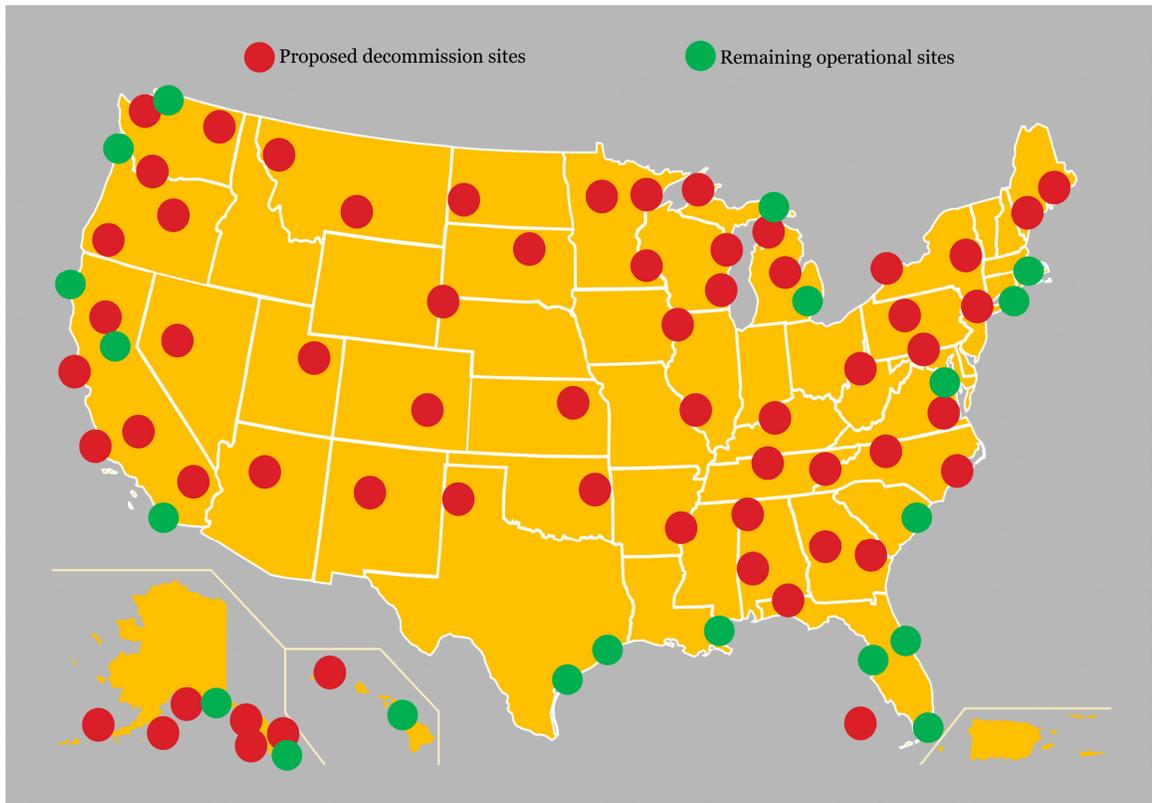


Users of NDGPS System Urged to Speak Against Its Deactivation by November 18 Deadline

By Judith Powers



The red dots are the beacons in the Nationwide Differential Global Positioning System scheduled to be shut down. The few to be left active, all on the seacoasts, are represented by green dots. Navigation on the most of the Great Lakes coasts, and the entire inland river system will stop receiving corrections on January 15, 2016 unless users make their opinions known by November 18, 2015. The site for making a comment is <http://www.regulations.gov>. Enter "Nationwide Differential Global Positioning System" in the search terms. In the "Filter Results By" column, check "open", and check all boxes under "Document Type". This will bring up the correct page for making a comment and for reading all comments that have been posted so far.

Most of the beacons in the Nationwide Global Positioning System (NDGPS), which provide sub-meter positions in the interior of the United States, will be shut down on January 15, 2016, unless users make themselves known to the U.S. Coast Guard (USCG) by November 18.

The entire system of 62 beacons that provide sub-meter positions throughout the interior of the U.S. are scheduled to be shut down. Twenty-two selected beacons on the coastline will be left on active status, but these will not provide contiguous coverage in

any area. The beacons are serving mariners on the 12,000 miles of the inland river system, including the towing industry, marine construction and dredging, inland waterway ports, and inland navigation aids. They provide critical sub-meter positions in port areas for safe maneuvering, especially in constricted areas. In addition, the system serves the land surveying, GIS, marine construction and agriculture industries. The railroad industry has sponsored aspects of the system in the past.

The accompanying map illustrates the extent to which this utility will be eliminated throughout the nation. The dots represent individual beacons, which have radii of 300 miles each. The red dots are the beacons to be de-activated, leaving the entire inland navigation system, many coastal ports and entrance channels, the Great Lakes, and interior United States land-based positioning without the benefit of the system, which has been in use since the late 1990s.

Because there is no way to quantify the use of the beacons other than by comments from users, the USCG is assuming that it is not being used, and is not including maintenance of the beacons in future funding allocations.

Once the extent of use of the system is ascertained by the comment process, it is hoped that either a different agency will be assigned the maintenance of the beacons, or that, armed with information on the extent of its use, the USCG will be able to justify including the system in its funding request.

Users and other interested parties are urged to comment by one of four methods. The first is online at the website <http://www.regulations.gov>. Enter “Nationwide Differential Global Positioning System” in the search terms. In the “Filter Results By” column, check “open”, and check all boxes under “Document Type”. This will bring up the correct page for making a comment and for reading all comments that have been posted so far.

As of October 27, there were only 33 comments on the site, yet all objected to the decommissioning of the beacons, some providing great detail concerning how shutting down specific beacons will affect the safety of navigation in major harbors. Other comments include individual boaters, park service archeologists, a Corps of Engineers navigation office, and others.

Other methods of submitting a comment are: by fax at 202-493-2251; by mail at Docket Management Facility (M-30), U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590-0001; by hand delivery at the same address between 9 a.m. and 5 p.m. Monday through Friday. Phone number is 202-366-9329. Include the docket number for the notice – DPT-OST-2015-0105. All comments will be posted without change to the www.regulations.gov website and will include any personal information provided.

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If the system on the rivers is shut down, mariners will need to purchase their own personal base station and radio station, which will incur additional costs and will not be integrity monitored or necessarily tied to the NGS National Spatial Reference System, causing another layer of possible position error. Another option would be to purchase an annual subscription to a service that provides corrections, which might not be integrity monitored, would involve extra cost if existing equipment doesn't interface with the service, and will likely use a non-maritime standard.

The entire nation would be left without a necessary, reliable redundant source of positioning.

Businesses whose major business is in river and harbor navigation, contacted for this article, were unanimous in their opinion that the system is vital for safety in the waterways, if not directly for positioning, then as a vital source of redundant positioning.

The agencies propose leaving 22 sites available in coastal areas only.

The August 18 notice in the Federal Register was signed by Gary Rasicot, Director of Marine Transportation Systems, U.S. Coast Guard; Gregory D. Winfree, Assistant Secretary for Research and Technology, U.S. Department of Transportation; and Robert A. Bank, Chief, Civil Works Branch of Engineering and Construction, U.S. Army Corps of Engineers.

Among the navigation beacons proposed for deactivation on the Mississippi River and tributaries are: Upper Keweenaw, WI; Wisconsin Point, WI; St. Paul (Alma), MN; Sturgeon Bay, WI; Mequon, MI; Cheboygan, MI; Saginaw Bay, MI; Rock Island, IA (run by the COE); St Louis, MO (COE); Bobo, MS; Louisville, KY (COE); Millers Ferry, AL (COE); Sallisaw, OK; and Youngstown, NY.

Other maritime locations to be shut down are:

Appleton, WA; Biorka, AK; Brunswick, ME; Cape Hinchinbrook, AK; Cold Bay, AK; Driver, VA; Eglin, FL; Gustavus, AK; Iasbla, PR; Key West, FL; Kodiak, AK; Kokile Point, HI; Level Island, AK; Lompoc, CA; New Bern, NC; Penobscot, ME; Pigeon Point, CA; Robinson Pt., WA; and Sandy Hook, NJ.

In addition, the solid network of beacons in the U.S. hinterland, each providing a transmission radius of 300 miles, will be shut down.

"Sandy Hook is one of primary inbound shipping station for the Port of New York and New Jersey," said Lou Nash, president of Measutronic, a major supplier of GPS systems to the marine industry. Since learning of the proposed shutdown, Nash has spent several days contacting users of especially the beacons that serve inland shipping.

"All were surprised about the announcement and feel they will be affected by the shutdown. They want to talk more about it," said Nash, who is interested in talking to all who depend on this system.

The Federal Register announcement refers to a request for comments issued in 2013, where comments were received to aid in analyzing the continuing need for the NDGPS system. Response was limited, according to the notice, which stated that 'no respondents reported the discontinuance of DGPS broadcast to be detrimental or harmful. (But) ship pilots in particular noted that DGPS can be critical in confined waterways for precise ship handling maneuvers.' Despite the fact that there were fewer than 20 comments, they were used to create the policy for the entire community of users.

In describing the decision to shut down the inland system, the notice mentions the National Oceanic and Atmospheric Administration's (NOAA) National Geodetic Survey

(NGS) that supplements their network of Continuously Operating Reference Stations (CORS). This system provides data for three-dimensional positioning for use in post-processing, but not in real time, for use in land surveys, Geographic Information systems (GIS), Land Information Systems (LIS) and environmental management, all of which stated that they have alternate systems and equipment and would not be harmed by the loss of the beacons.

The notice does not mention receiving comments from barge and towing companies, hydrographic surveyors, marine construction companies or dredging companies who use the beacons for positioning on the inland waterways, and the Coast Guard has no way of knowing if the system is being used by these industries without input from the users.

The decision to maintain the beacons in coastal areas was based on the comments of a few port pilots where, the statement says “marine traffic is most frequent and the need for precise marine navigation is greatest.”

However, there has not been an assessment of the usage of the beacons serving port areas to justify shutting down any of the beacons.

The Federal Register announcement is at:

<https://www.federalregister.gov/articles/2015/08/18/2015-20401/nationwide-differential-global-positioning-system-ndgps>