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**Draft Supplemental Watershed Plan No. 6 and Environmental Assessment  
for Flood Water Retarding Structure No. 26 of the  
Big Sandy Creek Watershed  
Wise County, Texas**



PREPARED BY

USDA Natural Resources Conservation Service

IN COOPERATION WITH

Wise Soil and Water Conservation District, Wise County Water Control and Improvement District No. 1, Wise County Commissioners Court, Upper Elm-Red Soil and Water Conservation District, Tarrant Regional Water District, Little Wichita Soil and Water Conservation District, Clay County Commissioners Court, Montague County Commissioners Court, City of Bowie, Texas

June 2024

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**DRAFT Supplemental Watershed Plan & Environmental Assessment  
for the Rehabilitation of Floodwater Retarding Structure No. 26 of the  
Big Sandy Creek Watershed, Wise County, Texas**

Prepared By:

The U.S. Department of Agriculture, Natural Resources Conservation Service

In Cooperation With:

Wise Soil and Water Conservation District, Wise County Water Control and Improvement District No. 1, Wise County Commissioners Court, Upper Elm-Red Soil and Water Conservation District, Tarrant Regional Water District, Little Wichita Soil and Water Conservation District, Clay County Commissioners Court, Montague County Commissioners Court, City of Bowie, Texas.

**AUTHORITY**

The original watershed work plan was prepared, and the works of improvement were installed, under the authority of the Watershed Protection and Flood Control Act of 1944 (Public Law 78-534) as amended. The rehabilitation of Big Sandy Creek Flood Retarding Structure No. 26 is authorized under Public Law 83-566 (as amended), as enacted by Section 313 or Public Law 106-472, otherwise known as "The Small Watershed Rehabilitation Amendments of 2000."

**ABSTRACT**

Big Sandy Creek Floodwater Retarding Structure No. 26 (FRS 26 or Big Sandy 26) was designed and constructed as a Class A, Low Hazard structure by the NRCS in the mid 1980's for the purpose of flood control as a measure included in the third supplemental watershed plan. Dam breach inundation analyses have revealed that FRS 26 is classified as a high hazard structure due to the expected loss of life resulting from catastrophic failure during the design storm event. In its current condition, FRS 26 does not meet Texas Commission on Environmental Quality (TCEQ) dam safety requirements or Natural Resources Conservation Service (NRCS) standards for high hazard dams. The FRS 26 project area is owned by Melton and Doris Neighbors (R000014951) and the United States Department of Agriculture - Forest Service (R000015019, LBJ National Grasslands). The non-compliance with Texas requirements for hydraulic capacity creates a need for action by the Sponsors. This Plan-EA describes the affected environment, identifies the affected environment, and describes the environmental consequences associated with each alternative. The preferred alternative involves structural rehabilitation of FRS 26 by widening the existing earthen auxiliary spillway channel, installing a filter drain and re-establishing the principal spillway's energy-dissipating structure. The Project Installation cost is estimated to be **\$3,195,000**, of which **\$2,065,300** will be paid from the Watershed Operations funds and **\$1,129,700** from local funds.

**COMMENTS AND INQUIRIES**

For further information, please contact: Mark J. Northcut, Landscape Planning Leader, USDA - Natural Resources Conservation Service, 101 South Main Street, Temple, Texas 76501, Phone: (254) 742-9824.

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# **BIG SANDY CREEK WATERSHED AGREEMENT**

Supplemental Watershed Plan Agreement  
(Supplement No. 6)

Between the

Wise Soil and Water Conservation District, Wise County Water Control and Improvement District No. 1, Wise County Commissioners Court, Upper Elm-Red Soil and Water Conservation District, Tarrant Regional Water District, Little Wichita Soil and Water Conservation District, Clay County Commissioners Court, Montague County Commissioners Court, City of Bowie,  
Texas

(Referred to herein as "Sponsors" or "Sponsoring Local Organizations" or "SLOs")

and the

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE  
Formerly the Soil Conservation Service (SCS)  
(Referred to herein as NRCS)

**Whereas**, the original Watershed Plan Agreement for the Big Sandy Creek watershed, State of Texas, executed by the Sponsors named therein and NRCS, became effective on January 18, 1956; and

**Whereas**, the Watershed Plan was amended by Supplemental Watershed Plan Agreements executed by the Sponsors and NRCS and became effective on December 13, 1971 (I), April 26, 1976 (II), August 22, 1979 (III), January 5, 2006 (IV), May 27, 2005 (V); and

**Whereas**, the responsibility for administration of the Watershed Protection and Flood Prevention Act, has been assigned by the Secretary of Agriculture to NRCS; and

**Whereas**, application has heretofore been made to the Secretary of Agriculture by the Sponsors for assistance in preparing a plan for works of improvement for Structure No. 26 in the Big Sandy Creek Watershed, State of Texas, under the authority of the Soil Conservation Act of 1935 (PL-46, 74<sup>th</sup> Congress), the Flood Control Act of June 22, 1936 (PL-738, 74<sup>th</sup> Congress), and the Flood Control Act of December 22, 1944 (PL-534, 78<sup>th</sup> Congress, 2<sup>nd</sup> Session); and

**Whereas**, there has been developed through the cooperative efforts of the Sponsors and NRCS a Watershed Work Plan No. 6 – Environmental Assessment for works of improvement for the restructuring of Structure No. 26, Big Sandy Creek Watershed, State of Texas, hereinafter referred to as the Plan-EA or plan, which plan is annexed to and made a part of this agreement;

**Now**, therefore, in view of the foregoing considerations, the Secretary of Agriculture, through NRCS, and the Sponsors hereby agree on this watershed project plan and that the works of

improvement for this project will be installed, operated, and maintained in accordance with the terms, conditions, and stipulations provided for in this plan and including the following:

1. **Term.** The term of this agreement is for the 3-year installation period and 100-year evaluated life of the project (103 years total) and does not commit NRCS to assistance of any kind beyond the end of the evaluated life.
2. **Costs.** The costs shown in this plan are preliminary estimates. Final costs to be borne by the parties hereto will be the actual costs incurred in the installation of works of improvement.
3. **Real property.** The sponsors will acquire such real property as will be needed in connection with the works of improvement. The amounts and percentages of the real property acquisition costs to be borne by the Sponsors and NRCS are as shown in the cost-share table in Section 5 hereof.

The sponsors agree that all land acquired for measures, other than land treatment practices, with financial or credit assistance under this agreement will not be sold or otherwise disposed of for the evaluated life of the project except to a public agency which will continue to maintain and operate the development in accordance with the operation and maintenance agreement.

The sponsors have current, original easements which lack specified flood easement elevation or surveyed structure extent. The broad wording of these easements will require greater definition by the Sponsors in order for the construction of the dam rehabilitation project to proceed. The recommended minimum easement elevation for FRS No. 26 is elevation 912.3 feet NAVD 88 (the original auxiliary spillway control section elevation plus two feet). The sponsors and the landowners acknowledge and accept the risks associated with allowing future construction to occur at elevations lower than the elevation of the Probable Maximum Flood. The Probable Maximum Flood peak water surface elevation is 913.3 feet NAVD 88. The area of upstream flooding in the proposed configuration at elevation 913.3 feet is approximately 57 acres.

4. **Uniform Relocation Assistance and Real Property Acquisition Policies Act.** *The* sponsors hereby agree to comply with all of the policies and procedures of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. Section 4601 et seq. as further implemented through regulations in 49 CFR Part 24 and 7 CFR Part 21) when acquiring real property interests for this federally assisted project. If the sponsors are legally unable to comply with the real property acquisition requirements, they agree that, before any Federal financial assistance is furnished, they will provide a statement to that effect, supported by an opinion of the chief legal officer of the state containing a full discussion of the facts and law involved. This statement may be accepted as constituting compliance. ¶

**5. Cost-share for Watershed Project Plans.** The following table will be used to show cost-share percentages and amounts for watershed project plan implementation.

Works of Improvement	NRCS		Other		Total
	Percent	Cost	Percent	Cost	Cost
<b>Cost-Shareable Items<sup>1/</sup></b>					
Construction: FRS 26 Spillway <sup>2/</sup>	66.8%	\$1,574,800	33.2%	\$782,690	\$2,357,500
<b>Subtotal - Cost Shareable Items – Flood Control</b>	<b>66.8%</b>	<b>\$1,574,800</b>	<b>33.2%</b>	<b>\$782,690</b>	<b>\$2,357,500</b>
<b>Non Cost-Shareable Items<sup>4/</sup></b>					
Engineering <sup>3/</sup>	98%	\$465,500	2%	\$9,500	\$475,000
Project Administration <sup>5/</sup>	N/A	\$25,000	NA	\$50,000	\$75,000
Water, Mineral and Other Resource Rights	N/A	\$0	N/A	\$0	\$0
Real Property Rights <sup>6/</sup>	0%	\$0	100%	\$187,500	\$187,500
Permits	0%	\$0	100%	\$100,000	\$100,000
Relocation, Beyond Required Decent, Safe, Sanitary	0%	\$0	100%	\$0	\$0
Non-Project Costs	0%	\$0	100%	\$0	\$0
<b>Subtotal: Non Cost-Shareable Items</b>	<b>60%</b>	<b>\$500,000</b>	<b>40%</b>	<b>\$337,500</b>	<b>\$837,500</b>
<b>TOTAL:</b>	<b>65%</b>	<b>\$2,065,300</b>	<b>35%</b>	<b>\$1,129,700</b>	<b>\$3,195,000</b>

1/ Price Base: 2023

Prepared: July 2023

2/ Cost share is based on eligible cost shareable items and in-kind contributions, limited to 100% of the construction cost.

3/ Includes engineering costs associated with geotechnical exploration and testing, design of the new auxiliary spillway, archaeological survey, and environmental coordination.

4/ If actual costs incurred are greater than shown here, each party shall bear the responsibility for their costs.

5/ Includes costs associated with contract administration.

6/ Includes purchase of construction easement and permanent easements associated with the proposed auxiliary spillway.

7/ Investigation of the watershed project area indicates that no displacements will be involved under present conditions. However, in the event that displacement becomes necessary at a later date, the cost of relocation assistance and payments will be cost-shared in accordance with the percentages shown.

**6. Land treatment agreements.** The sponsors will obtain agreements from owners of not less than 50 percent of the land above each multiple-purpose and floodwater-retarding structure. These agreements must provide that the owners will carry out farm or ranch conservation plans on their land. The sponsors will ensure that 50 percent of the land upstream of any retention reservoir site is adequately protected before construction of the dam. The sponsors will assist landowners and operators to ensure the installation of the land treatment measures shown in the watershed project plan. The sponsors will encourage landowners and operators to continue to operate and maintain the land treatment measures after the long-term contracts expire, for the protection and improvement of the watershed.

7. **Floodplain Management.** Before construction of any project for flood prevention, the sponsors must agree to participate in and comply with applicable Federal floodplain management and flood insurance programs.
8. **Water and mineral rights.** The sponsors will acquire or provide assurance that landowners or resource users have acquired such water, mineral, or other natural resources rights pursuant to State law as may be needed in the installation and operation of the works of improvement. Any costs incurred must be borne by the sponsors and these costs are not eligible as part of the sponsors' cost-share.
9. **Permits.** The sponsors will obtain and bear the cost for all necessary Federal, State, and local permits required by law, ordinance, or regulation for installation of the works of improvement. These costs are not eligible as part of the sponsors' cost-share.
10. **NRCS assistance.** This agreement is not a fund-obligating document. Financial and other assistance to be furnished by NRCS in carrying out the plan is contingent upon the fulfillment of applicable laws and regulations and the availability of appropriations for this purpose.
11. **Additional agreements.** A separate agreement will be entered into between NRCS and the sponsors before either party initiates work involving funds of the other party. Such agreements will set forth in detail the financial and working arrangements and other conditions that are applicable to the specific works of improvement.
12. **Amendments.** This plan may be amended or revised only by mutual agreement of the parties hereto, except that NRCS may deauthorize or terminate funding at any time it determines that the sponsors have failed to comply with the conditions of this agreement or when the program funding or authority expires. In this case, NRCS must promptly notify the sponsors in writing of the determination and the reasons for the deauthorization of project funding, together with the effective date. Payments made to the sponsors or recoveries by NRCS must be in accordance with the legal rights and liabilities of the parties when project funding has been deauthorized. An amendment to incorporate changes affecting a specific measure may be made by mutual agreement between NRCS and the sponsors having specific responsibilities for the measure involved.
13. **Prohibitions.** No member of or delegate to Congress, or resident commissioner, may be admitted to any share or part of this plan, or to any benefit that may arise therefrom; but this provision may not be construed to extend to this agreement if made with a corporation for its general benefit.
14. **Operation and Maintenance (O&M).** The sponsors will be responsible for the operation, maintenance, and any needed replacement of the works of improvement by actually performing the work or arranging for such work, in accordance with an O&M Agreement. An O&M agreement will be entered into before Federal funds are obligated and will continue for the project life (100 years). Although the sponsors' responsibility to the Federal Government for O&M ends when the O&M agreement expires upon completion of the evaluated life of measures covered by the agreement, the sponsors acknowledge that continued liabilities and responsibilities associated with works of improvement may exist beyond the evaluated life.



- 15. Emergency Action Plan.** Prior to construction, the sponsors must prepare an Emergency Action Plan (EAP) for the dam where failure may cause loss of life or as required by state and local regulations. The EAP must meet the minimum content specified in the NRCS Title 180, National Operation and Maintenance Manual (NOMM), Part 500, Subpart F, Section 500.52, and meet applicable State agency dam safety requirements. The NRCS will determine that an EAP is prepared prior to the execution of fund obligating documents for construction of the structure. EAPs must be reviewed and updated by the sponsors annually.
- 16. Nondiscrimination Provisions.** In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

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By signing this agreement, the recipient assures the Department of Agriculture that the program or activities provided for under this agreement will be conducted in compliance with all applicable Federal civil rights laws, rules, regulations, and policies.

- 17. Certification Regarding Drug-Free Workplace Requirements (7 CFR Part 3021).** By signing this Watershed Agreement, the sponsors are providing the certification set out below. If it is later determined that the sponsors knowingly rendered a false certification, or otherwise violated the requirements of the Drug-Free Workplace Act, the NRCS, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-Free Workplace Act.

*Controlled substance* means a controlled substance in Schedules I through V of the Controlled Substances Act (21 U.S.C. Section 812) and as further defined by regulation (21 CFR Sections 1308.11 through 1308.15);

*Conviction* means a finding of guilt (including a plea of *nolo contendere*) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes;

*Criminal drug statute* means a Federal or non-Federal criminal statute involving the manufacturing, distribution, dispensing, use, or possession of any controlled substance;

*Employee* means the employee of a grantee directly engaged in the performance of work under a grant, including: (i) all direct charge employees; (ii) all indirect charge employees unless their impact or involvement is insignificant to the performance of the grant; and (iii) temporary personnel and consultants who are directly engaged in the performance of work under the grant and who are on the grantee's payroll. This definition does not include workers not on the payroll of the grantee (e.g., volunteers, even if used to meet a matching requirement; consultants or independent contractors not on the grantees' payroll; or employees of subrecipients or subcontractors in covered workplaces).

**Certification:**

A. The sponsors certify that they will or will continue to provide a drug-free workplace by—

(1) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.

(2) Establishing an ongoing drug-free awareness program to inform employees about—

(a) The danger of drug abuse in the workplace;

(b) The grantee's policy of maintaining a drug-free workplace;

(c) Any available drug counseling, rehabilitation, and employee assistance programs; and

(d) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.

(3) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (1).

(4) Notifying the employee in the statement required by paragraph (1) that, as a condition of employment under the grant, the employee must—

(a) Abide by the terms of the statement; and

(b) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.

(5) Notifying the NRCS in writing, within 10 calendar days after receiving notice under paragraph (4)(b) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the

convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice must include the identification numbers of each affected grant.

(6) Taking one of the following actions, within 30 calendar days of receiving notice under paragraph (4) (b), with respect to any employee who is so convicted—

(a) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(b) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

(7) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (1), (2), (3), (4), (5), and (6).

B. The sponsors may provide a list of the sites for the performance of work done in connection with a specific project or other agreement.

C. Agencies will keep the original of all disclosure reports in the official files of the agency.

**18. Certification Regarding Lobbying (7 CFR Part 3018) (for projects > \$100,000)**

A. The sponsors certify to the best of their knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the sponsors, to any person for influencing or attempting to influence an officer or employee of an agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned must complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The sponsors must require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients must certify and disclose accordingly.

B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed

by U.S. Code, Title 31, Section 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

**19. Certification Regarding Debarment, Suspension, and Other Responsibility Matters—  
Primary Covered Transactions (7 CFR Part 3017).**

- A. The sponsors certify to the best of their knowledge and belief, that they and their principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (2) Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph A(2) of this certification; and
  - (4) Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- B. Where the primary sponsors are unable to certify to any of the statements in this certification, such prospective participant must attach an explanation to this agreement.

**20. Clean Air and Water Certification.**

- A. The project sponsoring organizations signatory to this agreement certify as follows:
- (1) Any facility to be utilized in the performance of this proposed agreement is not listed on the Environmental Protection Agency List of Violating Facilities.
  - (2) To promptly notify the NRCS-State administrative officer prior to the signing of this agreement by NRCS, of the receipt of any communication from the Director, Office of Federal Activities, U.S. Environmental Protection Agency, indicating that any facility which is proposed for use under this agreement is under consideration to be listed on the Environmental Protection Agency List of Violating Facilities.
  - (3) To include substantially this certification, including this subparagraph, in every nonexempt sub-agreement.
- B. The project sponsoring organizations signatory to this agreement agrees as follows:
- (1) To comply with all the requirements of section 114 of the Clean Air Act as amended (42 U.S.C. Section 7414) and section 308 of the Federal Water Pollution Control Act (33 U.S.C. Section 1318), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section

114 and section 308 of the Air Act and the Water Act, issued there under before the signing of this agreement by NRCS.

- (2) That no portion of the work required by this agreement will be performed in facilities listed on the EPA List of Violating Facilities on the date when this agreement was signed by NRCS unless and until the EPA eliminates the name of such facility or facilities from such listing.
- (3) To use their best efforts to comply with clean air standards and clean water standards at the facilities in which the agreement is being performed.
- (4) To insert the substance of the provisions of this clause in any nonexempt subagreement.

C. The terms used in this clause have the following meanings:

- (1) The term "Air Act" means the Clean Air Act, as amended (42 U.S.C. Section 7401 et seq.).
- (2) The term "Water Act" means Federal Water Pollution Control Act, as amended (33 U.S.C. Section 1251 et seq.).
- (3) The term "clean air standards" means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110 of the Air Act (42 U.S.C. Section 7414) or an approved implementation procedure under section 112 of the Air Act (42 U.S.C. Section 7412).
- (4) The term "clean water standards" means any enforceable limitation, control, condition, prohibition, standards, or other requirement which is promulgated pursuant to the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. Section 1342), or by a local government to assure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. Section 1317).
- (5) The term "facility" means any building, plant, installation, structure, mine, vessel, or other floating craft, location or site of operations, owned, leased, or supervised by a sponsor, to be utilized in the performance of an agreement or subagreement. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location will be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are collocated in one geographical area.

**21. Assurances and Compliance.** As a condition of the grant or cooperative agreement, the sponsors assure and certify that they are in compliance with and will comply in the course of the agreement with all applicable laws, regulations, Executive orders and other generally applicable requirements, including those set out below which are hereby incorporated in this agreement by reference, and such other statutory provisions as are specifically set forth herein.

State, Local, and Indian Tribal Governments: OMB Circular Nos. A-87, A-102, A-129, and A-133; and 7 CFR Parts 3015, 3016, 3017, 3018, 3021, and 3052.

Nonprofit Organizations, Hospitals, Institutions of Higher Learning: OMB Circular Nos. A-110, A-122, A-129, and A-133; and 7 CFR Parts 3015, 3017, 3018, 3019, 3021 and 3052.

22. **Examination of Records.** The sponsors must give the NRCS or the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to this agreement, and retain all records related to this agreement for a period of three years after completion of the terms of this agreement in accordance with the applicable OMB Circular.

23. **Signatures**

**Wise Soil and Water Conservation  
District - Sponsor**  
407 Park West Ct, Suite 200  
Decatur, Texas 76234

By: Cody Billings

Title: Chairman

Date: 7-12-24

The signing of this supplemental watershed agreement was authorized by the governing body of the Wise Soil and Water Conservation District at a meeting held on \_\_\_\_\_.

Bill G. Hill  
Administrative Secretary or Notary

Wise Soil and Water Conservation District  
407 Park West Ct, Suite 200  
Decatur, Texas 76234

Date: 7-12-24

Wise County Water Control  
and Improvement District No. 1 - Sponsor  
P.O. BOX 303  
Bridgeport, Texas 76426

By: [Signature]

Title: President

Date: 8/7/2024

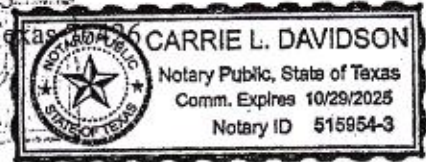
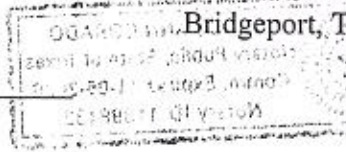
The signing of this supplemental watershed agreement was authorized by the governing body of the Wise County Water Control and Improvement District No. 1 at a meeting held on

[Signature: Carrie L. Davidson]

Administrative Secretary or Notary

Wise County Water Control  
and Improvement District No. 1  
P.O. BOX 303  
Bridgeport, Texas 76426

Date: 8/7/2024



Wise County Commissioners  
Court - Sponsor  
PO Box 899  
Decatur, Texas 76234

By: [Signature]

Title: County Judge

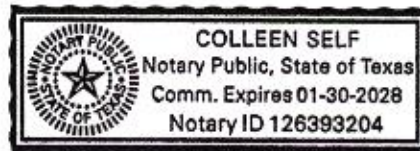
Date: 7/22/24

The signing of this supplemental watershed agreement was authorized by the governing body of the Wise County Commissioners Court at a meeting held on July 22, 2024

[Signature: Colleen Self]  
Administrative Secretary or Notary

Wise County Commissioners Court  
PO Box 899  
Decatur, Texas 76234

Date: 7/22/24



Upper Elm-Red Soil and Water  
Conservation District – Sponsor  
2200 N. Grand Ave  
Gainesville, Texas 76240

By: J. K. Bmtu

Title: CHAIRMAN

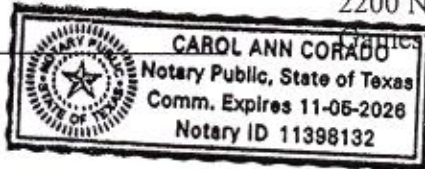
Date: 8/12/24

The signing of this supplemental watershed agreement was authorized by the governing body of the Upper Elm-Red Soil and Water Conservation District at a meeting held on \_\_\_\_\_

Carol Ann Corrado  
Administrative Secretary or Notary

Upper Elm-Red Soil and Water  
Conservation District  
2200 N. Grand Ave  
Gainesville, Texas 76240

Date: 8/12/24



Tarrant Regional Water  
District - Sponsor  
800 E. Northside Drive  
Fort Worth, Texas 76102

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

The signing of this supplemental watershed agreement was authorized by the governing body of the Tarrant Regional Water District at a meeting held on \_\_\_\_\_

\_\_\_\_\_  
Administrative Secretary or Notary

Tarrant Regional Water District  
800 E. Northside Drive  
Fort Worth, Texas 76102

Date: \_\_\_\_\_



Little Wichita Soil and Water

By: \_\_\_\_\_



**Conservation District - Sponsor**  
4311 South 31<sup>st</sup> Street, Suite 125  
Temple, Texas 76502  
PO Box 658

Title: Marilyn A. Chapman LWCD

Date: 8/21/24

The signing of this supplemental watershed agreement was authorized by the governing body of the Little Wichita Soil and Water Conservation District at a meeting held on \_\_\_\_\_.

\_\_\_\_\_  
Administrative Secretary or Notary

Little Wichita Soil and Water  
Conservation District  
4311 South 31<sup>st</sup> Street, Suite 125  
Temple, Texas 76502  
PO Box 658

Date: \_\_\_\_\_

**Clay County Commissioners  
Court - Sponsor**  
214 N. Main Street  
Henrietta, Texas 76365  
PO Box 548

By: [Signature]

Title: County Judge

Date: 8/26/2024

The signing of this supplemental watershed agreement was authorized by the governing body of the Clay County Commissioners Court at a meeting held on Aug. 26, 2024.

[Signature]  
Administrative Secretary or Notary

Clay County Commissioners Court  
214 N. Main Street  
Henrietta, Texas 76365  
PO Box 548

Date: 8/26/2024



**Montague County Commissioners  
Court – Sponsor**  
PO Box 416  
Montague, Texas 76251

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

The signing of this supplemental watershed agreement was authorized by the governing body of the Montague County Commissioners Court at a meeting held on \_\_\_\_\_.

\_\_\_\_\_  
Administrative Secretary or Notary

Montague County Commissioners Court  
PO Box 416  
Montague, Texas 76251

Date: \_\_\_\_\_

-----  
**City of Bowie, Texas - Sponsor**

By: \_\_\_\_\_

304 N. Mason  
Bowie, Texas 76230

Title: \_\_\_\_\_

Date: \_\_\_\_\_

The signing of this supplemental watershed agreement was authorized by the governing body of the City of Bowie, Texas at a meeting held on \_\_\_\_\_.

\_\_\_\_\_  
Administrative Secretary or Notary

City of Bowie, Texas  
304 N. Mason  
Bowie, Texas 76230

Date: \_\_\_\_\_



**Natural Resources Conservation Service**

**U.S. Department of Agriculture**

Approved by:

\_\_\_\_\_  
Kristy Oates

State Conservationist

Date: \_\_\_\_\_

## TABLE OF CONTENTS

<b>BIG SANDY CREEK WATERSHED AGREEMENT .....</b>	<b>I</b>
<b>SUMMARY (OFFICE OF MANAGEMENT AND BUDGET FACT SHEET).....</b>	<b>XXI</b>
<b>CHANGES REQUIRING PREPARATION OF A SUPPLEMENT .....</b>	<b>1</b>
<b>PURPOSE AND NEED FOR ACTION .....</b>	<b>1</b>
ORIGINAL PROJECT .....	2
WATERSHED PROBLEMS AND OPPORTUNITIES .....	2
<b>SCOPE OF THE ENVIRONMENTAL ASSESSMENT .....</b>	<b>4</b>
<b>AFFECTED ENVIRONMENT .....</b>	<b>7</b>
PLANNING ACTIVITIES .....	7
PHYSICAL FEATURES.....	7
LAND USE .....	8
ECOSYSTEM SERVICES RESOURCE CONCERNS .....	9
Provisioning.....	9
Regulating.....	9
Supporting .....	10
Cultural.....	10
THE PR&G GUIDING PRINCIPLES .....	10
OTHER CONCERNS IDENTIFIED THROUGH SCOPING .....	11
Geology and Soils.....	11
Water .....	11
Air .....	13
Plants and Animals .....	13
Human.....	14
Social and Economic Conditions.....	16
Description of Existing Dam.....	17
Status of Operation and Maintenance .....	18
Breach Analysis and Hazard Classification .....	18
Evaluation of Potential Modes of Dam Failure .....	18
Consequences of Dam Failure.....	21
<b>ALTERNATIVES .....</b>	<b>22</b>
FORMULATION PROCESS .....	22
ALTERNATIVES ELIMINATED FROM DETAILED STUDY.....	22
ALTERNATIVE PLANS CARRIED FORWARD.....	23
COMPARISON OF ALTERNATIVE PLANS .....	24
<b>ENVIRONMENTAL CONSEQUENCES.....</b>	<b>30</b>
PROVISIONING SERVICES .....	30
Food .....	30

REGULATING SERVICES .....	30
Flood and Disease Control .....	30
SUPPORTING SERVICES .....	31
CULTURAL SERVICES .....	31
SOILS .....	31
Land Use.....	31
Prime and Unique Farmland and Farmland of Statewide Importance.....	31
WATER.....	31
Water Resources, Waters of the U.S.....	31
Floodplain Management.....	32
Streams, Lakes and Wetlands.....	32
PLANTS .....	32
Forest Resources .....	32
Endangered and Threatened Species.....	32
Invasive Species.....	33
Ecologically Critical Areas.....	33
ANIMALS .....	33
Fish and Wildlife Resources.....	33
Threatened and Endangered Animal Species.....	33
State Species of Concern.....	34
Migratory Birds, Bald Eagle and Golden Eagle Protection Act.....	34
Invasive Animal Species .....	34
HUMAN .....	35
Public Health and Safety .....	35
Environmental Justice.....	35
Scenic Beauty .....	35
Cultural and Historic Properties .....	36
Local and Regional Economy.....	36
Recreation.....	36
Park Lands.....	36
CUMULATIVE EFFECTS.....	37
<b>RISK AND UNCERTAINTY .....</b>	<b>37</b>
<b>CONSULTATION AND PUBLIC PARTICIPATION .....</b>	<b>38</b>
U.S. FISH AND WILDLIFE SERVICE .....	38
TEXAS PARKS AND WILDLIFE DEPARTMENT.....	38
TRIBAL COORDINATION.....	39
PUBLIC PARTICIPATION .....	39
<b>LOCALLY PREFERRED ALTERNATIVE.....</b>	<b>40</b>
RATIONALE FOR THE PLAN SELECTION .....	40
SUMMARY AND PURPOSE .....	40
PERMITS AND COMPLIANCE .....	40
COSTS.....	41
INSTALLATION AND FINANCING.....	42
OPERATION, MAINTENANCE AND REPLACEMENT.....	43

PROPERTY RIGHTS AND EASEMENTS.....	43
ECONOMIC TABLES.....	44
REFERENCES.....	50
REPORT PREPARERS .....	52
DISTRIBUTION LIST .....	55

### LIST OF FIGURES

B-1	Project Map.....	B-1
C-1	Land Cover Map.....	C-1
C-2	Prime Farmland.....	C-2
C-3	Hydrology Map.....	C-3
C-4	Alternative 1 – FWOFI – Downstream Flood Limits.....	C-4
C-5	Alternative 2 – Decommissioning – Downstream Flood Limits.....	C-5
C-6	Alternative 3 – Rehabilitation – Downstream Flood Limits.....	C-6
C-7	Alternative 3 – Rehabilitation - Upstream Flood Limits.....	C-7
C-8	Alternative 2 – Decommissioning – Site Plan.....	C-8
C-9	Alternative 2 – Decommissioning - Profile & Section.....	C-9
C-10	Alternative 3 – Structural Rehabilitation – Site Plan.....	C-10
C-11	Alternative 3 – Structural Rehabilitation - Profile & Sections.....	C-11
C-12	Alternative 3 – Structural Rehabilitation - Impact Basin Plan and Profile.....	C-12
C-13	Alternative 3 – Structural Rehabilitation – Plunge Pool.....	C-13
C-14	FEMA Flood Hazard FIRMette.....	C-14

### LIST OF TABLES

A	Ecosystem Services Scoping Summary.....	4
B	Other Typical Concerns Identified through Scoping.....	5
C	Existing Land Use within Wise County, Texas .....	8
D	Demographics and Socio-Economics of Texas, Wise County, Alvord.....	16
E	Summary and Comparison of Alternative Plans and EcoSystem Services.....	23
F	Summary and Comparison of Alternative Plans and PR&G Guiding Principles.....	24
G	Summary and Comparison of Alternative Plans and Typical Scoping Concerns .....	26
H	Experience and Qualifications of Report Preparers.....	54
1	Estimated Installation Cost.....	45
2	Estimated Cost Distribution.....	46
3	Structural Data – Dams with Planned Storage Capacity.....	47
4	Average Annual NED Costs.....	48
5	Estimated Average Annual Flood Damage Reduction Benefits.....	49
6	Comparison of NED Benefits and Costs.....	49

## **LIST OF APPENDICES**

- Appendix A: Comments and Responses
- Appendix B: Project Map
- Appendix C: Supporting Maps
- Appendix D: Investigations and Analyses Report
- Appendix E: Other Supporting Information

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## SUMMARY (OFFICE OF MANAGEMENT AND BUDGET FACT SHEET)

### SUPPLEMENTAL WATERSHED PLAN NO. 6 & ENVIRONMENTAL ASSESSMENT

for  
Floodwater Retarding Structure No. 26  
of The Big Sandy Creek Watershed  
Wise County, Texas  
13th Congressional District

**Prepared By:** U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS)

**Authority:** The original watershed work plan was prepared, and the works of improvement were installed, under the authority of the Flood Control Act of 1944 (Public Law 78-534) as amended. The rehabilitation of floodwater retarding structure No. 26 is authorized under Public Law 83-566 as amended, and as further amended by Section 313 of Public Law 106-472.

**Sponsors:** The project sponsors are:

Wise Soil and Water Conservation District  
Wise County Water Control and Improvement District No. 1  
Wise County Commissioners Court  
Upper Elm-Red Soil and Water Conservation District  
Tarrant Regional Water District  
Little Wichita Soil and Water Conservation District  
Clay County Commissioners Court  
Montague County Commissioners Court  
City of Bowie, Texas

Hereinafter referred to as the "Sponsors, Sponsoring Local Organizations, or SLOs".

**Proposed Action:** The proposed action is the structural rehabilitation of Big Sandy Creek Floodwater Retarding Structure No. 26 (Big Sandy 26, FRS 26 or subject dam) to meet current NRCS and Texas Dam Safety standards for small, high hazard dams with a term of 103 years (3 years for design and installation, and a 100 year useful life).

**Purpose and Need for Action:** Big Sandy FRS 26 was constructed for the purpose of flood protection. FRS 26 was designed and constructed by the United States Department of Agriculture (USDA)'s Soil Conservation Service (SCS, now NRCS) in Big Sandy Creek's third watershed supplement. Measures described in the third watershed supplement included the addition of 56 floodwater retarding structures (including FRS 26), land treatment and critical area stabilization.

FRS 26 was designed as a low hazard structure in 1984. However, the dam is currently classified as high hazard based on current dam safety standards in Texas and the results of dam breach inundation analyses. The existing dam is hydraulically deficient and cannot safely pass the design flood event. As such, FRS 26 does not comply with Texas law for high hazard dams. The

inadequate spillway capacity could result in catastrophic failure during the design flood event and jeopardize human lives and property downstream. The Sponsors' need for action is to address FRS 26's non-compliance with Texas regulatory requirements for high hazard dams.

**Description of the Preferred Alternative:** Structural Rehabilitation of FRS 26. The structural measures for the high hazard rehabilitation consist of the following activities:

- Widen the vegetated earthen auxiliary spillway channel to a minimum of 250 feet.
- Raise the control section of the existing vegetated auxiliary spillway by approximately 0.7 feet with earth fill to elevation 911.0 feet.
- Install a graded aggregate filter drain at the toe of the maximum embankment section into the foundation.
- Raise the minimum crest of the embankment to elevation 914.0 feet.
- Construct a new energy dissipating structure at the outlet of the principal spillway conduit.
- Perform minor modifications to the principal spillway riser metalwork.

**Net Economic Benefit:**

The benefit to cost ratio associated with the preferred alternative is approximately 0.02. There are additional benefits associated with the preferred alternative, which include reducing the likelihood of a breach and catastrophic failure during the design flood event. The preferred alternative provides an additional \$4,537 in average annual flood damage reduction benefits (based on amortization of the installation costs using a discount rate of 2.50% and a 100 year period of analysis).

If FRS 26 were decommissioned, an estimated \$223,361 in average annual flood damage reduction benefits currently provided to the area of potential effect would be lost due to increased flooding during the frequency storm events.

**Resource Information:**

Latitude & Longitude: 33.362914 N, -97.680276 W

8-Digit Hydrological Unit Number: 12030101

Climate and Topography: In Wise County, Texas, which is in the Grand Prairie Physiographic Province, the average temperature is 52.5 degrees F in the winter and 76.3 degrees F in the summer. The last frost of spring normally occurs in the early April and the first frost in the fall occurs in late October. This provides a growing season of approximately 206 days. The average annual precipitation is about 34.8 inches. This precipitation is distributed through the year. The average total snowfall is 1 inch.

**Drainage Area:**

Watershed	Size (acres)	Percent of Total
Big Sandy Creek <sup>1</sup>	317,000	100.0
Big Sandy 26	435	0.14

*1. SCS. (1955). "Work Plan for Big Sandy Creek Watershed," Temple, TX. Includes entire Big Sandy Creek watershed area.*

**Land Use in FRS 26 Watershed:**

Land Use	Current		Proposed Conditions <sup>1</sup>	
	Land Area (acres)	Percentage of Watershed	Land Area (acres)	Percentage of Watershed
Woodland	6.2	1.4%	6.2	1.4%
Brush	135.3	31.1%	135.3	31.1%
Water	19.9	4.6%	19.9	4.6%
Open Space	273.7	62.9%	273.7	62.9%

*1. Development within basin not anticipated. Land use within Big Sandy 26 basin will not change as a result of rehabilitation measures.*

**Land Ownership in FRS 26 Watershed:**

	Private Land Ownership	Public Land Ownership
Upstream of Dam	68.9%	31.1%
Downstream of Dam <sup>1</sup>	90%	10%

*1. Assumed percentages of properties impacted by the maximum water depth created downstream of the dam site during the 500-year storm, modeled without the dam.*

**Population and Demographics:** Historically, Alvord and Wise County have been rural in nature and relatively unaffected by growth in the Dallas-Fort Worth metropolitan area. However, within the last two years, the North Central Texas Council of Governments, the metropolitan planning organization for the region, has included the City and County as part of the metroplex. Accompanying this is an expectation of potential accelerated future growth. Although this may be the case, there are not currently any local or regional land use plans reflecting this expectation.<sup>1</sup> The regional transportation plan indicates relatively minor improvements in the Alvord area consisting of incremental improvements to roadway capacity. No new roadways or significant changes to existing roadways are identified. The Texas State Demographer's Office estimated a rate of population increase of less than 1 percent per year over the period 2010-2050.

According to the U.S. Census Bureau's American Community Survey, the population of Alvord is 1,351 and Wise County is 68,632 (U.S. Census Bureau 2020). Approximately 86 percent of individuals in Alvord are White, with individuals of multi-racial heritage comprising 7 percent of the population. For the County, approximately 79 percent of individuals are White, with 11 percent claiming multi-racial heritage. Twenty percent of Wise County and ten percent of Alvord claim Hispanic or Latino heritage.

<sup>1</sup> <https://www.nctcog.org/regional-data/regional-data-center>

The median age of the population of Alvord is 28.3 years, in contrast to the Wise County median of 38.6 years. There is a significantly higher proportion of the population 18 years old or less (29 percent) compared to Wise County or State of Texas, with percent populations under 18 years old of 24.7 and 25.8, respectively. Less than 10 percent of the Alvord population is over 65 years old, while in Wise County and the State, approximately 15 and 13 percent of the population is over 65 years old, respectively.

Approximately 34.2 percent of the residents in Wise County age 25 or older have a high school education or higher, while 41.4 percent of Alvord residents age 25 or older have a high school diploma. About 15.6 percent of Alvord residents have earned a bachelor's degree or higher, while 18.8 percent of Wise County residents 25 or older have a bachelor's degree or higher.

There are 516 Wise County residents who are 16 years of age or older and employed, according to the U.S. Census Bureau 2020. The local economy of Alvord is divided into five categories: private company workers (66.1%); self-employed in own incorporated business (2.7%); private not-for-profit (9.5%); local, state, and federal government (17.8%), and self-employed in own not incorporated business (3.9%). The civilian population over 16 is also divided into the following categories: management, business, science, and arts occupations (26.4%); service occupations (18.8%); sales and office occupations (23.2%); natural resources, construction, and maintenance occupations (14.9%); and production, transportation, and material moving occupations (16.7%).

According to the 2020 Census Bureau, the median household income estimated for Alvord was \$60,469. This compares to \$63,826 per year for the median household income calculated for Texas. The national figure for median household income per year estimated for the same period was \$64,994.

According to the U.S. Census Bureau 2020 estimates, Alvord had 4.6 percent of the population citizens living below the poverty level. That compares to 14.2 percent for State and 12.8 percent for the Nation.

The U.S. Census Bureau 2020 estimates that there were 418 housing units within Alvord. Of the occupied housing units, 56.5 percent were owner-occupied and 29.4 percent renter-occupied. The remaining housing units were vacant.

Cultural Resources: To assess the cultural resources impacts on all action alternatives, the Sponsors commissioned a cultural resources literature review.

A constraints memorandum dated April 6, 2021 identified known cultural resources and previously conducted archeological surveys in the project study area. Part of the eastern portion of the study area was previously surveyed for the United States Forest Service in 2010. There are five state-recognized archeological sites within a kilometer the study area; none were recommended for NRHP listing. No sites have been documented within the project study area. Additionally, no potentially eligible historic structures or other cultural resources have been documented in or adjacent to the study area. Based on the constraints memo there is low potential to adversely impact historic properties. However, there is the potential for undocumented archeological sites to be buried within alluvial settings in the study area. The SHPO has recommended an archaeological survey be conducted within the project area prior to beginning construction. Tribal consultation was initiated on January 11, 2021 and will be ongoing until Tribes and SHPO have had the

opportunity to concur with NRCS's final determination of eligibility and formal findings of effect (after final archaeological report).

Highly Erodible Cropland: No effects are anticipated.

Threatened and Endangered Species: The reservoir was reviewed for occurrence of federally protected species or habitat and reported occurrences of state protected species. The USFWS Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC) was queried for trust resources known or expected to near the project site. There are no records of federally protected species directly on the site, but the databases indicated the potential for protected species in the vicinity. There is also the potential for state protected species at or near the site.

The USFWS's Information, Planning and Conservation System (IPaC) lists a total of four threatened and endangered bird species that may occur in the vicinity of the reservoir, three of which only need to be considered for wind energy projects. The species with potential to be found at the project site is the whooping crane.

The existing dam already creates an impediment to fish and other aquatic species. The project will have negligible impact to fish and wildlife.

The Texas Parks and Wildlife (TPWD) database was accessed to evaluate potential state species of concern on all reservoir alternatives considered. TPWD's database reports the following occurrences of state-listed imperiled and vulnerable species within Wise County (but none confirmed at the project site): two amphibians, nine birds, one insect, eight mammals, three mollusks, six reptiles, and seven plants.

**Alternative Plans Considered:** The following alternatives to address the need for action were considered:

**Alternative 1: *Future Without Federal Investment or FWOFI / NEPA No-Action:*** This alternative is the true no-action alternative, where the current condition of the structure will remain for the evaluated period, with routine maintenance activities performed by the Sponsors. The FWOFI and the effects produced by the FWOFI will serve as the baseline for comparing all other action alternatives with respect to the relevant scoping concerns and the affected environment. For FRS 26, the no-action alternative results in the Sponsors continuing to operate a dam that does not meet standards for high hazard dams in Texas. Other dam safety issues identified during past visual inspections, assessments and analyses performed as part of this watershed supplement will remain unaddressed. The dam safety issues worsen over time, promoting other failure mechanisms for FRS 26. The design storm eventually occurs and the dam fails catastrophically, sending a floodwave downstream 3.5 miles to the confluence with Big Sandy Creek. Flooding throughout the City of Alvord, Texas of life, damage to structures, roadways and other property.

**Alternative 2: *Decommissioning with Federal Assistance:*** This alternative involves a controlled breach of FRS 26, removal of all appurtenant structures, and re-establishing the floodplain, stream, and other nearby areas to a condition similar to before FRS 26 was constructed in 1984. Decommissioning addresses the need for action by removing the dam from service thereby

eliminating the dam safety deficiency. However, the removal of FRS 26 results in significantly increased flooding downstream during a wide array of flood events. Alternative 2 is a Federally-assisted decommissioning project.

**Alternative 3: Rehabilitate to high hazard standards (Texas and NRCS standards) with Federal Assistance:** This alternative involves the structural rehabilitation of FRS 26 to meet Texas and NRCS standards for small, high hazard dams. This alternative generally involves a combination of modifying the existing auxiliary spillway, raising the low areas of the embankment crest slightly with earth fill, installing a graded-aggregate filter through the toe of the embankment, and re-constructing the principal spillway energy dissipating structure. Alternative 3 is a Federally-assisted project. Alternative 3 is the preferred alternative identified in this plan, because it addresses the Sponsors' need for action while continuing to fulfill its purpose of flood control.

**Alternative 4:** The Sponsors have indicated that their preferred plan is Alternative 3 – Rehabilitate to high hazard standards (Texas and NRCS standards) with federal assistance. However, if federal funds are not available, then the sponsors have indicated that they will rehabilitate the dam to meet Texas standards for high hazard dams. The measures are nearly identical to achieve compliance with both Texas and NRCS standards for high hazard dams. This is the probable plan if the responsible federal official finds no justification for expenditure of federal funds on this project. This alternative includes generally the same measures as Alternative 3.

**Alternative 5: Modify the Dam to Reduce the Hazard Classification.** FRS 26 is currently classified as a high hazard structure due to the consequences associated with an uncontrolled release of the reservoir during the design storm event. This alternative involves structural modification of the existing FRS 26 to reduce the maximum storage volume of the dam such that an uncontrolled release during the design storm event would result in a significant hazard classification under Texas law. The dam and spillway are currently capable of passing a storm event greater than 50 percent of the Probable Maximum Precipitation. However, after performing a variety of dam breach inundation analyses and subsequent review of the consequences associated with PMP breach events of FRS 26, it is unlikely that this can be accomplished without significant structural modification of the principal spillway riser and auxiliary spillway. Based on these factors, Alternative 5 was considered unfeasible and was not carried forward to detailed analysis.

**Alternative 6: Floodproof Downstream Structures.** In its current configuration, the design storm event with breach of FRS 26 will result in the inundation of approximately 61 residential structures, 6 commercial structures, a government structure, an agricultural structure, 7 roadways including U.S. 287, and the BNSF railroad. Additionally, significant uncertainty would remain if additional development within the area of potential effect occurs in the future and new hazards were constructed without appropriate flood protection measures, thus reverting FRS 26 back to high hazard. Based on the number of impacted structures associated with a PMP and breach event of FRS 26 and uncertainties surrounding future development within the area of potential effect, floodproofing the downstream hazards was considered unfeasible and was not carried forward to detailed analysis.

**Project Costs (Dollars)<sup>1/</sup>**

Item	Cost Allocation	Cost Sharing			
		Public Law 83-566	Percent (%)	SLOs	Percent (%)
Construction	\$2,357,500	\$1,574,810	65	\$782,690	35
Engineering	\$475,000	465,500	98	9,500	2
Real Property Rights	\$187,500	\$0	0	\$187,500	100
Project Admin.	\$75,000	\$25,000	n/a	\$50,000	n/a
Permits	\$100,000	\$0	0	\$100,000	100
<b>Total</b>	<b>\$3,195,000</b>	<b>\$2,065,300</b>	<b>--</b>	<b>\$1,129,700</b>	<b>--</b>

<sup>1/</sup> Price base: 2023

(Prepared: July 2023)

<sup>2/A</sup> A contingency of 25% was applied to the construction costs and real property rights costs.

**Project Benefits:** The preferred alternative will provide \$2,000 in average annual flood protection benefits.

The estimated annual benefit to cost ratio is near-zero (approximately 0.02).

**Number of Direct Beneficiaries:** The population at risk (PAR) is estimated to be on the order of 97. The area of potential effect includes 61 residential structures, six commercial structures, one government structure (a fire station), one agricultural structure, seven roadways, and the BNSF Railway.

**Other Beneficial Effects:**

- The action will bring FRS 26 into compliance with applicable Texas and NRCS requirements for high hazard dams.
- The action will reduce the number of residential structures impacted during the design flood event from 61 to 3; commercial structures from 6 to 0; government structures from 1 to 0; agricultural structures from 1 to 0; roadway impacts from 7 roads flooded to 4; and 1 Railway to 0.
- This modification will reduce the likelihood of a dam failure if the design storm occurs which will also reduce the likelihood of life loss during the design flood event.
- Reduces the threat of loss of access and loss of emergency services for downstream properties and property owners during the design flood event.
- Th existing FRS 26 provides \$226,300 in average annual equivalent flood protection benefits when compared with the dam being decommissioned.

**Funding Schedule:** The most likely scenario is for the project to be implemented over three years including the design and construction.

**Federal funds:**

**Year 1:** \$300,000 for engineering; \$5,000 for project administration.

**Year 2:** \$165,500 for engineering; \$600,000 for construction; \$10,000 for project administration.

**Year 3:** \$974,800 for construction; \$10,000 for project administration.

**Non-Federal Funds:**

**Year 1:** \$9,500 for engineering; 20,000 for permits; \$10,000 for project administration.

**Year 2:** \$300,000 for construction; \$187,500 for Real Property Rights; \$15,000 for project administration; \$80,000 for permits.

**Year 3:** \$482,700 for construction; \$25,000 for project administration,

**Period of Analysis:** 103 years (includes 1.5 year for design and 1.5 years for construction)

**Affected Environment**

**Project Life:** 100 years

**Environmental Effects/Impacts of the Proposed Action (EcoSystem Services):**

Ecosystem Services Item	Impacts of Preferred Alternative
<b>Provisioning</b> (tangible goods provided for direct human use and consumption)	
Food	Provides flood protection for approximately 10.7 acres of croplands within the area of potential effect.
<b>Regulating</b> (maintain world in which it is possible for people to live, providing critical benefits that buffer against environmental catastrophe)	
Flood and Disease Control	The project will result in FRS 26 meeting applicable dam safety standards for high hazard dams in Texas. Will provide additional benefits by reducing the likelihood of a breach during the design storm event.
<b>Supporting</b> (underlying processes maintaining conditions for life on Earth)	
No relevant resource concerns identified	Not applicable.
<b>Cultural</b> (make the world a place in which people want to live)	
No relevant resource concerns identified	No known cultural resource concerns have been identified, Tribal consultation was initiated on January 11, 2021 and will be ongoing until Tribes and SHPO have had the opportunity to concur with NRCS's final determination of eligibility and formal



Ecosystem Services Item	Impacts of Preferred Alternative
	findings of effect (after final archaeological report). The draft archaeological report was submitted to NRCS and USFS on March 20, 2024. S106 consultation was completed following NRCS review of the archaeological report.

**Environmental Effects/Impacts of the Proposed Action (Other Typical Scoping Concerns):**

<u>Resource</u>	<u>Impact</u>
Land Use	No land use changes are anticipated for the preferred alternative.
Prime and Unique Farmlands	Marginal encroachment on prime farmland is anticipated at the toe of the embankment.
Air Quality	Temporary increase in particulate matter on site during construction. Effects are short-term – indirect, minor, and adverse impacts. These effects can be largely mitigated with erosion and sediment control during construction. No long-term effects.
Water Resources, Waters of the U.S.	Coordination with the USACE will be necessary due to work in close proximity to waters of the U.S. No long-term impacts are anticipated.
Floodplain Management	The structural rehabilitation will protect the floodplain against damage resulting from a catastrophic failure of FRS 26.
Streams, Lakes and Wetlands	Temporary impacts to the downstream tributary, FRS 26 reservoir and an estimated 2.44 acres of wetlands located around the reservoir are anticipated. Less than 0.1 acre of permanent wetlands disturbance is anticipated. The normal pool elevation of FRS 26 will not change. A wetlands
Forest Resources	No known timbering activities are occurring within the project area. Approximately ½-acre of trees will be removed during construction. Tree cutting/clearing will be conducted in consultation with relevant State and Federal agencies, and outside of the sensitive or vulnerable time periods for any species identified by said agencies.
Endangered and Threatened Plant Species	No effect. No threatened or endangered plant species were identified in the project area.
Invasive Plant Species	No effect. No invasive plant species have been identified in project area.
Ecologically Critical Areas	No ecologically critical areas were identified within the project area.

<b><u>Resource</u></b>	<b><u>Impact</u></b>
<b>Fish and Wildlife Resources</b>	The current lake level may be drained and maintained in a drained state during part of construction. Temporary impacts may occur. No long-term effects are anticipated.
<b>Threatened and Endangered Animal Species</b>	Potential for one threatened species (whooping crane) in the project area subject to short-term impacts during construction. No long-term effects.
<b>State Species of Concern</b>	No permanent effects are anticipated for the preferred alternative.
<b>Migratory Birds, Golden Eagles, Bald Eagles</b>	No additional permanent loss of habitat is expected from the proposed alternative. Construction activity may deter migratory birds from this area temporarily.
<b>Invasive Animal Species</b>	No effect. No invasive animal species have been identified in the project area.
<b>Public Health and Safety</b>	<b>The proposed alternative will result in improved public health and safety by greatly reducing the likelihood of a failure and breach during the design flood event.</b>
<b>Environmental Justice</b>	<b>No unfair or disparate treatment to disadvantaged communities will result from the proposed action.</b>
<b>Scenic Beauty</b>	<b>No effect.</b>
<b>Cultural and Historic Properties</b>	Section 106 Consultation is ongoing. No known historic properties have yet been identified, Tribal consultation is ongoing until Tribes have had the chance to concur with NRCS's final determination of eligibility and formal findings of effect (final archaeological report submitted to NRCS March 20, 2024).
<b>Local and Regional Economy</b>	<b>The rehabilitation will reduce the likelihood of a failure of FRS 26 during the design flood, which will support the local and regional economy by not impacting commuters and local roadways during a major hydrologic event.</b>
<b>Recreation</b>	<b>No effect.</b>
<b>Park Lands</b>	<b>No effect.</b>

**Major Conclusions:** The sole purpose of FRS 26 is flood control. The Sponsors' need for action is to address a dam safety deficiency associated with FRS 26. The preferred alternative will result in the Sponsors meeting requirements for high hazard dams in Texas. The proposed action will result in an estimated \$2,000 in additional average annual flood protection benefits as compared with the existing condition. The selected alternative will reduce the likelihood of the dam overtopping and failing during the design flood event, which provides protection to approximately 58 residential structures, 6 commercial structures, 1 agricultural structure, 1 government structure, 4 roadways and the BNSF Railway. Unavoidable adverse effects would result from

implementation of the proposed action. These effects are anticipated to be short-term and minor overall. Most of the adverse impacts identified in the Plan-Environmental Assessment can be mitigated prior to and during construction.

**Areas of Controversy:** None.

**Issues to be Resolved:** None.

**Evidence of Unusual Congressional or Local Interest:** None.

**Is this report in compliance with executive orders, public laws, and other statutes governing the formulation of water resource projects?** Yes