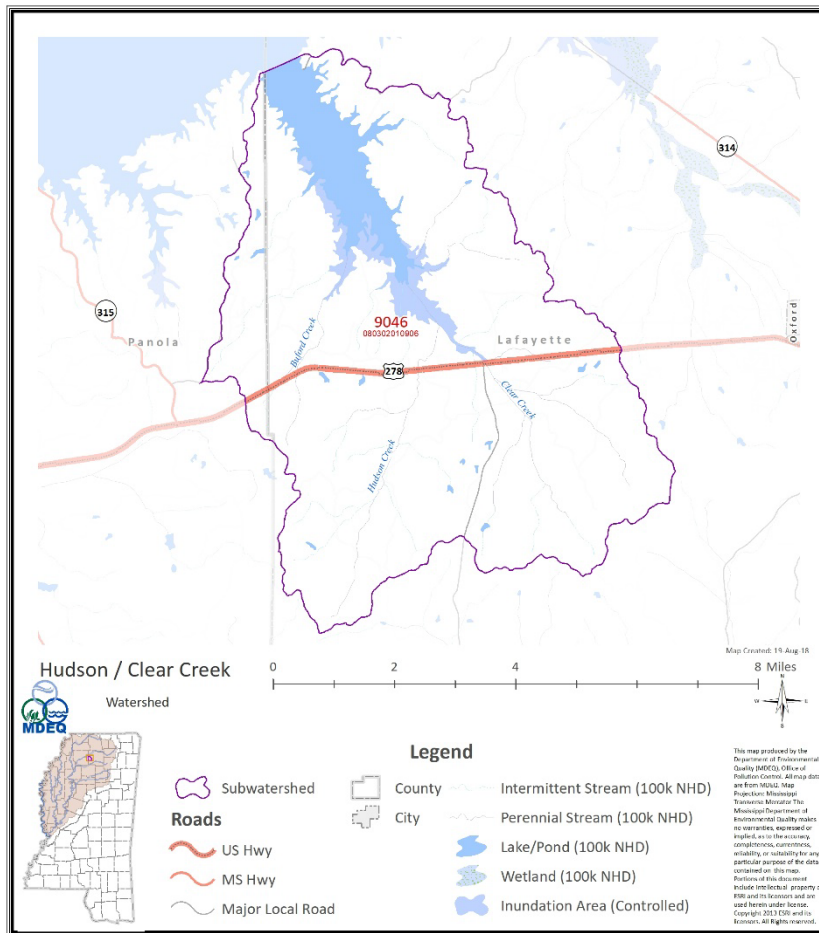


5-Alt Justification for Hudson Creek-Clear Creek Watershed



The Hudson Creek-Clear Creek (HUC 080302010906) watershed is a 28,125-acre watershed located primarily in Lafayette County MS, with a small portion of the watershed being in Panola County in the northwestern part of the state. Positioned on the southern side of Sardis Lake, the waters flow in a northerly direction ultimately ending in the flood pool of the lake. The Hudson Creek-Clear Creek watershed is part of the Yazoo River Basin; one of 9 major drainage basins in the state. This watershed is located in the upland or Yazoo hills portion of the basin as opposed to the flatter part of the basin referred to as the “Mississippi Delta”. Hudson Creek and Clear

Creek represent the two main perennial water bodies in the watershed. Clear Creek captures the drainage from the eastern part of the watershed and Hudson Creek captures the majority of the flow from the western portion of the watershed.

In 2000, MDEQ developed a comprehensive biological monitoring program to add another assessment tool to their monitoring program. As part of this effort, a robust multi-metric benthic macroinvertebrate index, the Mississippi Benthic Index of Stream Quality (M-BISQ) (MDEQ, 2003), was developed for wadable streams outside of the MS Alluvial Plain. As part of MDEQ’s biological monitoring program, benthic macroinvertebrate community data was collected on Hudson Creek-Clear Creek (HUC 080302010906) and assessed as being biologically impaired. As a result, Hudson Creek (MS904612) was included on MS’s 2006 Section 303(d) List. In 2016, biological community data was collected on Clear Creek (MS904611). These data indicated Clear Creek was also biologically impaired and therefore the creek was included in the 2018 Section 303(d) List of Impaired Water Bodies. Sediment was identified as a probable primary stressor for these biological impairments through a stressor identification process that was performed in 2018.

Through a collaborative partnership between the Mississippi Department of Environmental Quality (MDEQ), Mississippi Soil and Water Conservation Commission (MSWCC) and the Mississippi office of the Natural Resource Conservation Service (NRCS), the Hudson Creek-Clear Creek (HUC 080302010906) watershed was identified for inclusion as a pilot watershed in the FY 2017 National Water Quality Initiative (NWQI). This watershed assessment was completed along with an education and outreach plan for the stakeholders in the watershed as part of the NWQI process. The information contained within this document was developed following *National Planning Procedures Handbook (NPPH), Subpart F – Area – wide Conservation Planning*, Part 600.50 B (USDA, NRCS, 2014). The watershed assessment contained herein was completed at a HUC-12 watershed scale. As such, any watershed approved for funding under NWQI undergoes a significant planning effort to complete a thorough watershed assessment. This assessment intends to determine conservation implementation needs in the watershed to address water quality impairments, describe watershed characteristics and hydrologic conditions, identify critical areas needing practice implementation, and develop an education and outreach plan to engage local producers/partners. Through the implementation of the watershed assessment developed for NWQI, conservation practices funded through NRCS will be implemented to address agricultural and other nonpoint sources of pollution to Hudson Creek- Clear Creek. More information on NWQI and a full listing of watershed implementation activities funded through this program can be found here: [National Water Quality Initiative](#).