

HUDSON RIVER PILOTS ASSOCIATION
201 EDGEWATER STREET
STATEN ISLAND, NY 10305

September 1, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

✓ M7M Rcvd 9/8/2015

Dear Admiral Glang,

My name is Captain R. Scott Ireland. I am the senior pilot of the Hudson River Pilots Association. Our members, along with many other professional mariners, are responsible for the safe and timely movement of commercial shipping on the Hudson River.

As Hudson River Pilots, we routinely brings ships that are 600 ft to 650 ft long x 105.9 ft wide through the federal channel from Kingston NY to Albany NY. This channel is 50 miles long and 400 feet wide with a federal project depth of 32 ft. The ships that we pilot carry cargoes such as scrap steel, grain, heavy lift project cargo, and the new player on the block, millions of barrels of Bakken crude oil being shipped out of the Port of Albany.

The increasing frequency of these large ships transiting an unusually long, narrow channel (as well as barges/ATB's carrying crude oil) creates difficult navigational challenges that we encounter on a daily basis.

The biggest challenge, due to vessel size and the frequency of such transits, is that the meeting and passing of these increasingly larger vessels often requires that we find areas of the river where either or both vessels necessarily need to navigate the edges or even outside the edges of the federal channel. Doing so safely often requires one or both of the meeting vessels to rely on soundings outside the channel to ensure that enough water is available in the area being transited. Unfortunately, the soundings provided by NOAA on the current Hudson River NOAA charts are stunningly old and inaccurate.

Our problem, and the reason for my writing, is twofold:

First, the NOAA charts themselves for the Hudson River state that all the areas outside the federal channel have not been surveyed since 1939 and in most cases the soundings are pre-1939. We are relying on soundings that are 115+ years old and (based on information from smaller vessels that venture outside the channel) we know the soundings are wrong and in most cases...very wrong.

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Second, the scale of the river chart is much too small for the navigational needs of the vessels that use the river.

Regarding the age and reliability of the soundings: we are increasingly alarmed about the inaccuracy of the soundings that are reflected on the published NOAA charts. There are numerous areas on the river where there is dramatically more water available than is indicated as well as areas where there is significantly less water than indicated. **In both cases, navigating in these areas requires us to rely on soundings that are in excess of 115 years old, are inaccurate and unreliable, and present navigators with unacceptable risks should they venture into these areas.**

As to the scale of the charts: the current 1:40,000 scale charts do not provide enough space for adequate detail and close-quarters navigation of the upper river; simply updating or adding soundings will not address this. A larger scale chart for the Hudson, along with accurate sounding data will provide for much safer navigation. We know, for example, that there are certain areas along the federal channel that, while the current chart shows depths of 12-14 ft, are actually 25 to 30 ft deep for a distance of 50 to 100 ft outside the channel width.

At the current scale, a higher density of soundings to better-utilize those sections of the river would not be possible. Those areas, which are now avoided by vessel traffic, could be utilized during meeting and passing situations if accurately published. The result would be the effective widening, for shallow draft traffic, by upwards of 25% of the 400 ft wide channel and would significantly increase the safety margins during vessel transits.

In addition to concerns over safety of navigation, there is a considerable impact to the cost of commerce. For instance, rather than being able to turn part of a ship outside the channel where we are not sure if there might be sufficient water, nearly all of the larger ships (over 500 feet) docking or undocking from the Port of Coeymans currently need to go 10 miles north to a turning basin in Albany. This adds about 3 hours to each transit, and due to daylight restrictions, can even delay sailing or arriving by 18 to 24 hours. As you are no doubt aware, running costs for a ship can be upwards of \$20k per day, and the extra demurrage costs and transit time negatively impact everyone including shipowners, agents, charterers, up and down the transit chain.

Maritime commerce on the Hudson River, however, continues to expand. The Port of Albany, for instance, reports increasing traffic and tonnage as well as investments into waterfront infrastructure to increase capacity for heavy lift cargo. Similarly, at the Port of Coeymans, millions of dollars have been spent in infrastructure over the last 5 years in order to become a world class cargo terminal. Notably, they currently build and ship entire bridge roadway sections for the new Tappan Zee Bridge.

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In November of 2014, NOAA's Northeast Navigation Manager accompanied a Hudson River pilot on a 6-hour river transit to assess these navigation concerns and agreed that the soundings and scale of the current charts are inadequate for the expanding navigational needs of the vessels transiting the river.

The Hudson River Pilots Association therefore requests that NOAA provide up to date soundings as well as larger scale charts of the Hudson River in order to improve safety of navigation as well as support vital regional commerce.

Thank you for your time and consideration.

Regards,



Capt. R Scott Ireland
Hudson River Pilots Association
rvrpilot@gmail.com
845-988-7318 cell

UNITED NEW YORK SANDY HOOK PILOTS' BENEVOLENT ASSOCIATION
AND
UNITED NEW JERSEY SANDY HOOK PILOTS' BENEVOLENT ASSOCIATION

August 20, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

It has come to our attention that the Hudson River Pilots are requesting to have the Hudson River surveyed because the currently charted hydrographic data hasn't been updated for many years and, in many cases, inaccurately depicts reality. They are further requesting that NOS produce larger scale nautical charts for the Hudson River which would provide more accurate and detailed navigational information to support the deep draft commerce regularly taking place between Yonkers and Albany. We strongly support the Hudson River Pilot's request and cannot state strongly enough how sensible and needed improved charts and survey are. Updated surveys are long overdue especially given the nature of cargo (oil) presently being moved in increased quantity and frequency by both large ships and barges. More accurate charts and sounding data are critically needed to support the navigation of such vessels.

If indeed it is discovered there are sections of the river that have deeper water than presently charted as per century old soundings, this could have a profoundly positive effect on shipping and navigation practices. As Captain Ireland stated, it is possible significant savings could be obtained and, new surveys may also reveal areas in which vessels could more safely overtake or meet. In either case, recent surveys would at least provide answers to the many navigational questions that exist regarding the bottom contour of the river.

In addition to the Hudson River Pilots' concerns, you should know that the Sandy Hook Pilots work very closely with the HRPB and that we provide licensed transport pilots to support the commercial demand in times of increased traffic frequency. These pilots would very much like to work with recent soundings and surveys of the river, as would all other commercial operators of tug and tows and other vessels frequenting the waters up to Albany.

We would greatly appreciate your favorable consideration of this request. If we can provide any other information or answers to any questions concerning the need for recent soundings please don't hesitate to ask.

Very truly yours,

Capt. Richard J. Schoenlank
President, UNJSHBPBA

Capt. John J. DeCruz
President, UNYSHBPBA

Cc: Captain Scott Ireland, HRPB



PORT OF ALBANY

APDC 2015-52

ALBANY PORT DISTRICT COMMISSION

GEORGETTE STEFFENS
CHAIR, BOARD OF COMMISSIONERS

ALBANY-RENSSELAER
106 Smith Blvd.
ALBANY, N.Y. 12202 - (518) 463-8763
FAX NO. (518) 463-8767

RICHARD J HENDRICK
GENERAL MANAGER

August 18, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang:

As General Manager of the Albany Port District Commission, I am writing to request your support of the Hudson River Pilots recent application to your office for updated channel soundings and expanded charts. As I am sure your office is aware of the vital link the Hudson River is to the world, the Port of Albany has over the past decade and will continue to invest over 40 million dollars to enhance our capabilities for our customers. This investment in port commerce needs to be backed by the most accurate real time information available to the Pilots, who transit the river and have to make the decisions on safe positioning of these ocean going vessels. The charts relied upon by the State Pilots are believed to be almost 100 years old and are not of a useable size to be understood by the Bridge Management Team working to safely sail these ships.

Respectfully,

Richard J. Hendrick Sr.
General Manager



The New Jersey Maritime Pilot & Docking Pilot Commission

One Penn Plaza East * 9th Floor * Newark, NJ 07105
Tele: (973) 491-7693 * Fax: (973) 491-4352
Email: astuckey@njtransit.com

September 1, 2015

Rear Admiral Gerd Glang
Director
NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

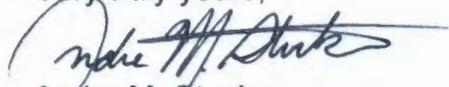
I write to you on behalf of the New Jersey Maritime Pilot and Docking Pilot Commission. We are the state agency charged with licensing and regulating pilots in the State of New Jersey. We are the sister agency to the Board of Commissioners of Pilotage of the State of New York and have developed a MOU which allows New Jersey state licensed pilots to work on and provide transport services for the Hudson River.

The Hudson River Pilots Association has submitted an application to your office to update the existing channel soundings and expand charts for the Hudson River. The current soundings and charts are taken from surveys that were done in the early 1900s. Conditions such as weather, dredging and maintenance, overtime causes changes to the existing layout of the channel.

It is the belief of this Commission that the pilots who transit on the Hudson River will be able to make better decisions on the positioning of the vessels they are piloting with accurate real-time information and updated charts. This is especially important with the arrival of the larger Post-Panamax vessels that have already begun to arrive.

The New Jersey Maritime Pilot and Docking Pilot Commission is in support of the application to update the channel soundings and expand the charts for the Hudson River.

Very truly yours,



Andre M. Stuckey
Executive Director

CC Board of Commissioners of Pilotage of the State of New York
Captain Robert S. Ireland

Commissioners: Timothy J. Dacey * Brian McEwing * Jacob Shisha * Charles Wowkanech
Andre M. Stuckey, Executive Director * Kinta D. Montilus, Confidential Secretary



Charles V. Schaffer Jr. School of Engineering

August 19, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

The Davidson Laboratory at Stevens Institute of Technology strongly supports the request by Captain Scott Ireland and the Hudson River Pilots Association for resurveying and updating Hudson River navigational charts. Areas outside of the federal navigation channel haven't been surveyed since 1939, with many last surveyed *pre-1900*. There are major well known discrepancies between existing charts and actual conditions.

Stevens Institute of Technology is located on the Hudson River across from New York City in Hoboken, NJ and our research will greatly benefit from the updated bathymetric data.

My research team and I operate The [New York Harbor Observing and Prediction System \(NYHOPS\)](#). It was established to permit an assessment of ocean, weather, environmental, and vessel traffic conditions throughout the New York Harbor and New Jersey Coast regions. The system is designed to provide a knowledge of meteorological and oceanographic conditions both in real-time and forecasted out to 72 hours in the Hudson River, the East River, NY/NJ Estuary, Raritan Bay, Long Island Sound and the coastal waters of New Jersey. We have shown that a key ingredient to accurate water prediction is a good knowledge of the bathymetry. Data from the new surveying will provide unique measurements for our mission.

Please don't hesitate to contact me should questions arise.

Sincerely,

Alan F. Blumberg, Ph. D.
George Meade Bond Professor and
Director, Davidson Laboratory
voice: 201.216.5289
fax: 201.216.8372



Sea Tow Central Hudson
PO Box 642
Stony Point, NY 10980
P 845.561.0008
F 845.839.2814
seatow.com

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

August 22, 2015

Dear Admiral Glang,

My name is Captain Walter Garschagen and I am the owner of Sea Tow Central Hudson. Our company provides on-water marine assistance to the recreational boater on the Hudson River between the George Washington Bridge and the Newburgh-Beacon Bridge. Our vessels and captains travel hundreds of miles each year in this forty-odd mile stretch of river and encounter hundreds of incidents and observations.

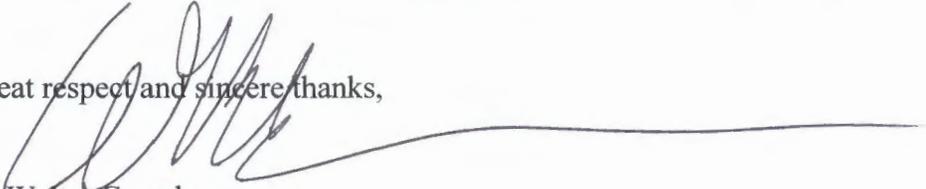
In assisting disabled recreational vessels of shoal draft, our vessels enter the shoal draft areas of the river on a daily basis and have discovered that the charts and scale of the charts provided to us are inadequate for the work we do. Many of the soundings provided to us on paper and digital charts date back almost eighty years. Many structures have been added to the river's edge, diverting the river flow and causing shoaling on many of the flats where the public is recreating on their small vessels.

For example, in our area of responsibility, the Tappan Zee has shoaled dramatically on the western shore off Piermont and Nyack, due to the WW II construction of the Piermont pier, causing many a groundings of recreational vessels and a tricky job for our captains to navigate through. The Tappan Zee Bridge has caused shoaling on both sides of the western span. Haverstraw Bay has shoaled on the flats and the federal channel since the last soundings, making local knowledge more important than the NOAA chart. Hurricane Sandy has contributed to this discrepancy, with new discoveries of shoaling on a seasonal basis. Peekskill Bay has deepened in some spots, but shoaled in others making the chart less effective as well. Newburgh Bay has shoaled dramatically along the shore lines and on the flats on the east and west sides of the river.

The scale of the chart has caused many problems for the recreational public, because their use of the river is often outside of the navigable channel and close detail a must to observe hazards in the shallower areas of the river. The recreational use of the river is not new, but the increase in commercial traffic within the channel has encouraged the recreational boater to play along the edges and venture in the lightly charted areas of the river.

I hope your agency is able to find resources to update the soundings of our entire Hudson River.

With great respect and sincere thanks,


Captain Walter Garschagen
Owner, Sea Tow Central Hudson



HUDSON VALLEY MARINE TRADES ASSOCIATION

P.O. Box 272 ♦ Stony Point ♦ New York 10980

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

August 22, 2015

My name is Jim Tammen. I am the president of the Hudson Valley Marine Trades Association. Our association represents the recreational marine industry in the entire Hudson Valley. Our businesses rely on the boating public enjoying the beautiful Hudson River safely. We advocate safe boating practices and network among each other and our local politicians in Albany, on issues relating to our river and the boating public.

Many of the soundings provided to us on paper and digital charts date back almost eighty years. Many of our customers boat along the river's edge to swim, fish and sunbath and therefore need accurate soundings to stay safe and afloat. Hurricane Sandy caused much shoaling in the Tappan Zee, Haverstraw Bay and Stony Point Bay. We actually urge the boating public to stay out of the federal channel in order to avoid incidents with the commercial traffic and therefor urge you to provide a better scale chart of the Hudson for the boating public.

The recreational use of the river is not new, but the increase in commercial traffic within the channel has encouraged the recreational boater to play along the edges and venture in the lightly charted areas of the river.

I hope your agency is able to find the resources to update the charts for our Hudson River.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim Tammen".

Jim Tammen
President, Hudson Valley Marine Trades Association

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife and Marine Resources, Bureau of Marine Resources

Hudson River National Estuarine Research Reserve

Norrie Point Environmental Center

256 Norrie Point Way, PO Box 315, Straatsburg, NY 12580

P: (845) 889-4745 | F: (845) 889-4749

www.dec.ny.gov

August 27, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

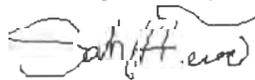
Dear Admiral Glang,

Captain R. Scott Ireland, the senior pilot of the Hudson River Pilots Association is leading a request for NOAA to conduct soundings and produce larger scale navigation charts of the Hudson River, NY. The Hudson River National Estuarine Research Reserve (HRNERR) supports this request, both for the benefit to navigation as articulated by Captain Ireland, and to benefit Hudson River research.

HRNERR research is focused on the function of critical estuarine habitats, including submerged aquatic vegetation (SAV), freshwater tidal wetlands, and shorelines, and their resilience to sea level rise. Sediment dynamics are a key factor in understanding the response of these habitats to rising waters. If there is too much sediment supply, SAV growth becomes inhibited by high turbidity. If there is too little sediment supply, freshwater tidal wetlands may not be able to accrete sediment at a rate that will keep pace with sea level rise, and wetland habitat may be flooded and lost. If sediment becomes eroded from shorelines, human infrastructure becomes less resilient to increased storm surges and flooding.

The climate change stressors of increased storms and rising water levels became apparent in the Hudson River Estuary during Hurricanes Irene and Lee in 2011. According to USGS, in the nine days following these storms, the volume of sediment that moved through the estuary was equivalent to the three year supply. It is currently unknown where the majority of this sediment was deposited, but the impact was evident by a 90% loss in SAV habitat that has persisted from 2012 through this current growing season. An update in Hudson River soundings conducted by NOAA would provide the necessary data to help us understand how these storms impacted the sediment dynamics, and help us understand how future storms and climate change stressors may impact critical Hudson River habitats so that they can be best managed and protected.

Thank you for your consideration,



Sarah H. Fernald
HRNERR Research Coordinator

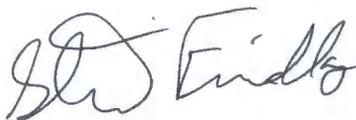
August 28, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910
Dear Admiral Glang,

Dear Admiral Glang,

I am a Senior Scientist at the Cary Institute of Ecosystem Studies and have conducted research on the Hudson River for over 25 years. I write to support the proposed re-surveying of depths in the tidal Hudson River. Many of our research projects deal with habitats that occur between the navigation channel and the shoreline and the bathymetry of much of this area is either unknown or based on old records. These habitats are crucial for a variety of important organisms and human uses of the Hudson and are quite likely to shift as sealevel rises. A precise and up-to-date baseline survey would be extremely valuable to mitigation planning efforts as well as projecting likely gains/losses in areal extent. The research community of the Hudson Valley has been aware for some time that this portion of the river is poorly described and a better data set on present depths would support large-scale restoration efforts as well as several NOAA-funded research projects. I encourage you to move forward on a re-survey for the improvement of safety and efficiency of navigation as well as support for the science necessary to understand and protect the Hudson River.

Sincerely,



Stuart Findlay
Senior Scientist
Cary Institute of Ecosystem Studies



Sea Tow Mid Hudson
PO Box 456
Lake Katrine, NY 12449-0456
P 845.336.8145
F 845.331.2824
seatow.com

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

My name is Captain Joseph Thomas, and I am a commercial captain operating on the Hudson River. Currently, I work with many of the commercial shipping companies along the Hudson River -- most notably the Hudson River Pilots Association. I am also owner and operator of Sea Tow Mid-Hudson and offer commercial assistance for towing and salvage from Newburgh, NY to the Federal Dam located in Troy, NY. I am also owner/operator of the charter vessel *Teal*, based out of Kingston, NY.

As the shipping traffic increases in the Hudson River, so does the need for accurate soundings of the areas outside the channel. During the years, through my work in towing and salvage, I have noticed many recreational boaters leaving the channel more and more to avoid the larger vessels transiting the river. As a result, the occurrence of vessels running aground has increased because of the inaccurate soundings. On numerous occasions, I have ventured into the areas outside the channel to find soundings on the chart to be in the four-to-six-foot range and, in actuality, found these areas to be around one to two feet in depth.

As a charter vessel captain, I also find myself venturing outside the channel in an effort to give the larger vessel the room it needs to maneuver. In more than one location, there is much more water available to me than the chart sounding states. Many sections of the river become very narrow and scarcely allow for the passing of a tug and barge and a ship. When you bring a charter vessel carrying 75-plus passengers into this equation, we need to leave the channel to allow for the safety of all vessels involved. More accurate soundings would give us more options in these situations.

The inaccuracy of these 100-plus-year-old soundings is further affected by recent storm activity during the past ten years. Due to these major tropical storms and the heavy storm surge they bring, an already heavily shoaled river has become increasingly shallower in certain areas. Conversely, the storms have also given areas of the river much more depth than the soundings from 1939 that are currently showing on available charts.

I would like to show my support for the Hudson River Pilots Association and its request to update these soundings. Not only will this allow for major improvements in passing situations to larger commercial traffic, but it will also assist the recreational users of the river to safely enjoy their Hudson River experience. This will lead to the continued success of the Hudson River region and allow for the continued growth of the maritime industry.

Thank you for your time and consideration in this matter.

A handwritten signature in black ink, appearing to be "J. Thomas", with a long horizontal line extending to the right.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Hudson River Estuary Program

21 South Putt Corners Road, New Paltz, NY 12561

P: (845) 256-3016 | F: (845) 255-3649

www.dec.ny.gov

August 21, 2015

Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

We are in full support of the Hudson River Pilots Association's request for new bathymetric surveys of the Hudson River Estuary outside the federal channel, not only for safe passage of commercial traffic, but also for wildlife management, contaminant management, and infrastructure development.

We know from recent work by the U.S. Geological Survey and our own benthic survey work that great volumes of sediment move through the estuary causing ever-changing bottom configurations, not unlike those reported by Mark Twain in *Life on the Mississippi*. During Hurricanes Irene and Lee in 2011 the USGS determined that 2.75 million tons of sediment entered the estuary north of Poughkeepsie but only 1.00 million tons of sediment passed their sensors at Poughkeepsie. Presumably 1.75 million tons of sediment was deposited in the estuary north of Poughkeepsie, suggesting areas of great shoaling in this region.

Several of our signature fish species including the endangered Atlantic and shortnose sturgeon are bottom feeders that require habitat that may change in location as bottom conditions change.

Many of the contaminants including PCBs and heavy metals are associated with bottom sediment and move with that sediment. To the extent that we know where sediment is accumulating we know where contaminants may be accumulating. The cost of dredge spoil disposal is directly related to the contaminants contained within the sediment.

Electric cable and gas pipeline installations, either in-place or planned, depend on knowledge of areas of sediment deposition and erosion. If a cable or pipeline is buried, it is important that it remains buried.



Department of
Environmental
Conservation

Between 1998 and 2005, contractors working for NYSDEC mapped the bathymetry in the estuary in areas where water depth exceeded about 12 feet. In many areas these high-resolution multibeam surveys revealed fields of sediment waves indicating sediment on the move. A reanalysis of some or all of these areas would help us to understand where sediment is accumulating and where it is eroding, which would provide invaluable insights for safer commercial navigation and environmental management.

Best regards,



Frances Dunwell
Hudson River Estuary Program Coordinator



Rear Admiral Gerd Glang
Director, NOAA Office of Coast Survey
1315 East West Highway
Silver Spring, MD 20910

Dear Admiral Glang,

I am writing in support of a project to bring navigational charts up to current standards by asking NOAA to provide more accurate soundings and higher resolution charts for Hudson River mariners. Beacon Institute for Rivers and Estuaries, Clarkson University, an environmental research organization located in the Hudson Valley, feels it is in everyone's interest to improve these charts, as the safe navigation of large shipping vessels is critical to maintaining public health and protecting the Hudson River's natural ecosystems.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read 'Timothy F. Sugrue'.

Timothy F. Sugrue, Ph.D.
President, CEO
Beacon Institute for Rivers and Estuaries.
Clarkson University