United States Department of Agriculture
Natural Resources Conservation Service
3381 Skyway Drive
Auburn, Alabama 36830

Finding Of No Significant Impact

For

Middle Tennessee River Valley Watershed

Cullman, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marshall, and Morgan Counties, Alabama

Introduction

The Middle Tennessee River Valley Watershed is a federally assisted action authorized for planning under Public Law 83-566, the Watershed Protection and Flood Prevention Act. This act authorizes the Natural Resources Conservation Service to provide technical and financial assistance to local project sponsors. The local sponsor of the Middle Tennessee River Valley Watershed is the Alabama Soil and Water Conservation Committee.

An environmental assessment was undertaken in conjunction with the development of the watershed plan. This assessment was conducted with local, State and Tribal Governments; Federal agencies; and interested organizations and individuals. Data developed during the assessment are available for public review at the following location:

https://alconservationdistricts.gov/resources/watershed-assessment/

Recommended Action

Proposed is the installation of irrigation practices on acreage used for agricultural production within the project area, which encompasses 1,864,805 acres. The proposed action supports the modernization of agricultural production by helping to minimize crop losses due to drought by supplementing soil water holding capacity during periods of uneven rainfall distribution. The watershed plan evaluates expanding irrigation on 25,650 acres of farmland within the watershed. Conservation measures will be planned and applied based on the Natural Resource Conservation Service's onsite environmental evaluation/consultations and recommendations in order to increase irrigation efficiencies and/or mitigate possible impact on the surrounding environmental resources. The Sponsoring Local Organization will conduct a sign-up, rank

applications, and fund approved applicants. The five Irrigation Practices proposed for cost-share include Low Pressure Center Pivots, Micro-Irrigation, Linear/Lateral Irrigation, Tow/Traveler Irrigation, and Plasticulture.

Effect of Recommended Action

The recommended action would support the sustainable expansion of irrigation within the watershed. Depending on farmer application needs, this action will allocate funding for the development or additions to water delivery/supply infrastructure and/or irrigation application equipment at the farm level.

In consideration of the analysis documented in the Environmental Assessment (EA) completed June 2019, the preferred alternative will not have a significant impact on the quality of human or natural environment.

The EA evaluated both the beneficial and adverse impacts of the proposed action. However, there may at times be minor site-specific adverse environmental effects that primarily will be short term and occurring during the implementation period. Because there is potential to adversely affect one type of resource while improving the condition of another resource, there may at times be minor site-specific adverse environmental effects that primarily will be short term and occurring during the implementation period. NRCS policy at 7 CFR part 650.3(b)(4) requires that NRCS plans minimize adverse effects before NRCS provides technical or financial assistance. In addition, NRCS has in the past, and will continue to prepare documentation of a site-specific environmental evaluation, and will consult with the appropriate organizations to avoid, reduce, or otherwise mitigate adverse impacts on natural resources. As part of this process, NRCS also complies with requirements for protecting unique geographic features and other resources, as well as NRCS policies protecting natural resources. Thus, any adverse effects that may result from this program will occur at a much lower threshold than the EIS threshold.

The proposed action will not result in significant adverse effects on public health or safety. The project will consist of on-farm irrigation and appropriate measures will be taken on a site-specific basis to avoid, minimize or mitigate the potential for adverse effects that might occur to public health and safety during implementation.

There is no evidence indicating there will be any significant adverse effects to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas from selection of the proposed action. Consulting as required with agencies having jurisdiction over these resources also helps NRCS to avoid significant adverse effects on a site-specific basis.

The proposed action will encourage and promote agricultural enterprises in the watershed through increased irrigation. This action will tend to offset pressures to convert important farmland to other uses, such as residential development.

The effects of this action on the quality of the human environment are not controversial. All NRCS conservation practice standards are published for public comment in the Federal Register before being adopted to ensure integration of appropriate science and to identify and resolve any related controversy. It is only through the implementation of these conservation practices that this project would affect the environment. Any controversies that may arise from a site-specific application will be identified during the environmental evaluation process and appropriate mitigation measures applied.

The proposed action will have minor effects on both the surface and groundwater supply. Currently there is approximately 24,000 irrigated acres in the watershed. Current irrigation demand from surface supplies in the watershed is less than one percent of the total streamflow. Current irrigation demand from groundwater supplies is also less than one percent of recharge rates across the watershed. Using conservative estimates as the threshold for the Preferred Alternative, the Watershed could support up to 180,000 irrigated acres. At that acreage, irrigation demand from surface water would still be less than one percent of total streamflow. Irrigation demand from groundwater would be approximately five percent of total annual recharge. The effects are anticipated to be minor. The Preferred Alternative may have localized impacts on smaller tributaries and watersheds within the project watershed. These effects will be mitigated by providing irrigated acreage density at the HUC-12 level to the NRCS and Sponsoring Local Organization during site selection. Promoting expanded irrigation in HUC-12s that have less than 10 percent of the overall drainage areas as irrigated acres is recommended to protect local water supplies and existing irrigation investments.

The proposed action is anticipated to have minor effects on both surface and groundwater quality. Water quality could be impacted by increased nutrient runoff into surface waters, increased turbidity due to sediment transport and/or biological productivity, or nutrient leaching into groundwater due to irrigation applied in excess of field capacity. If irrigation is applied using best management practices, negative impacts are not anticipated. Projections for increased sediments or nutrients carried by surface waters are minor assuming the soil moisture is maintained at or below field capacity. The Preferred Alternative may have localized impacts on smaller tributaries and watersheds within the project watershed. This will be mitigated by providing irrigated acreage density at the HUC-12 level to the NRCS and SLO during site selection.

The proposed action is not considered highly uncertain and does not involve unique or unknown risks. Conservation practices implemented under NRCS programs are supported by science and have been demonstrated to improve natural resource conditions.

The proposed action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or historical resources. As stated in the EA, NRCS follows the Advisory Council on Historic Preservation's regulations for implementation of section 106 of the National Historic Preservation Act of 1966 and related policy guidance to

ensure historic properties are considered during project and program planning. NRCS also has a programmatic agreement with the Alabama Historical Commission to ensure appropriate steps are taken to identify and avoid adversely affecting these resources as conservation practices are implemented.

The proposed action will not adversely affect endangered or threatened species, marine mammals, or critical habitat to any significant degree. NRCS regularly consults with the U.S. Fish and Wildlife Service, to ensure these species are not jeopardized, adverse effects are minimized, and that there are no adverse modifications to designated critical habitat.

The proposed action does not threaten to violate Federal, State, or local requirements imposed for protection of the environment. The NRCS Environmental Evaluation (EE) Worksheet identifies requirements for protection of the environment to ensure they are considered and that adverse effects are addressed during the EE process, normally by consultation with the agency having jurisdiction. As a result, the proposed action is consistent with the requirements of these laws and related policies.

Alternatives

The planned action is the most practical means of increasing irrigation acreage in the watershed in a sustainable, environmentally conscious manner. Because no significant adverse environmental impacts will result from installation of the measures, the only other alternative considered was the future-without-project alternative.

Consultation-Public Participation

Agency consultation began in 2018 late summer / early fall with three small meetings:

1. US Fish and Wildlife Service
2. AL Department of Environmental Management
3. environmental advocacy groups (The Nature Conservancy and Alabama Rivers Alliance)

A multi-agency scoping meeting was conducted in early fall 2018 with representation from two environmental advocacy groups (The Nature Conservancy and Alabama Rivers Alliance), five state agencies (ADEM, ADAI, ADECA-OWR, GSA, ASWCC), three nongovernmental entities (ALFA, AL Pulp and Paper Council, AACD), one federal agency (NRCS), and two academic institutions (AU/ACES, UAH). In fall 2018, project team met separately with USGS and TVA.

Additional scoping meetings were held in October 2018 and November 2018 and were attended by landowners, state and federal agencies, Extension and academia.

The environmental assessment was transmitted to all participating and interested agencies, groups, and individuals for review and comment in January 2019 and June 2019. Public

meetings were held throughout the planning process to keep all interested parties informed of the study progress and to obtain public input to the plan and environmental evaluation.

Agency consultation and public participation to date have shown no unresolved conflicts with the implementation of the selected plan.

Conclusion

Based on the environmental assessment summarized above, and according to the National Environmental Policy Act and the Natural Resources Conservation Service Regulations (7 CFR Part 650), I find that the Proposed Action is not a major Federal action significantly affecting the quality of the human environment. Therefore, no environmental impact statement will be prepared.

Ben Malone

STATE CONSERVATIONIST
USDA-NRCS
Alabama

July 3, 2019