



Public Notice

U.S. Army Corps
of Engineers
Tulsa District

Reply To:

U.S. Army Corps of Engineers
ATTN: Regulatory Office
2488 East 81ST Street
Tulsa, Oklahoma 74137-4290

SWT-2011-860
Public Notice No.

December 13, 2019
Public Notice Date

January 12, 2020
Expiration Date

PURPOSE

The purpose of this public notice is to inform you of a proposal for work in which you might be interested and to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

SECTION 10

The U.S. Army Corps of Engineers is directed by Congress through Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) to regulate all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

SECTION 404

The U.S. Army Corps of Engineers is directed by Congress through Section 404 of the Clean Water Act (33 U.S.C. 1344) to regulate the discharges of dredged and fill material into all waters of the United States. These waters include lakes, rivers, streams, mudflats, sandflats, sloughs, wet meadows, natural ponds, and wetlands adjacent to other waters. The intent of the law is to protect these waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical, and biological integrity.

NOTICE TO PUBLISHERS

This public notice has been provided as a public service and may be reprinted at your discretion. However, any cost incurred as a result of reprinting or further distribution shall not be a basis for claim against the Government.



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

PUBLIC NOTICE
PROPOSED MODIFICATION OF TERRA FOUNDATION IN-LIEU FEE STREAM AND WETLAND MITIGATION PROGRAM INSTRUMENT

AUTHORITY: Pursuant to the Final Rule for the Compensatory Mitigation for Losses of Aquatic Resources, referred to as the Mitigation Rule (33 CFR Parts 325 and 332, and 40 CFR Part 230), dated April 10, 2008; this notice announces a proposed modification of the Terra Foundation In-Lieu Fee (ILF) Stream and Wetland Mitigation Program Instrument (August 2015) to add Site 2 Cane Creek ILF project site within the Lower Arkansas A Service Area.

ILF (SPONSOR): Mr. Craig Gump (Sponsor)
Terra Foundation
7633 East 63rd Place, Suite 300
Tulsa, OK 74133

PROJECT LOCATION: The proposed mitigation site is an approximately 131.63-acre site and is located in Section 13, Township 14 North, Range 15 East, Muskogee County, Oklahoma. This proposed site is within the Arkansas River Watershed (HUC 1111). The project site is located at North Latitude 35.68907 and West Longitude 95.67323.

PROPOSED WORK AND PURPOSE: The Sponsor is proposing modification of its program instrument to include the new ILF project site. The purpose of this ILF project site is to provide compensatory mitigation for unavoidable impacts authorized by Department of the Army permit authorizations.

The following tables below indicate the initial advanced credits, balance of the remaining credits available, and the anticipated credits to be provided by the proposed ILF project site:

- a. Advanced wetland and stream credits to Sponsor within Lower Arkansas A Service Area:

Wetland Credits	Ephemeral Stream Credits	Intermittent Stream Credits	Perennial Stream Credits
11	3,900	6,200	1,000

- b. Remaining advanced wetland and stream credits in Lower Arkansas A Service Area (as on November 1, 2019):

Wetland Credits	Ephemeral Stream Credits	Intermittent Stream Credits	Perennial Stream Credits
0	2,832.5	2,014	1,000*

* reserved credits

c. Anticipated credits from the proposed ILF project site:

Wetland Credits	Ephemeral Stream Credits	Intermittent Stream Credits	Perennial Stream Credits
37.87	1,818	9,921	6,538

The following table depicts the amount of authorized impacts for each type of wetland and stream credits by DA permit authorizations within the Lower Arkansas A Service Area to-date:

Palustrine Forested - Wetland	Palustrine Emergent - Wetland	Ephemeral - Stream	Intermittent - Stream	Perennial - Stream
2.42	8.58	1,067.5	6,200	1,000

For wetland mitigation activities, this ILF project site would provide wetland restoration, establishment, and enhancement. The forested wetland restoration area would be improved through the planting of bare root seedling trees and shrubs within the restoration areas. The sponsor is proposing a planting rate of 302 trees per acre for hardwood restoration on 12 foot by 12 foot planting spacing. Emergent wetlands would be rehabilitated by constructing various pools, removal of invasive and undesirable species, and restoring a diverse native emergent plant community. Additional tree plantings within the upland buffer areas and adjacent uplands would also be used to provide protection from adverse surrounding land uses. Planting rates of 225 bare root seedlings per acre (14 foot by 14 foot spacing) would be utilized.

For stream mitigation activities, this ILF project site would provide in-stream mitigation by breaching existing man-made levees and adding constructed rock riffle grade control to improve floodplain connectivity. The floodplain would be enhanced by the construction of a floodbench as well as bank and toe stabilization with installation of longitudinal peaked stone protection and coir log toes. Minor stream enhancement to ephemeral streams would occur by the installation of grade control structures in head-cutting streams to stabilize the stream bed, increase bed diversity, and improving connected aquatic habitats.

The ILF project site would be planted with a diverse mixture of native wetland, forest, and prairie plants after earthwork is completed. The former agricultural pasture areas of the ILF project site will be seeded with native seed blends appropriate for either upland native prairie and wetland habitats. Bare root seedling tree and shrub plantings will be used within the forested riparian and upland buffer planting areas.

Herbaceous, shrub, and tree species would be acquired in either deep cell plugs, 1- or 2-quart containers, or as seed. All plant stock would be acquired from a nursery specializing in native plants and would be installed by a qualified mitigation contractor. All planted or seeded vegetation would be from local sources as close to the ILF project site, as practicable.

INTERAGENCY REVIEW TEAM: The primary role of the IRT is to advise the Corps in the establishment of ILF programs and sites. The IRT will review the prospectus, instrument, and other appropriate documents and provide comments to the district engineer.

CULTURAL RESOURCES: The ILF project site would comply with the National Historic Preservation Act of 1966 and 36 CFR Part 800. As specific project sites are identified and brought forward under this program instrument, the Corps would evaluate information provided by this public notice from the State Historic Preservation Officer, federally recognized Tribes, and the public. A survey of specific project areas may be required, if deemed necessary.

ENDANGERED SPECIES: The following species listed by the U.S. Fish and Wildlife Service (USFWS) as candidate, endangered, or threatened within Muskogee County are the American Burying beetle (*Nicrophorus americanus*), gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*), least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), and whooping crane (*Crus americana*). The ILF project site would comply with the Endangered Species Act. Modification of the program instrument to include this ILF project site would be coordinated with the USFWS. The USFWS has a representative on the IRT.

FLOODPLAIN: This activity is being reviewed in accordance with Executive Order 11988: Floodplain Management, which discourages direct or indirect support of floodplain development whenever there is a practicable alternative. By this public notice, comments are requested from individuals and agencies that believe the described work would adversely impact the floodplain.

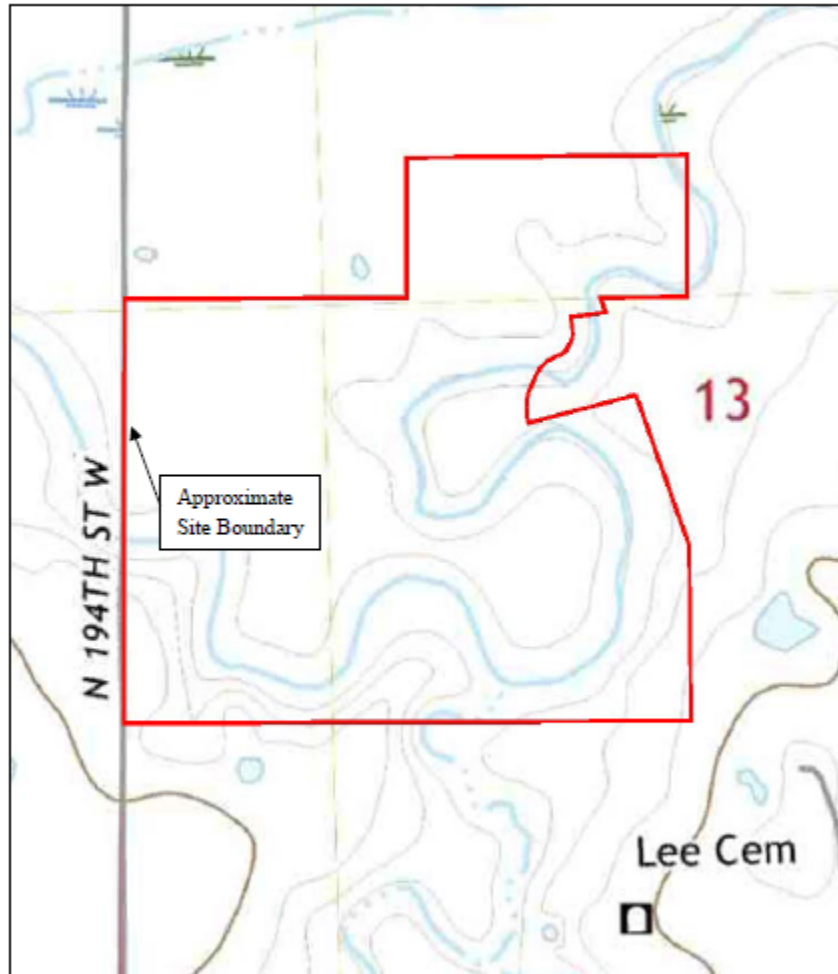
PUBLIC INTEREST REVIEW: The purpose of this public notice is to advise all interested parties of the proposed project site and to solicit comments and information necessary to evaluate the probable impact on the public interest. The decision to allow or deny the Sponsor to move forward and develop the project site would be based on an evaluation of all relevant factors that reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal would be considered including the cumulative effects thereof; among those are conservation, economics, esthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and, in general, the needs and welfare of the people. The evaluation of the impact of the proposed activity on the public interest would include application of the 404 (b)(1) Guidelines promulgated by the EPA under authority of Section 404 of the Clean Water Act (33 USC 1344).

COMMENTS: The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of the above-described activity. This notice is also provided to outline details of the above-described activity so Tulsa District may consider all pertinent comments prior to determining acceptance of the proposed ILF instrument amendment, such that, the Sponsor may move forward in modifying the ILF program instrument to include the project site. Any interested party is invited to submit to this office written facts or objections relative to the activity on or before the public notice expiration date. Comments both favorable and unfavorable will be accepted and made a part of the record and will receive full consideration in determining whether this ILF project site plan document would be in the public interest. Copies of all comments, including names and addresses of commenter's will be provided to the Sponsor. All comments should be mailed to Mr. Michael A. Ware at U.S. Army Corps of Engineers, 2488 East 81st Street, Tulsa, OK 74137; telephone No. 918-669-7400; or email to michael.a.ware@usace.army.mil.

PUBLIC HEARING: Any person may request, in writing, prior to the expiration date of this public notice, that a public hearing be held to consider this application. Such requests shall state, with particularity, the reasons for holding a public hearing.

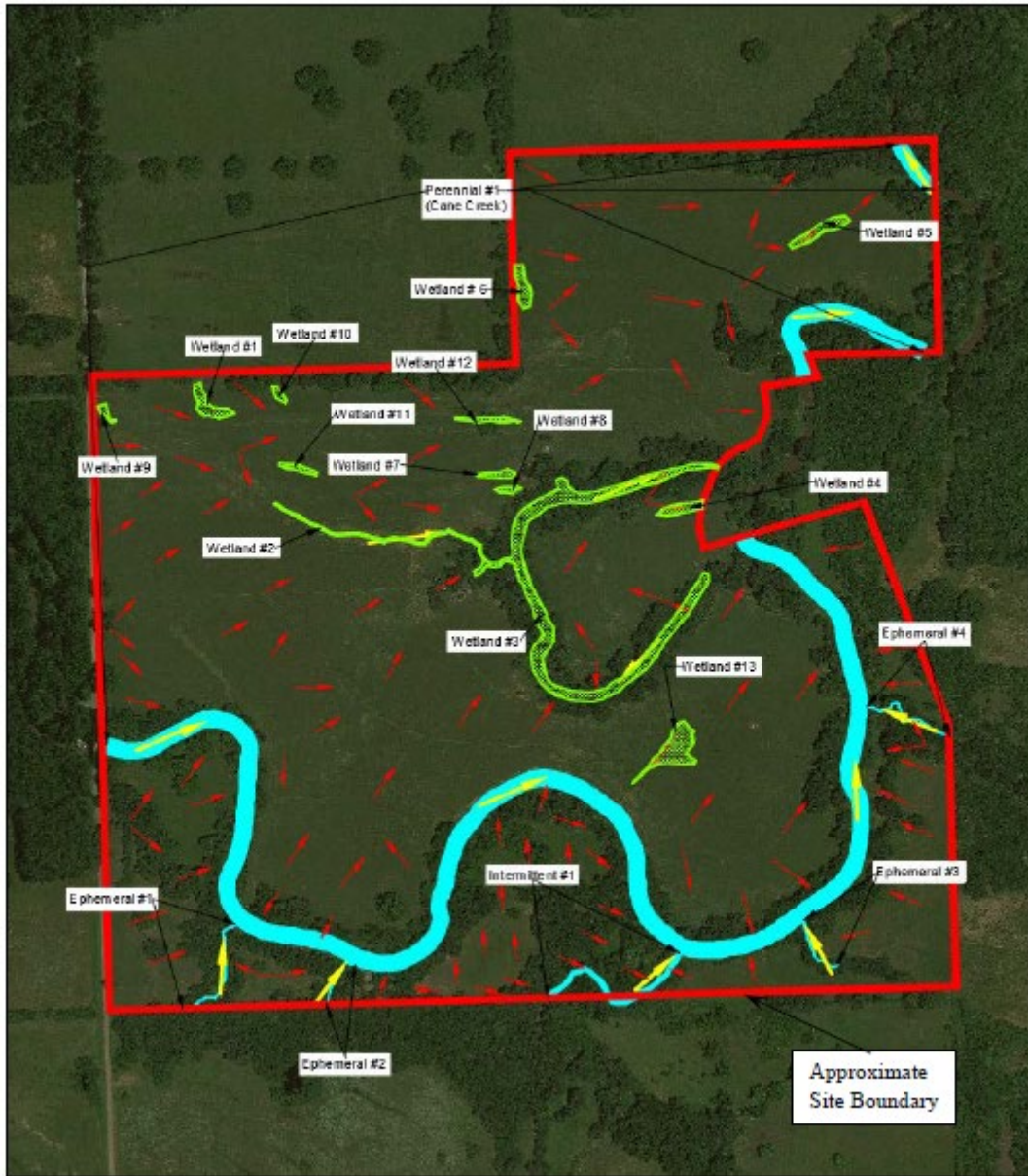
NOTE: This public notice and proposed ILF amendment is posted for review on the Tulsa District's Regulatory web page:
<https://www.swt.usace.army.mil/Missions/Regulatory/Public-Notices/>.

Figure 3. 2018 U.S. Geological Survey Topographic Map



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Terra Foundation Inc ILF Project Site
Cane Creek
Muskogee County, Oklahoma
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Figure 4. Baseline Conditions Surface Water Flow Paths



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Table 6. Proposed Wetland Credit Amounts

Restoration Activity	Area (Acres)	Credit Ratio (Credits: Acres)	Resulting Credits
Emergent Wetland Restoration	22.25	1:1	22.25
Emergent Wetland Rehabilitation	0.97	1:1	0.97
Forested Wetland Enhancement	1.35	1:2	0.68
Wetland Buffer Restoration	50.16	1:4	12.54
Adjacent Uplands Restoration	14.33	1:10	1.43

TOTAL WETLAND CREDITS: 37.87

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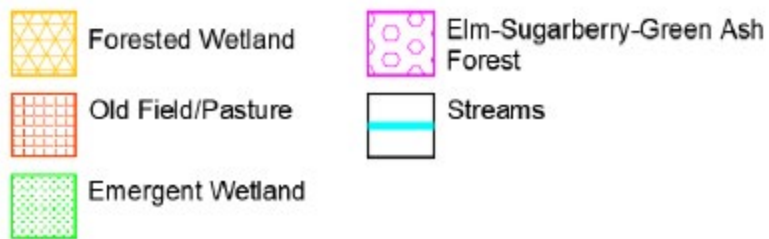
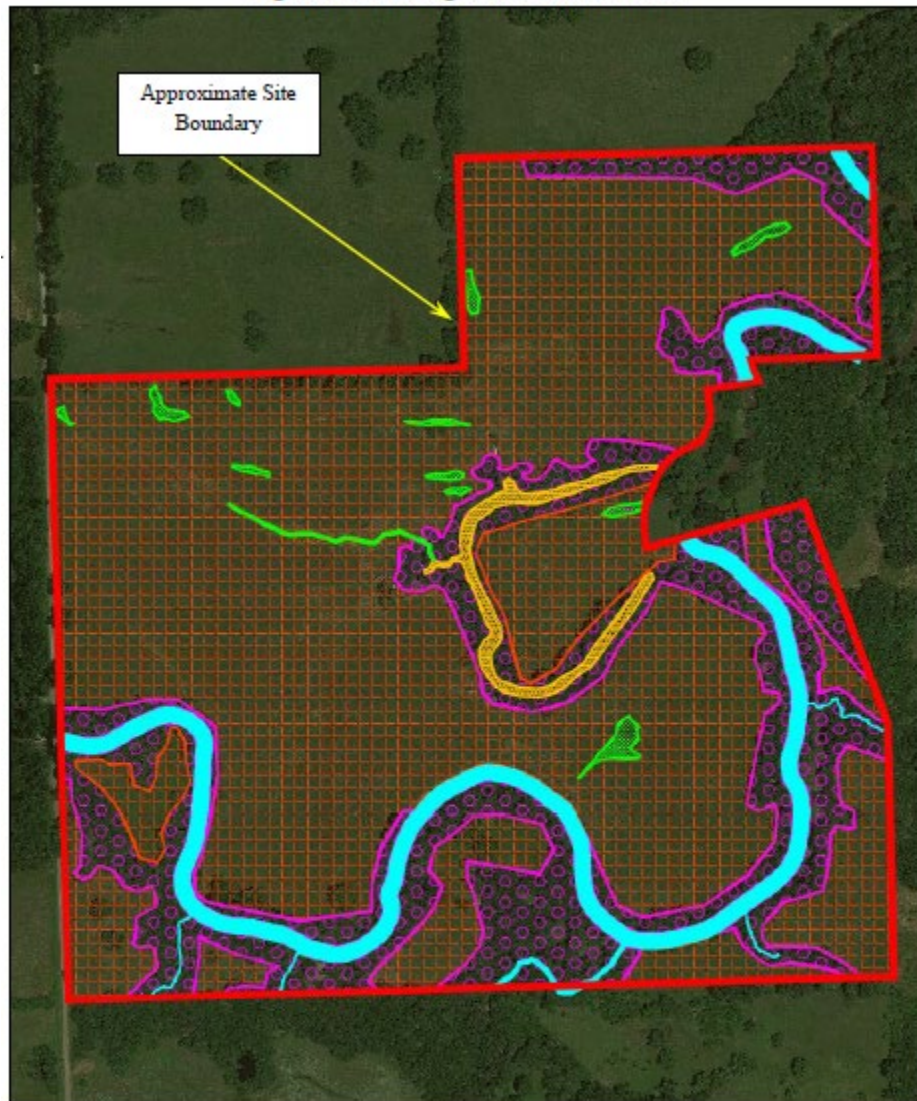
Table 8. Proposed Stream Credit Amounts

Stream ID	Net Benefit	Restoration Type	Credit Factor	Stream Length	Credits Generated
Cane Creek	1	Riparian	1.0	4,977	4,977
Cane Creek	2	In-Stream	3.5	3,132	10,962
Cane Creek	3	Riparian	0.5	97	49
Cane Creek	4	Riparian	0.625	323	202
Cane Creek	5	Riparian	0.5	214	107
Cane Creek	6	Riparian	0.25	191	48
Ephemeral #1	7	Riparian	1.0	248	248
Ephemeral #1	8	In-Stream	2.0	254	508
Ephemeral #2	9	Riparian	1.0	45	45
Ephemeral #2	10	In-Stream	2.0	150	300
Intermittent #1	11	Riparian	0.25	456	114
Ephemeral #3	12	Riparian	1.0	45	45
Ephemeral #3	13	In-Stream	2.0	185	370
Ephemeral #4	14	Riparian	0.5	200	100
Ephemeral #4	15	In-Stream	2.0	101	202
TOTAL PERENNIAL CREDITS:					6,538*
TOTAL INTERMITTENT CREDITS:					9,921*
TOTAL EPHEMERAL CREDITS:					1,818

* No advance perennial credits have been sold or need to be satisfied within the Lower Arkansas A Service Area. As such, in accordance with the credit conversion provisions outlined in Section II.F. Page 14 and Section II.G. Page 21 of the Final Program Instrument, 60% of the mitigation credits generated by the restoration activities on Cane Creek will generate intermittent credits to satisfy intermittent credit advance credit sales and permittee needs within the Lower Arkansas A Service Area.

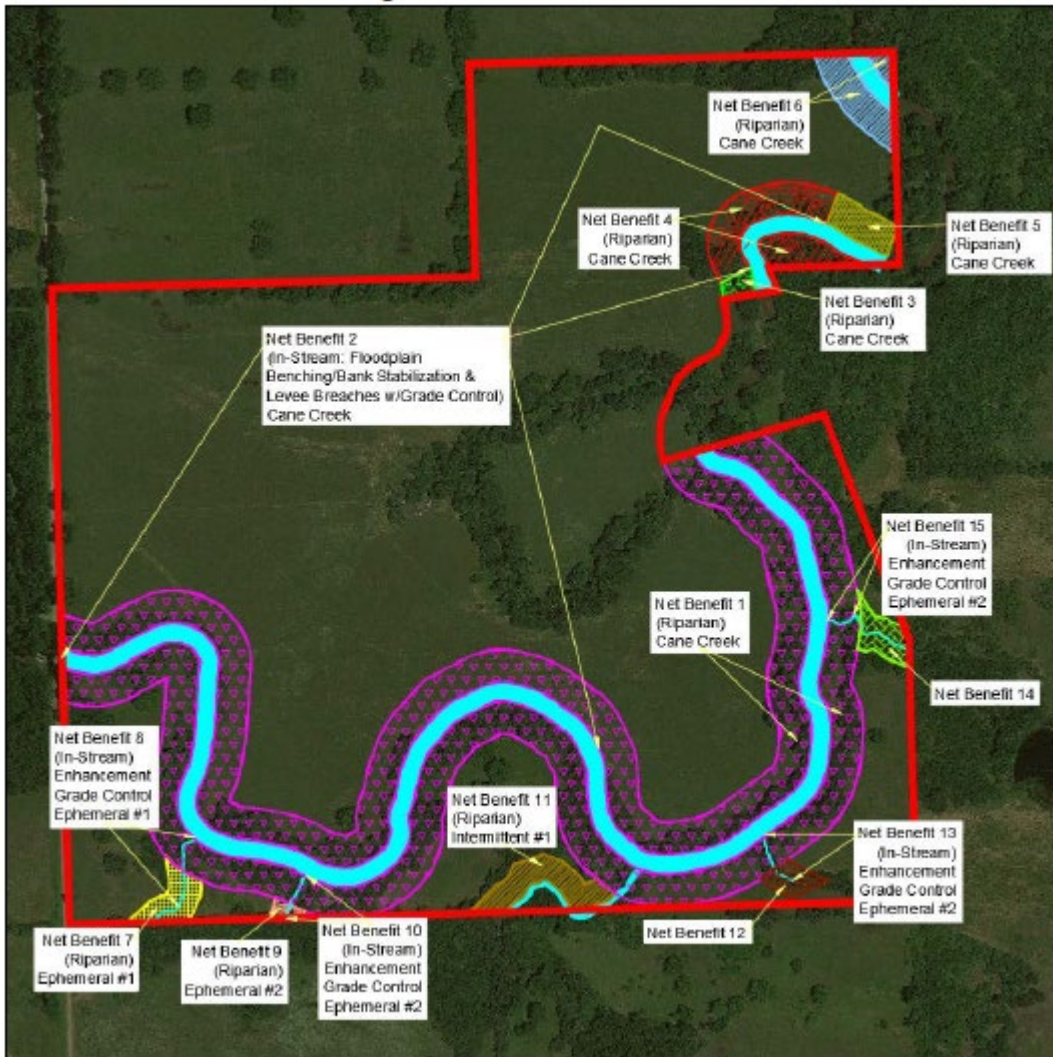
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Figure 9. Existing Plant Communities



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Figure 11. Net Benefit Areas



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