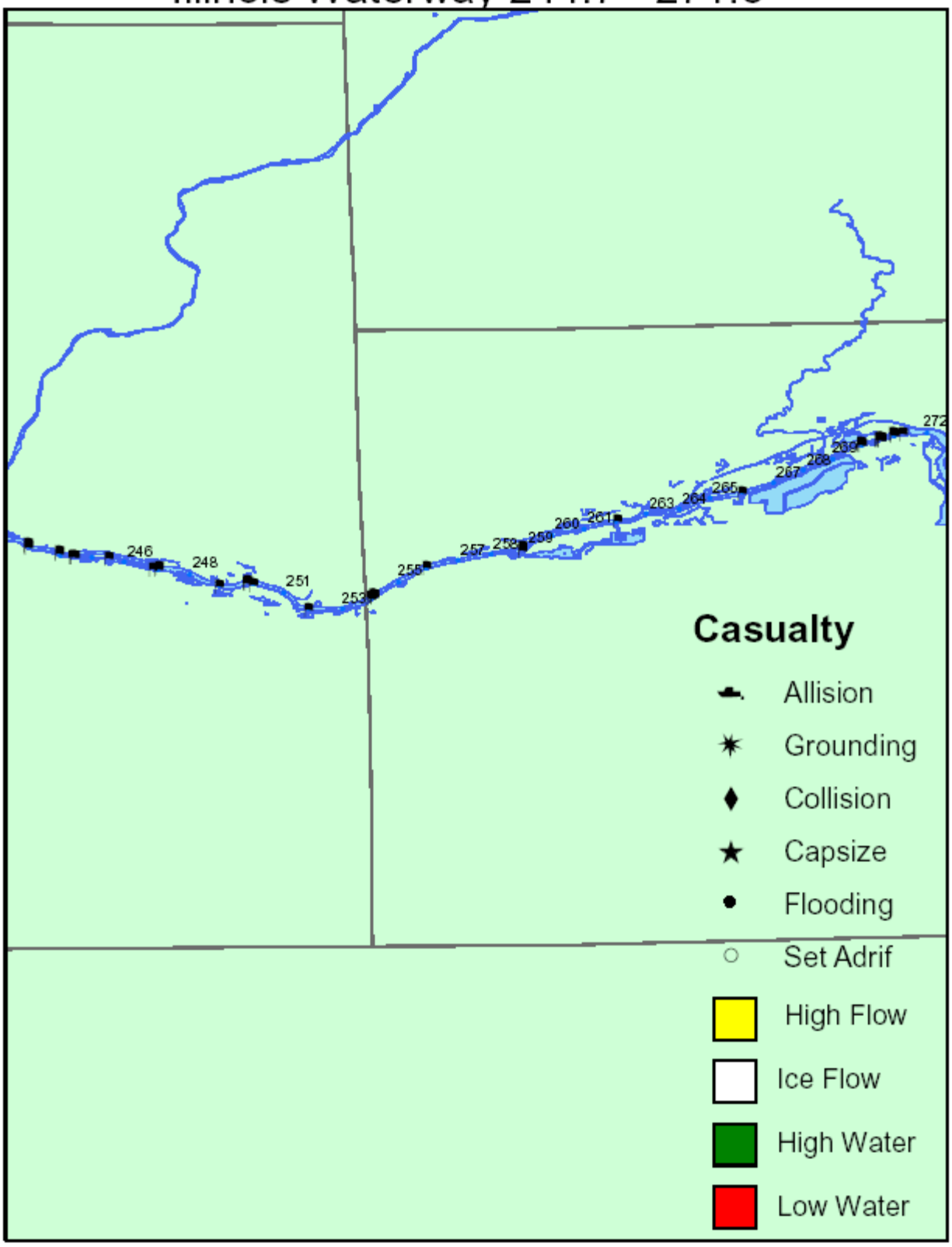
Zone 9
Illinois Waterway 200.0 - 230.9



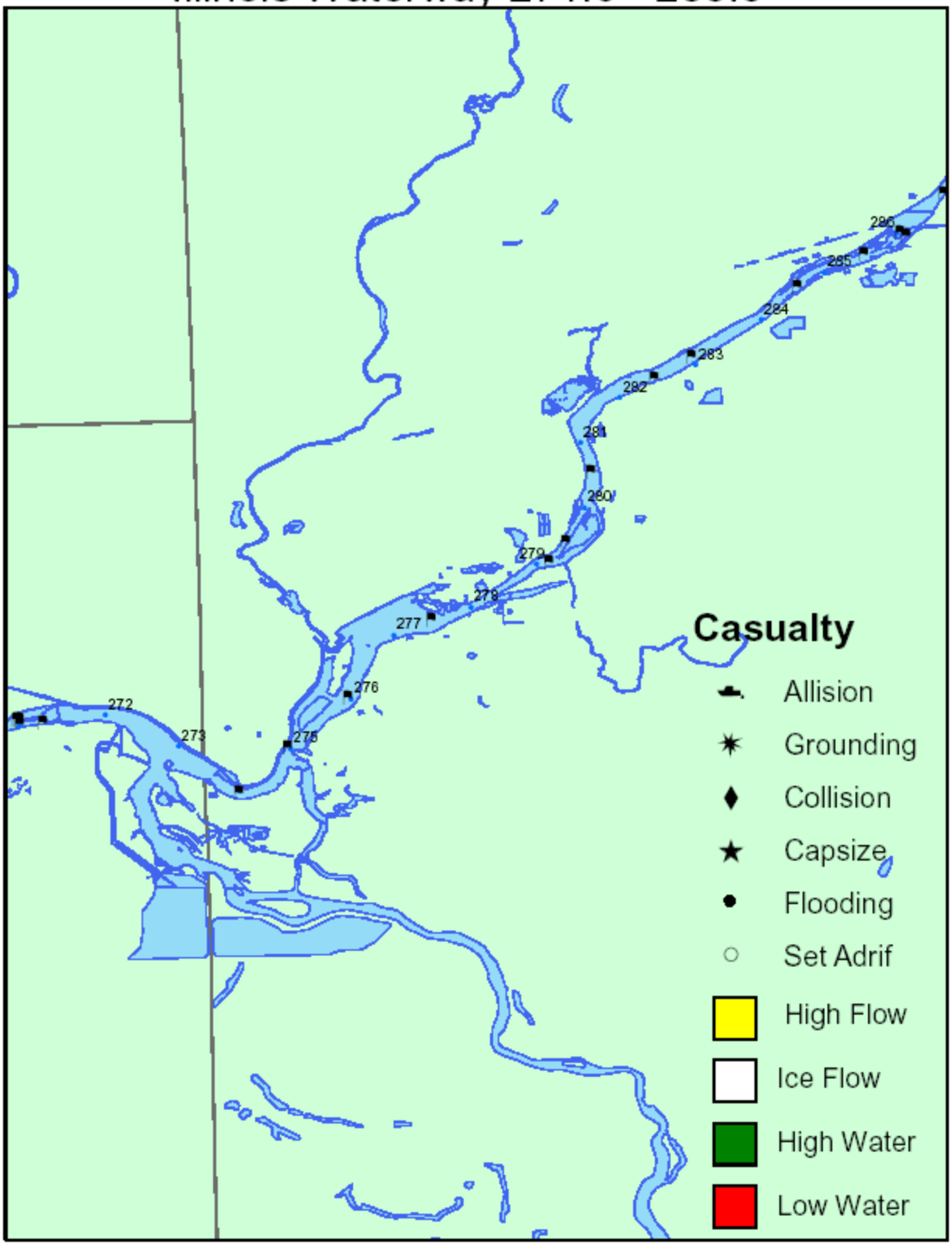
Zone 10
Illinois Waterway 231.0 - 244.6



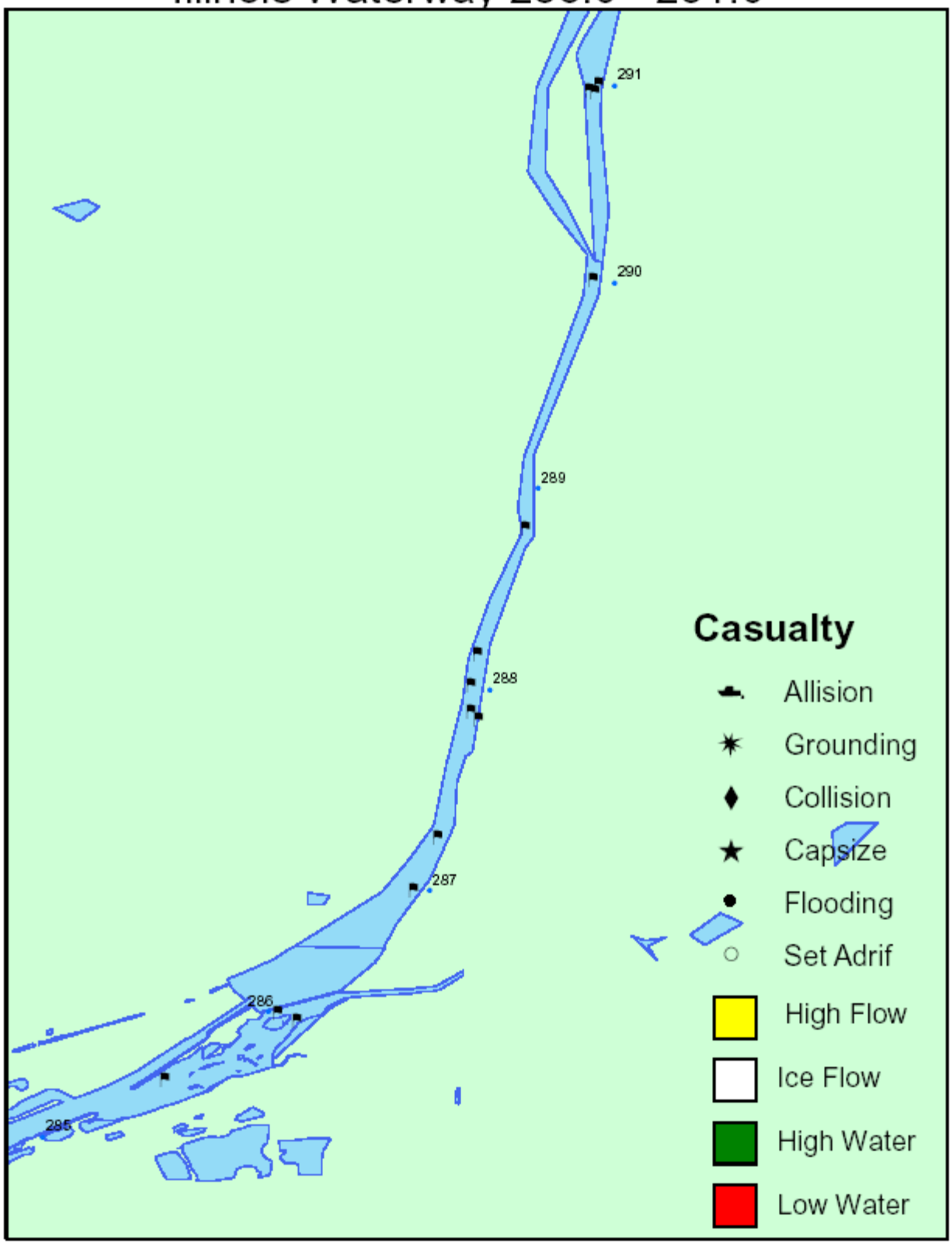
Zone 11
Illinois Waterway 244.7 - 271.5



Zone 12
Illinois Waterway 271.6 - 285.9



Zone 13
Illinois Waterway 286.0 - 291.0



Zone 14
Illinois Waterway 291.1 - 333.4