

**Finding of No Significant Impact
and
Floodplain Statement of Findings
for the
Implementation of the Wetland Mitigation Bank Program
at the Savannah River Site**

Agency: U. S. Department of Energy

Action: Finding of No Significant Impact

Summary: The Department of Energy (DOE) has prepared an environmental assessment (EA) (DOE/EA-1205) for the proposed implementation of a wetland mitigation bank program at the Savannah River Site (SRS), located near Aiken, South Carolina. Based on the analyses in the EA, DOE has determined that the proposed action is not a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (NEPA). Therefore, the preparation of an environmental impact statement (EIS) is not required, and DOE is issuing this Finding of No Significant Impact (FONSI) and Floodplain Statement of Findings.

Public Availability: Copies of the EA and FONSI or further information on the DOE NEPA process are available from:

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Background: Since the period of early colonial settlement, it is estimated that the United States has lost through draining and filling activities approximately 30 to 40 percent of the total wetland acreage present within the nation's boundaries. This habitat destruction has continued in this country at a rate of 121,410-202,350 hectares (300,000-500,000 acres) per year, although the ongoing loss of wetlands has slowed markedly in the past two decades.

In 1972, Congress passed the Federal Water Pollution Control Act Amendments, also known as the Clean Water Act (CWA) of 1972. Section 404 of this Act established a permit program regulating discharges of dredged and fill material into waters of the

United States. This program is jointly administered by the U.S. Army Corps of Engineers (COE) and the U.S. Environmental Protection Agency. In parallel to the development of the Federal wetland regulatory process under Section 404, a variety of documents and orders were issued by Government agencies toward furthering the protection of the nation's wetlands. Most notable of these was the national wetland goal established by the Bush Administration in the late 1980s as "no-net-loss" in wetland acreage and function in the short term, to be followed by a net gain as the long-term goal.

At present, all unavoidable losses of wetlands are replaced by compensatory mitigation under the Section 404 permit program. Mitigating the adverse impacts of necessary development actions on the nation's wetlands is a central premise of this Federal wetland regulatory program. The Section 404 regulatory program relies upon a sequential approach to mitigating these adverse effects by first avoiding unnecessary impacts, then minimizing environmental impacts, and, finally, compensating for remaining unavoidable damage to wetlands and other waters through mitigation activities. Such mitigation typically involves the creation, restoration, or enhancement of replacement wetlands on or adjacent to the development or project site.

Wetland mitigation banking is a relatively new natural resources management concept that provides for advance compensation of unavoidable wetland losses due to development activities. Mitigation banking is achieved through the creation, restoration, enhancement, or, in certain defined circumstances, preservation of other wetland areas of equivalent value which are generally located outside of the immediate area of the project-specific impacts. Wetland mitigation banks are typically relatively large blocks of wetlands whose estimated tangible and intangible values, termed "credits," are managed in a crediting-debiting system analogous to that of a financial bank account. As development takes place, credits equivalent to the estimated unavoidable wetland losses are withdrawn or debited from the bank to compensate for the losses incurred.

SRS has a higher percentage of wetland acreage within its boundaries than any other individual site within the DOE complex. Future SRS proposed actions such as the environmental remediation of existing waste sites and the repair/replacement of bridges will likely impact some wetland areas. Because of these circumstances, the establishment of a wetland mitigation bank at SRS would enable DOE Savannah River Operations Office (SR) to locate, restore, monitor, and receive credit for mitigation activities accomplished prior to the realization of any potential wetland impacts.

The proposed SRS wetland mitigation bank program is embodied in an interagency Memorandum of Agreement (MOA) between DOE-SR and several Federal and State regulatory and resource agencies. This MOA established the basic components and inner workings of the proposed program. Based on the MOA, the SRS wetland mitigation bank program would gain "credit" for current and future wetland restoration work not required as part of any existing Mitigation Action Plan, and in expectation of future mitigation needs at SRS. Implementation of the proposed program would save DOE-SR both time and expenses by not having to conduct wetland mitigation on a project-by-project basis.

Purpose and Need for Agency Action: The purpose of the proposed action is to provide SRS with a timely and cost-effective means of compensating for unavoidable wetland losses due to site projects and development activities. DOE needs to implement a site-wide program at SRS to provide comprehensive support and further the achievement of the established national goal of “no-net-loss” of wetlands. By establishing a wetland mitigation bank prior to such impacts, DOE-SR can incorporate mitigation efforts required for new projects in a more timely manner. For future remediation and construction projects that require compensatory wetland mitigation, the bank would save the time and money needed to locate a suitable wetland for restoration and to obtain approval for its use.

Proposed Action: DOE proposes to implement a wetland mitigation bank program at SRS. The complete scope of the proposed action is embodied in the aforementioned MOA. This wetland mitigation bank would be a dedicated bank to be used for SRS project needs only. This use would be limited to compensation of wetland impacts or losses from environmental restoration and construction projects on SRS. Use of the bank’s credits for compensation relative to resource injury due to the release of any hazardous substance must be approved by the appropriate SRS Natural Resource Trustees. In addition, the proposed action would be implemented in conjunction with the landscape-scale land use planning effort that is currently being developed at SRS. The existence of degraded wetlands such as drained Carolina bays, channelized streams, and thermally-impacted swamp forests provide DOE-SR the opportunity to develop a wetland mitigation bank with a high probability of success.

The scope of the proposed action would encompass both the general mitigation activities on SRS wetlands and the overall management of the resulting site "banking" program. However, other than the general conceptual aspects, the debiting portion of the bank and the specific activities associated with debiting the bank credits are not included in the scope of the proposed action in this EA. Separate NEPA reviews would be prepared for any future SRS actions which would require debiting the bank for wetland mitigation purposes.

In such instances, the use of bank credits by DOE-SR to offset unavoidable impacts of Section 404 permits to wetlands resources would be allowed only after demonstration by the applicant to the satisfaction of COE that wetlands have been avoided and impacts to affected wetlands have been minimized to the maximum extent practicable. Further, it must be determined that there is also no possibility of feasible onsite mitigation to compensate for the proposed wetland impacts. Compliance with appropriate sections of CWA 404(b)(1) guidelines would also be required before the use of the bank could be considered. The banking credits cannot be used to offset impacts to Federally-protected species. Similarly, the bank cannot be used to absolve cultural resources impacts requiring consideration under Section 106 of the National Historic Preservation Act of 1966 (16 USC 470). In addition, special cases involving adverse impacts to certain anadromous fish species would also preclude the use of the bank.

The Mitigation Banking Review Team (MBRT) is an interagency group designated in the MOA to review and consult with DOE-SR regarding the implementation and operation of the SRS wetland mitigation bank. The MBRT is composed of the agencies signatory to the MOA and the National Marine Fisheries Service (NMFS). The MBRT will include the following: reviewing and having approval authority over the site-specific management plans for proposed mitigation projects; reviewing annual reports on the monitoring and success of these projects; reviewing and having approval authority over the amount and input of credits to the bank; and reviewing and having approval authority over the debits taken from the bank. The responsibilities of this interagency group will also include: conducting field visits to SRS project sites as needed; providing advice and input to SRS regarding techniques for restoration, monitoring, and success; and provide input on and concur on any remedial actions deemed necessary to ensure the success of a mitigation project.

A number of SRS organizations would also be participants in implementing the proposed action. The SRS Wetlands Task Group (WTG) will be responsible for reviewing all mitigation banking activities and forwarding recommendations on to the SRS Natural Resources Coordinating Committee, which would then pass these on to DOE-SR. Various organizations, including the U.S. Forest Service Savannah River Institute (SRI), Natural Resources Conservation Service (NRCS), Savannah River Ecology Laboratory (SREL), South Carolina Department of Health and Environmental Control, South Carolina Department of Natural Resources, and Westinghouse Savannah River Company (WSRC) would be responsible for identifying suitable mitigation areas and submitting these to the WTG for consideration. The SRI, NRCS, SREL, and WSRC would also be responsible for implementing and conducting the various mitigation projects on site.

The SRS wetland mitigation bank would involve the restoration and enhancement of small isolated wetlands, as well as major wetland systems scattered throughout the site's nonindustrialized area. The primary goal of the bank would be the restoration and enhancement of degraded Carolina bays and streamside bottomland hardwood forest on SRS. Mitigation opportunities within the industrialized area may also be explored to provide mitigation sites where feasible. A key advantage for establishing the bank at SRS is the presence of experienced land management and research groups on site. The combination of available land and onsite knowledge would lower the total cost of the proposed action and ensure its success.

The method used for valuation of mitigation credit is a matrix system developed by COE and currently approved for use in South Carolina. DOE-SR would be responsible for the accounting of the bank credits. Separate accounting systems would be established for isolated wetlands and adjacent wetlands to facilitate the use of the bank on an in-kind compensatory basis. The withdrawal of credits (i.e., debiting) would be allowed as compensation activities occur and interim success criteria are met.

The SRS wetland mitigation bank would be implemented in a phased manner. To ensure conservative credit withdrawal during the initial period of wetland

compensation/crediting to the bank, no more than 15 percent of the available credits could be debited during the first 3 years of the bank's operation. Mitigation measures would be reviewed by the MBRT after the initial 3-year period to determine usage. If success criteria are being met, no restrictions would be placed on future transactions. DOE-SR would provide data sheets and a summary for each credit/debit transaction to the MBRT member agencies at one-year intervals.

Alternatives: In accordance with NEPA regulations, DOE examined the following alternatives to the proposed action: (1) no action, continue to implement mitigation on a project-by-project basis; (2) implement a variation of the proposed wetland mitigation bank program; and (3) purchase offsite mitigation credits for compensation. The no-action alternative would consist of DOE continuing to implement compensatory wetland mitigation on a project-by-project basis. No regulatory or future project benefits would be realized from any SRS wetland restoration or enhancement activities, which were conducted on the basis of good stewardship of the site's natural resources. The second alternative would entail implementing the proposed action with the change that any new development/facility projects that could withdraw credits from the bank would only be allowed to be located within the SRS industrial zone. Any future project or facility development in the industrial support zone would not be allowed to use the wetland mitigation bank credits and would be required to conduct mitigation activities on a project-specific basis. This would be more costly and less timely for these SRS projects. A third alternative would be for DOE-SR to purchase mitigation credits from an offsite source to provide for compensation of onsite project-related wetland losses. This alternative would necessitate finding an offsite commercial wetland mitigation bank that could sell credits to the Federal Government. Such credits are very expensive, and would greatly increase the project costs associated with having to conduct wetland mitigation.

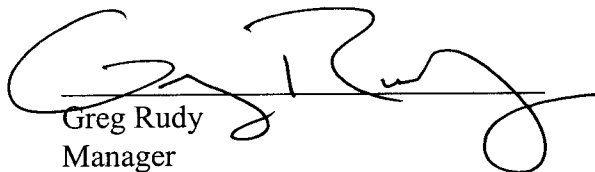
Environmental: The principal cumulative impact from the proposed action would be the loss of SRS lands currently used for timber production. The loss of such land use would be less than 0.001 percent on an annual basis, with the estimated losses for the entire proposed action at less than 0.01 percent. There would be no measurable impact on the local economy because of the proposed action. The impacts to 100-year floodplain and jurisdictional wetlands would only be temporary in nature. Some mortality of small and less mobile wildlife would result from grading and logging activities at the individual mitigation sites. The proposed action would have no adverse impacts on threatened and endangered species. Given the minimal amount of soil excavation activities associated with most wetland restoration and enhancement activities, the potential impacts to cultural and archaeological resources should be negligible. However, site-specific assessments would be necessary as individual mitigation locations are selected to ensure that no significant impacts to these resources are realized. Cumulative ambient air quality impacts would be negligible. Assuming that both protective clothing and adequate safety measures are employed, the proposed action should not pose any potential problems for

either human health or worker safety. There would be no measurable impact to either public health or safety as a consequence of the proposed action. No adverse impacts to either surface or groundwater quality would be expected from implementing the proposed wetland mitigation bank at SRS.

Floodplain Statement of Findings: This Floodplain Statement of Findings was prepared in accordance with 10 CFR 1022. A Floodplain/Wetlands Assessment was prepared for the general site areas to be impacted by implementation of the proposed SRS wetland mitigation bank. The Floodplain/Wetlands Assessment stated that both 100-year floodplain and jurisdictional wetlands did exist in many of the locations to be affected by the proposed program. During implementation of the proposed action, restoration or enhancement project activities could result in short-term impacts to either areas of the base floodplain or existing wetlands. A number of mitigation activities would be implemented to minimize potential impacts to the floodplain and wetland areas. Operation of construction equipment in the wetland and floodplain areas would be minimized. Depending upon the type of mechanized construction equipment to be employed, the use of platform support mats may be required to minimize the impacts to the wetland soils in the project area. Silt fences and other erosion control structures as needed would be installed to ensure there is no deposition in the downslope wetland areas. Any impacts resulting from the operation of mechanized equipment would be corrected prior to project completion. Best management practices would be employed during construction and maintenance activities associated with this proposed action.

Determination: Based on the information and analyses in the EA (DOE/EA-1205), and after careful consideration of all comments, DOE has determined that the proposed implementation of the wetland mitigation bank program at SRS does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS is not required and DOE is issuing this FONSI and Floodplain Statement of Findings.

Signed in Aiken, South Carolina, this 28th day of April, 1999.


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