



DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
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FINDING OF NO SIGNIFICANT IMPACT

Harleyville Reach Water Transmission Main

Dorchester and Orangeburg Counties, South Carolina

August 2014

The National Environmental Policy Act (NEPA) requires the U.S. Army Corps of Engineers, Charleston District (The Corps) to evaluate the effect of proposed projects on both the environment and human health and welfare. This Finding of No Significant Impact (FONSI) summarizes the results of The Corps' evaluation and documents The Corps' conclusions.

The Corps, working in cooperation with the Lake Marion Regional Water Agency, Santee-Cooper, and Dorchester County, is proposing to construct an extension to an existing potable water transmission main near the Town of Holly Hill. This project would extend the water transmission main from Holly Hill southward to the Town of Harleyville (see Figures 1a and 1b). An Environmental Assessment (EA) of the anticipated environmental effects of the proposed project was prepared by the Corps. The Corps' work on this project is being conducted under authority of the Water Resources Development Act (WRDA) of 1992 (Public Law 102-580), which authorized the Corps to provide assistance to non-Federal interests for water and wastewater related environmental infrastructure projects.

The proposed project is an extension of the Lake Marion Regional Water System. The new 16-inch water main will connect to an existing 24-inch water main near the Town of Holly Hill and will follow the SC Highway 453 corridor approximately 34,900 feet (about 6.6 miles) southward to the Town of Harleyville. The proposed project would enhance public health by providing a reliable, high-quality water supply in compliance with drinking water regulations. The proposed project is expected to satisfy the current and future water supply needs for a large portion of the western half of Dorchester County.

The Corps evaluated several alternatives before development of the proposed project. These alternatives included the following:

Alternative 1 (proposed project) would connect the new 16-inch potable water transmission main to an existing 24-inch water transmission main near the Town of Holly Hill and extend the water transmission main southward to the Town of Harleyville (Figure 1a and 1b). The proposed route for the new water transmission line would require crossing one small stream (i.e., Home Branch) and Four Hole Swamp. All stream crossings would be constructed using directional drilling or jack and boring. For the section of the project crossing Four Hole Swamp the pipe would be placed in the shoulder of Highway 453 or directionally drilled. Using these construction techniques would greatly reduce impacts to Four Hole Swamp. Water will be supplied from a water treatment plant located on Lake Marion near the Town of Santee. The water treatment plant become operational in 2008 and has the capacity to support the increased water supply needs from construction of the proposed project.

Alternative 2 would be similar to Alternative 1 except the water transmission main would begin south of Santee, near the Highway 15 and Interstate 95 interchange, and run approximately 90,100 feet (~ 17 miles) southward from this area to the Town of St. George. Then, at a later time, the water transmission main would be extended to Harleyville. This route for the water transmission main would require crossing several small streams and Four Hole Swamp. The route of the water transmission main through Four Hole Swamp would follow power line right of ways. This alternative would require extensive temporary impacts to Four Hole Swamp during installation of the water transmission main. As in Alternative 1, water would be supplied from the water treatment plant located on Lake Marion near the Town of Santee. The water treatment plant become operational in 2008 and has the capacity to support the increased water supply needs from construction of the proposed project.

Alternative 3 would provide water to Harleyville and the surrounding areas by installing more water wells in the area. There are concerns about the increasing demand on groundwater and its effect on the capability of the aquifer to continue to produce high quality water in the area of the proposed project. These concerns have resulted in the State of South Carolina implementing a program that monitors all new groundwater wells that withdraw more than 3 million gallons per month (i.e., approximately 70 gallons/minute if operated continuously). Because of this increased demand on groundwater and the concerns about the effect on the aquifer as an additional source of potable water, groundwater is not recommended as a source of potable water for the city of Harleyville.

The No Action Alternative is the same as the most probable future without constructing the proposed project. A basic alternative to any proposed plan of improvement is the "No Action" alternative. Adoption of this alternative implies acceptance of the existing conditions in the proposed project area.

The Corps criteria for evaluating the effect of the proposed project included the following:

- Important Farmland – This project will not result in the unnecessary and irreversible conversion of farmland to nonagricultural uses
- Formally Classified Lands – no significant impacts to formally classified lands are expected as a result of implementing the proposed project.

- Wetlands– No practical non-wetland alternative exists. The considered actions do not conflict with applicable state and local standards concerning wetland protection and permitting and are covered under USACE nationwide permit number 12. The proposed project will not significantly affect the natural and beneficial values of the impacted wetlands as most areas will be allowed to return to a natural state after instillation of the water transmission main. The proposed project has avoided and minimized wetland impacts where possible. No permanent fill will be placed into wetlands. All permanent impacts will be mitigated for to ensure no net loss of wetland function.
- Floodplains - No practical non-floodplain alternative exists. The considered actions do not conflict with applicable state and local standards concerning floodplain protection. The considered action will not significantly affect the natural and beneficial values of the floodplain
- Water Quality – no significant effects on water quality are expected as result of construction or operation of the proposed project. Directional drilling or jack and boring would be used at all stream crossings and would result in no impacts to streams from construction of the proposed project.
- Cultural Resources – no effects on cultural resources are expected as a result of implementing the proposed project.
- Threatened and Endangered Species – no effects on threatened and endangered species are expected as a result of implementing the proposed project.
- Noise – a short term increase in noise is expected during construction; however, these impacts will be temporary. No additional effects are anticipated a result of implementing the proposed project.
- Air Quality – A short term decrease in air quality in the immediate vicinity of construction is expected as a result of implementing the proposed project; however, these impacts will be temporary and localized. No additional effects are anticipated a result of implementing the proposed project
- Environmental Justice – no adverse effects on minority and low-income populations are expected as a result of implementing the proposed project.
- Cumulative Impacts – no significant adverse cumulative impacts are expected as a result of implementing the proposed project.

The draft EA and FONSI were distributed in June 2014 for a 30 day comment and review period. The Final EA addresses comments received during this review period. No significant comments were received. Since the Corps' findings demonstrate that the project will not significantly adversely affect environmental resources or human health, the preparation of an Environmental Impact Statement is not warranted. The full Environmental Assessment can be downloaded from the internet at <http://www.sac.usace.army.mil/Missions/CivilWorks/NEPADocuments.aspx>.

Date 01 AUG 14



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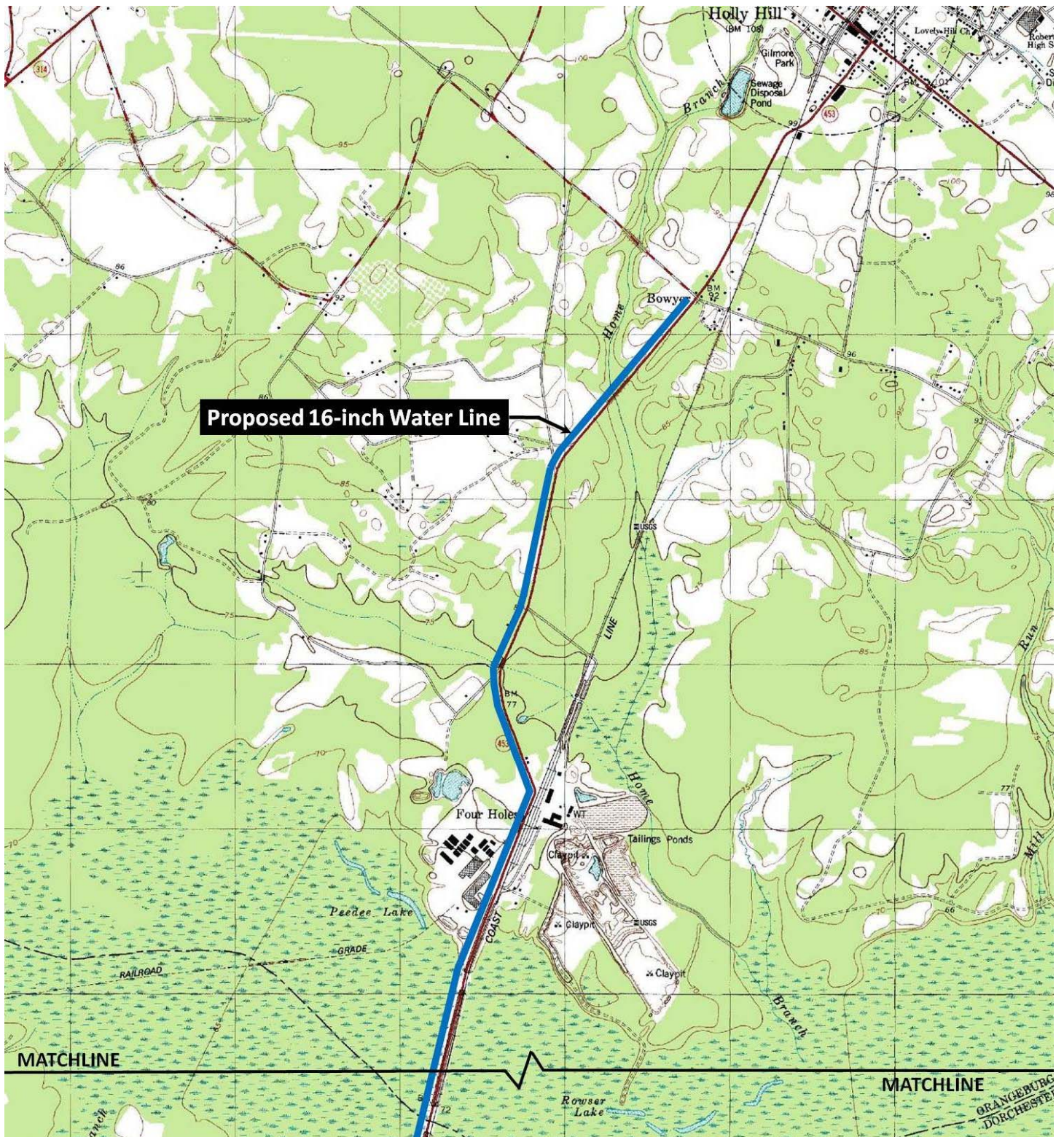


Figure 1(a) Project Area Map. Proposed water transmission main placement shown in blue.

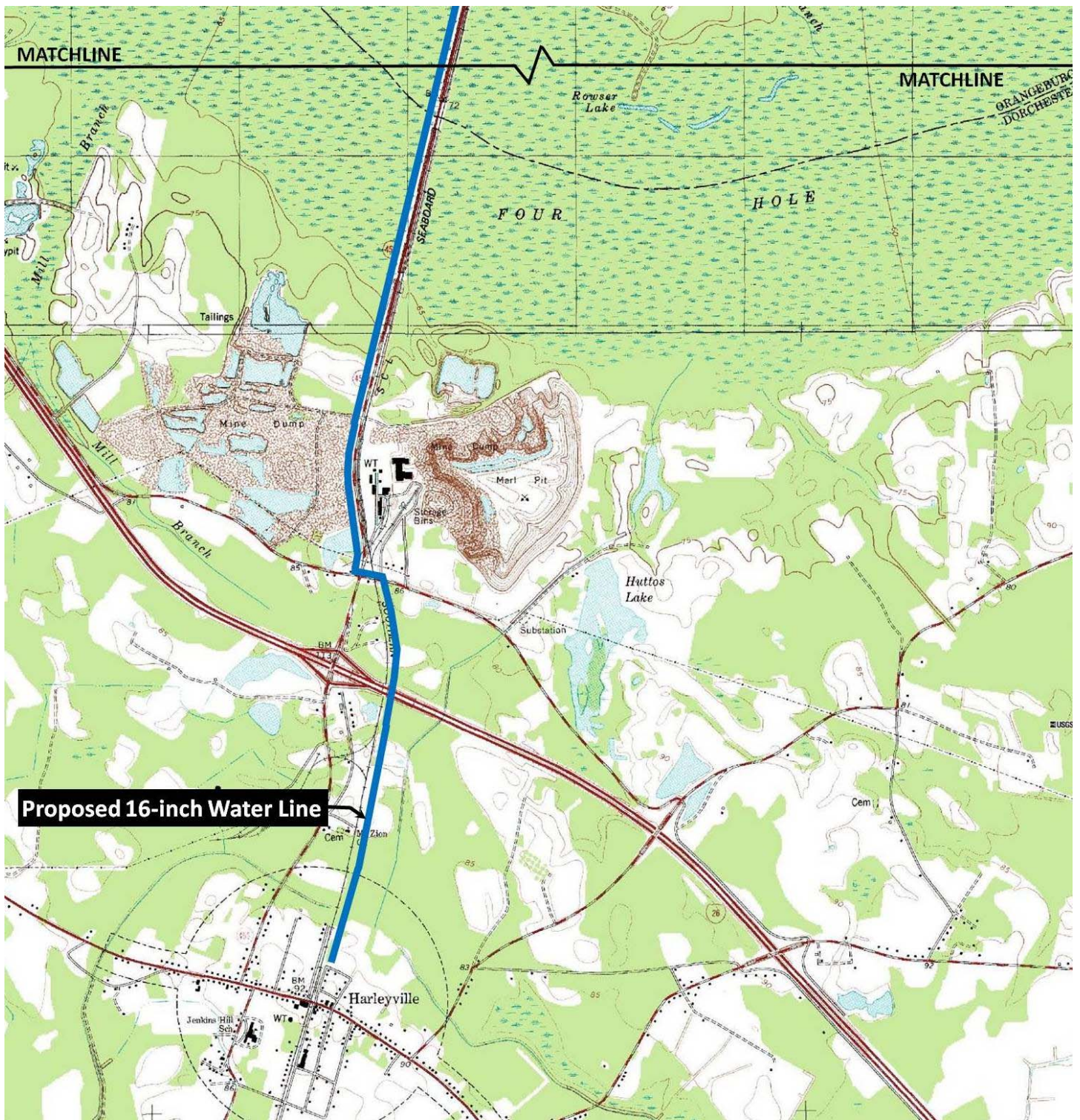


Figure 1(b) Project Area Map. Proposed water transmission main placement shown in blue.