July 8, 2026 MIR-26-20

# Contact of *Myra Eckstein* Tow with Vicksburg Highway 80 Bridge

On May 5, 2025, about 0957 local time, the towing vessel *Myra Eckstein*, with a crew of 10 on board, was pushing 25 barges downbound on the Lower Mississippi River near Vicksburg, Mississippi, when the lead barge on the starboard side contacted a fixed pier of the Vicksburg Highway 80 Bridge at mile 435.8.[1] As a result of the contact, five barges broke away; four were recovered, and one sank. There were no injuries, and no pollution was reported. Damage to the barges was estimated at $941,000.


**Figure 1.** Towing vessel *Myra Eckstein* in 2007. (Source: Mark Haury, VesselFinder.com)

[1] (a) In this report, all times are central daylight time, and all miles are statute miles. (b) Visit ntsb.gov to find additional information in the public docket for this NTSB investigation (case no. DCA25FM036).

| Casualty Summary | |
|---|---|
| **Casualty type** | Contact |
| **Location** | Lower Mississippi River, mile 435.8, near Vicksburg, Mississippi<br>32°18.82' N, 090°54.28' W |
| **Date** | May 5, 2025 |
| **Time** | 0957 central daylight time (coordinated universal time –5 hrs) |
| **Persons on board** | 10 |
| **Injuries** | None |
| **Property damage** | $941,000 est. |
| **Environmental damage** | None |
| **Weather** | Visibility 10 mi, fair skies, winds south-southeast 5 mph, air temperature 70°F, morning twilight 0545, sunrise 0611 |
| **Waterway information** | River; width 0.5 mi, depth 45 ft, current 6 mph est. |

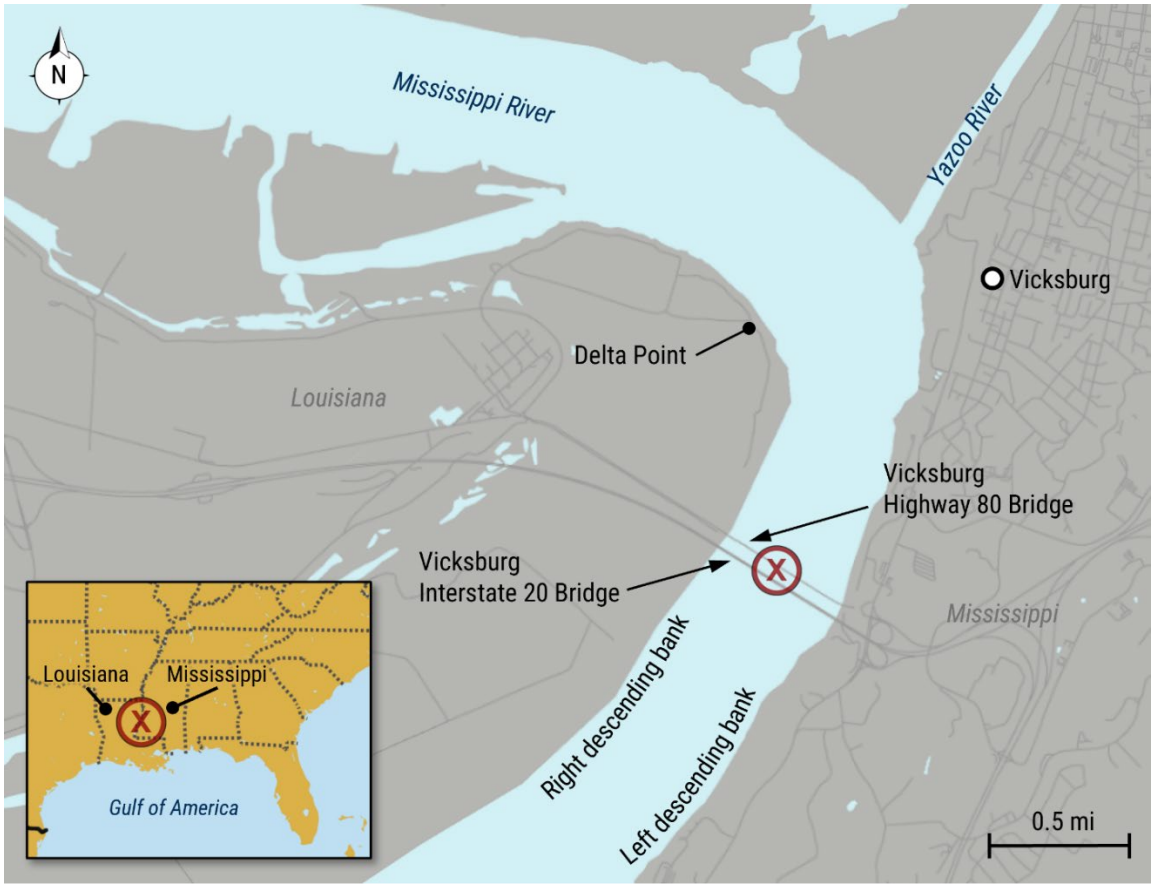


**Figure 2.** Area where the *Myra Eckstein* tow contacted the Vicksburg Highway 80 Bridge, as indicated by a circled *X*. (Background source: Google Maps)

# 1 Factual Information

## 1.1 Background

The 152.5-foot-long, steel-hulled towing vessel *Myra Eckstein* was built in 1971 in St. Louis, Missouri. The vessel was owned and operated by the Marquette Transportation Company. Propulsion for the *Myra Eckstein* was provided by two Caterpillar 3612 diesel engines, each rated 3,900 hp (2,908 kilowatts) and connected to a fixed-pitch propeller via a set of reduction gears. The steering system consisted of conventional standard blade rudders aft of each propeller and a set of flanking rudders forward of each propeller.[2] The vessel operated under its operating company's towing safety management system and had a valid US Coast Guard-issued certificate of inspection documenting compliance with Title 46 *Code of Federal Regulations* Subchapter M.

## 1.2 Event Sequence

On May 3, 2025, the *Myra Eckstein* departed Cairo, Illinois, pushing 25 barges on the Mississippi River, bound for New Orleans, Louisiana. The tow, which was 1,152.5 feet long and 175.5 feet wide, was configured with five strings of five barges filled with grain (see figure 3). The crew was comprised of two captains, a pilot, a mate, five deck crewmembers, and a cook.[3] Due to recent high-water conditions, the second captain was aboard the towing vessel to assist with maneuvering. The Coast Guard Waterways Action Plan (WAP) for the area had been activated. For more information about recent rainfall and river flooding, and the Coast Guard WAP precautions in place, see section 1.3.4 and section 1.3.5.

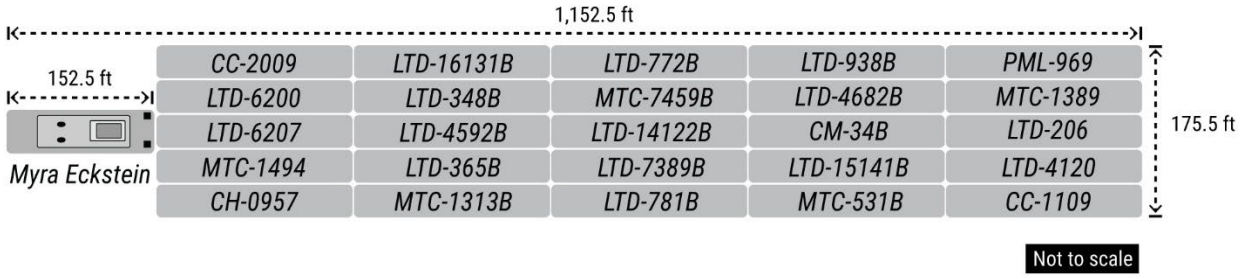


**Figure 3.** The *Myra Eckstein* tow configuration. (Background source: Marquette Transportation Company)

[2] *Flanking rudders* are used to provide greater maneuverability when a towing vessel and its tow are navigating river bends (flanking) with a following current, and to provide enhanced control when operating a vessel astern.

[3] *Pilot* is a term used aboard towing vessels on inland waterways for a person, other than the captain, who navigates the vessel.

On May 5, the tow was approaching Vicksburg and two bridges: the Vicksburg Highway 80 Bridge and the Vicksburg Interstate 20 Bridge (see figure 2). The Vicksburg Highway 80 Bridge opened in 1930 and originally served as a highway and railroad crossing (see figure 4). The bridge had been closed to vehicular traffic for several years, serving solely as a railway bridge. Vehicular traffic was carried via the Vicksburg Interstate 20 Bridge, which was about 315 feet downstream from and ran parallel to the Vicksburg Highway 80 Bridge. The Coast Guard recorded 29 reportable contacts with the bridge between March 2010 and February 2024.[4]

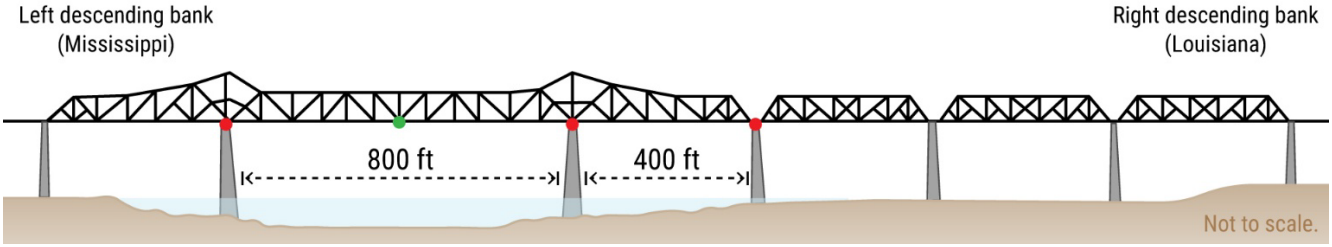


**Figure 4.** The Vicksburg Highway 80 Bridge, as viewed looking downriver. (Background source: US Army Corps of Engineers)

About 0940, the captain began maneuvering the tow at 9 mph around Delta Point, a 121° bend in the river that converges with the current from the Yazoo River, about 1.1 miles upstream from the Vicksburg bridges. That day, the Vicksburg gage (located on the Vicksburg Highway 80 Bridge) was about 3 feet above major flood stage and falling.

The captain reported that, after the tow maneuvered around Delta Point, and about "a couple hundred feet" above the Vicksburg Highway 80 Bridge, the head of the tow began to "hang up in the eddy" and "wouldn't pull back" (would not turn in the direction he was attempting to steer it).[5] The captain had been monitoring the vessel's electronic chart system to observe the tracklines of several towing vessels that had transited through the area recently. He told investigators that he was "right on" the other vessels' tracklines, but the tow's head remained unresponsive to steering commands due to the current (see figure 5). Going into the turn, the tow transited closer to the right descending bank than other towing vessels that had transited the area during the preceding 24 hours.[6] All traffic transiting around

[4] Coast Guard Office of Regulations and Standards (CG-REG-1), Reportable Marine Casualties database.

[5] An *eddy* is a circular, swirling current of water that flows opposite to the main river current.

[6] The inland towing industry refers to the shorelines of Western Rivers as the left and right banks when traveling (facing) downriver. The left bank is called the left descending bank, and the right bank is called the right descending bank.

Delta Point and toward the Vicksburg bridges during that period, including the *Myra Eckstein*, was west of the "recommended track" (sailing line) shown on the inland electronic navigation chart and displayed on the *Myra Eckstein*'s electronic chart system.[7]

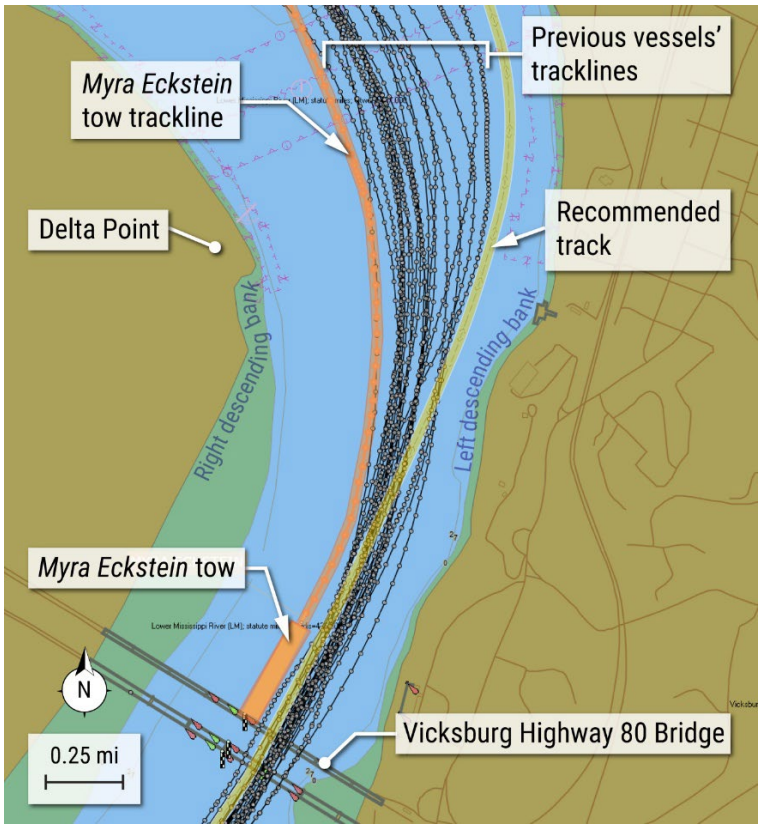


**Figure 5.** Trackline of the *Myra Eckstein* tow (*highlighted orange*) before and during the contact with the Vicksburg Highway 80 Bridge, the recommended track (*highlighted yellow*), and the tracklines of vessels (*black*) transiting downbound in daylight hours from 1000 on May 4, 2025, to 0958 on May 5, 2025. (Background source: Corps of Engineers Inland Electronic Navigation Chart U35LM425 as viewed on Made Smart)

The captain was unable to correct the heading and align the tow between the piers of the bridge. About 0957, the lead barge of the starboard string, the *CC-1109*, contacted the right descending bank main pier of the Vicksburg Highway 80 Bridge. As a result, the barges in the starboard string broke free. The *CC-1109* drifted about 2,000 feet downriver, and sank in about 100 feet of water. The other barges were later recovered. The captain of the *Myra Eckstein* pushed the remaining barges in the tow into the left descending bank and came to a stop.

[7] The *recommended track*, also known as the *sailing line* on inland navigational charts, is a nonregulated recommended route within the reaches of a navigable channel.

## 1.3 Additional Information

The captain of the *Myra Eckstein* did not report any steering or propulsion equipment issues aboard the vessel.

### 1.3.1 Damage

Damage to the sunken barge (*CC-1109*) was estimated at $550,000 and the loss of its cargo was $250,000. Other barges in the tow sustained damage, and repairs were estimated at $141,000 (see figure 6). Damage to barges in the tow included:

- *CH-0957*—Towing button was pulled off deck,
- *LTD-365B*—Cleat was detached from the deck,
- *MTC-531B*—Frames in the wing void were bent, and
- *MTC-1313B*—A side in a void space was dented.

There was no damage to the *Myra Eckstein* or the Vicksburg Highway 80 Bridge.

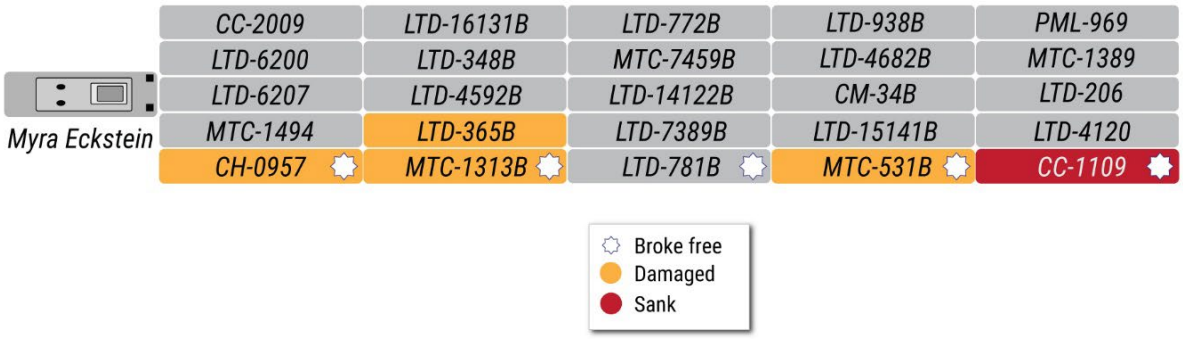


**Figure 6.** Barges that broke away, were damaged, and/or sank as a result of the contact.

### 1.3.2 Company Policy for Navigation of Bridges

The operating company had a bridge transit checklist that outlined requirements for safe navigation of bridges. The checklist required the captain to:

- Conduct a risk assessment,
- Maintain a sterile pilothouse (which meant no cell phone use and emergency internal calls only),
- Assess the need for tug assist,
- Check the river stage, current, wind, and visibility, and
- Close all main deck doors and hatches before the transit.

On the *Myra Eckstein*, hard copies of the checklist were not prepared for each watch change but were reviewed and completed verbally by the captain and logged in the vessel's logbook.

The company also had a watch-change checklist, and a company representative stated that the crew acknowledged on this checklist that all bridge navigation checklist items were confirmed as completed.

### 1.3.3 Captain Experience and Qualifications

The vessel's captain, who was maneuvering the vessel during the casualty, had about 10 years' experience as a captain, with 2 years on the *Myra Eckstein*. In October 2023, December 2023, and March 2024, the captain completed transits on the Mississippi River while being observed by senior captains for assessments and qualifications. Evaluators graded his performance during these assessments as either meeting or exceeding expectations, with the March 2024 evaluator adding that the captain was a "good pilot" and "capable of taking 35 loads S/B [southbound] on the LMR [Lower Mississippi River]."

The captain told investigators that this was the second time that he had transited through the Vicksburg bridges during high-water conditions within a month. The previous transit was on a different vessel that had a smaller tow and less horsepower (6,600 hp) but had Z-drives.[8] The river stage for the previous transit was about a foot higher than the day of the casualty, and rising.

### 1.3.4 Weather and Waterway

On April 2, the National Weather Service produced a news release titled, "High Water with Major Flooding in the Mississippi Valley" and advised of widespread rainfall set to begin on April 2, with rainfall totaling of 7–10 inches. As a result, the agency warned that the rainfall "could bring potentially historic rain totals with moderate to major tributary river flooding and significant localized flash flooding."

On April 22, the Coast Guard included a high water safety advisory in the Local Notice to Mariners for the Lower Mississippi River from miles 869 to 303, advising mariners to "transit with caution due to the hazardous conditions associated with strong currents, severe outdrafts, missing/off station aids to navigation and diving buoys." The Coast Guard Captain of the Port, Lower Mississippi River, with the concurrence of the Lower Mississippi River Committee, recommended certain limits

[8] A *Z-drive*, or *azimuthing propeller*, is a propulsion system that allows the propeller to rotate 360° around a vertical axis.

for tows transiting downbound between miles 869 and 303.[9] When the Vicksburg gage reached 36 feet, tows over 110 feet wide were restricted to daytime transit only through the Vicksburg bridges. Also, towing vessels over 6,000 hp, like the *Myra Eckstein*, had a maximum tow size of 36 barges, with a minimum of 280 hp per loaded standard barge and 560 hp per oversized barge. On the day of the casualty, the *Myra Eckstein* was pushing 25 standard barges (312 hp per barge).

On April 27, the Mississippi River at Vicksburg was recorded having a level of 49.3 feet. According to the National Weather Service, this was the highest peak at the Vicksburg gage since 2020.

On May 5, the day of the casualty, the Vicksburg gage read 46.17 feet (about 3.17 feet above major flood stage and about 16 feet above historic normal stage) and falling (see figure 7). Visibility was about 10 miles, with fair skies and south-southeasterly winds at 5 mph. The captain of the *Myra Eckstein* estimated that the current was about 6 mph.

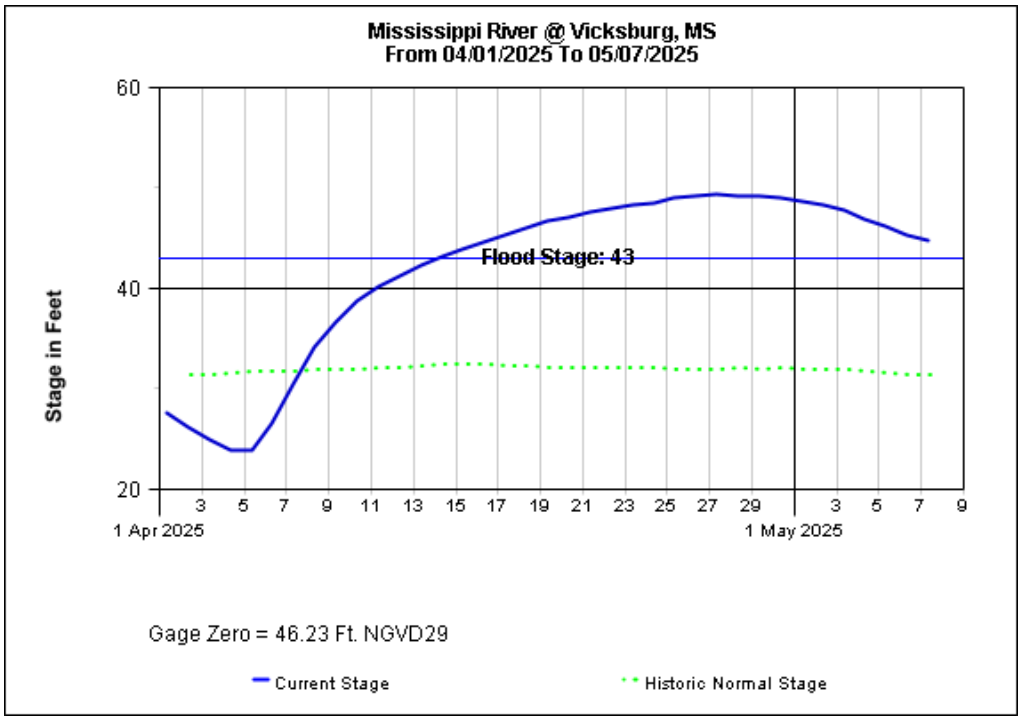


**Figure 7.** Mississippi River water level in feet at Vicksburg, April 2–May 5, 2025. (Source: Corps of Engineers)

[9] The Lower Mississippi River Committee is an association of companies and organizations who are stakeholders in the commercial industry on the inland rivers. The committee representatives provide an industry perspective to the Coast Guard and the Corps of Engineers on matters such as high and low water, shoaling, marine accidents, and recovery.

### 1.3.5 Coast Guard Waterways Action Plan

The Coast Guard had a WAP in place for the Lower Mississippi River, which provided general information about managing and responding to high-water, high-velocity, and low-water conditions. The WAP also provided guidelines for personnel in the Vicksburg Information Center (VIC) to follow and actions to complete after river levels had risen above 45 feet on the Vicksburg gage.[10] The VIC guidelines required the crews of downbound vessels have a briefing with their port captain, to include—

- Discussing tow size and horsepower,
- Reviewing the river stage and conditions,
- Reviewing all information reported from the VIC and other vessels,
- Evaluating wheelhouse experience of the vessel's captain and pilot, to identify which had more experience, and
- Confirming all involved had a clear understanding of the circumstances.

Before starting the transit, the *Myra Eckstein* crew followed the guidance outlined in the WAP. According to a company representative, a "Green-Amber-Red" assessment was reviewed, completed verbally, and logged in the vessel's logbook. The representative also stated that the crew acknowledged the activity was conducted in accordance with the company's watch-change checklist.

[10] For the Vicksburg bridges, the Lower Mississippi River Committee established the VIC to provide mariners with the most updated information related to river conditions affecting transit through the Vicksburg bridges and approach.

# Analysis

About 0957 on May 5, 2025, while the towing vessel *Myra Eckstein* was pushing 25 barges downbound on the Lower Mississippi River in high water conditions with an estimated 6 mph current, the lead barge in the starboard string contacted a pier on the right descending bank side of the Vicksburg Highway 80 Bridge. As a result, all five barges in the starboard string broke free from the tow. The lead barge drifted downriver and sank. The remaining four barges in the string were later recovered; three sustained minor damage. Another barge that did not break free from the tow also sustained minor damage.

The history of bridge strikes at the Vicksburg Highway 80 Bridge (29 reported contacts over the last 14 years) indicates that the location of the bridge and the geography of the approach make it difficult for downbound tows to pass through the span, particularly in high water. Even with a wide, 800-foot horizontal clearance, the bridge is more difficult to transit than others because of the increased risk associated with the approach, which leaves operators only 1.1 miles from the end of the 121° bend at Delta Point to line up their tows to pass through the Vicksburg bridges.

In extreme high water, such as on the day of the accident (about 3 feet above major flood stage, and about 16 feet above historic normal stage), bends and their associated cross currents and eddies create hazardous navigation conditions. In addition, high water on the day of the accident produced fast currents (estimated at 6 mph) that further increased the risk of contact while navigating a tow through the Vicksburg bridges.

As the tow proceeded downbound on the Lower Mississippi River toward the Vicksburg Highway 80 Bridge on the day of the casualty, the *Myra Eckstein*'s crew followed the Coast Guard WAP requirements that were in place due to the high-water conditions. In addition to the WAP requirements, a second captain was assigned to the vessel to assist with maneuvering. The vessel's captain, who was maneuvering the vessel during the casualty, had been the master of the *Myra Eckstein* for 2 years, had experience navigating the Lower Mississippi River, and had recently transited through the Vicksburg bridges in similar flooding conditions.

The captain stated that he was following previous tows' tracklines around Delta Point and the approach to the Vicksburg Highway 80 Bridge. A review of other vessel tracklines from the 24 hours leading up to the casualty showed that the *Myra Eckstein*'s trackline was closer to the right descending bank than all other downbound vessels. This left the tow more susceptible to eddies that formed along the right descending bank near Delta Point. The captain reported that he was unable to correct the heading of the tow in the current despite his maneuvering actions. He

reported no mechanical issues with the propulsion and steering systems that would have affected maneuverability. Despite precautionary manning, careful planning, and the captain's familiarity with the towboat and the area, the captain was unable to overcome the various forces acting on the tow during the high-water conditions.

# 2 Conclusions

## 2.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the contact of the *Myra Eckstein* tow with the Vicksburg Highway 80 Bridge was the captain's inability to overcome the effect of high-water and high-current conditions on the tow and correct the tow's track, which was closer to the river's right descending bank than recent downbound tows, as the tow approached the bridge.

## Vessel Particulars

| Vessel | *Myra Eckstein* | *CC-1109* |
|---|---|---|
| **NTSB Vessel Type** | Towing/Barge (Towing vessel) | Towing/Barge (Barge) |
| **Owner/Operator** | Marquette Transportation Co. LLC (Commercial) | TD Equipment Finance Inc. (Commercial) |
| **Flag** | United States | United States |
| **Port of registry** | St. Louis, Missouri | St. Louis, Missouri |
| **Year built** | 1971 | 2011 |
| **Official number** | 531539 (US) | 1236541 (US) |
| **IMO number** | N/A | N/A |
| **Classification society** | Towing Vessel Inspection Bureau (Third-party organization) | N/A |
| **Length (overall)** | 152.5 ft (46.4 m) | 200.0 ft (61.0 m) |
| **Breadth (max.)** | 45.0 ft (13.7 m) | 35.0 ft (10.7 m) |
| **Draft (casualty)** | 9.2 ft (2.8 m) | 13.0 ft (4.0 m) |
| **Tonnage** | 674 GRT | 764 GRT |
| **Engine power; manufacturer** | 2 × 3,900 hp (2,908.2 kW); Caterpillar 3612 diesel engines | N/A |

NTSB investigators worked closely with our counterparts from **Coast Guard Marine Safety Unit Vicksburg** throughout this investigation.

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For more detailed background information on this report, visit the NTSB Case Analysis and Reporting Online (CAROL) website and search for NTSB accident ID DCA25FM036. Recent publications are available in their entirety on the NTSB website. Other information about available publications also may be obtained from the website or by contacting—

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