West Fork White River Mitigation Bank

Addition of Area 2

Overview

September 13, 2023

1.1. Objectives

The West Fork White River (WFWR) Mitigation Umbrella Banking Instrument (instrument) allows for the bank sponsor, Watershed Conservation Resource Center (Sponsor) to request additional mitigation sites within the WFWR watershed that need river/wetland/riparian restoration be added to the WFWR Mitigation Bank (bank). Area 2 is a degraded floodplain of the WFWR that is in need of restoration (See Figure 1 for location). Through restoration and enhancement, the site can provide high quality mitigation value to offset unavoidable impacts to aquatic resources within the designated service area.

1.2. Site Selection

The factors considered for site selection are based on watershed needs and regional and local priorities concerning aquatic resources and water quality for the WFWR watershed. Area 2 is located in the Ozark Plateau Ecoregion.

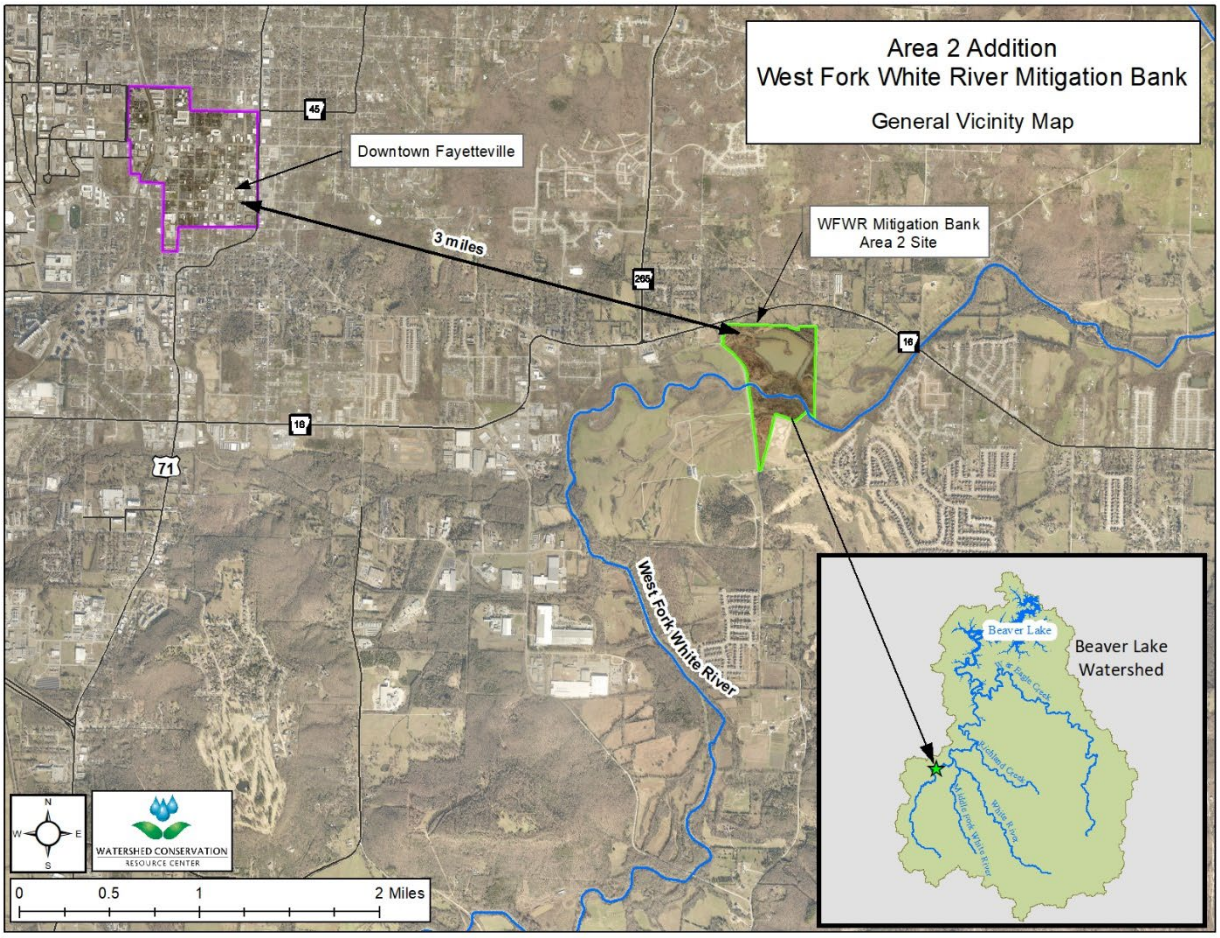

Figure 1 Location of Area 2.

A soils map and a topographic map of Area 2 are shown in Figures 2 and 3, respectively. The site was selected for expansion of the bank for the following reasons:

1) Property is located in the 100-year floodplain and floodway of the WFWR. Soils were excavated in the early 2000's resulting in a large area of degraded wetland and open water habitat. The remaining area was historically a hay field and wetlands can be found throughout this site. Restoration will result in highly functional terrestrial and aquatic habitats and will filter and store contaminants carried by floodwaters.
2) There are several areas along riverine sections of the site that have little or no forested riparian area. Enhancing and restoring these areas to create a forested riparian will help to protect the river channel and provide high quality riparian habitat for wildlife. Restored areas will help connect the existing riparian areas to create larger areas of high quality habitat.
3) The site has oxbow-wetland areas that are unique ecological features that have almost disappeared from the Ozark region. Placing this area in perpetual conservation ensures that these rare features are not destroyed through development in the future.
4) There are several tributaries on site that have been channelized and are providing low quality habitat. Restoring these channels and re-establishing riparian areas will greatly improve the wildlife habitat and improve the function of the oxbow-wetland areas where they are connected.
5) The restoration of an unstable section of the WFWR will occur at some future date as circumstances warrant.

1.3. Site Protection Instrument

The property associated with Area 2 is owned by the Sponsor and the City of Fayetteville. The areas where restoration and enhancement are conducted will be held in a conservation easement to ensure perpetual protection of the mitigation site. The operational life of the bank ends once the mitigation credits have been sold and the restoration is deemed to be self-sustaining. The City of Fayetteville has also entered into an agreement with the Sponsor giving them permission to establish and operate a mitigation bank. The agreement includes the Sponsor to have facilities on the site and create public access to the natural area. The Sponsor plans to establish:

- The River Commons and Institute of Northwest Arkansas
    - Public access to a natural area with amenities that focus on the ecology and cultural history of the site and recreation
    - Training Center and Offices

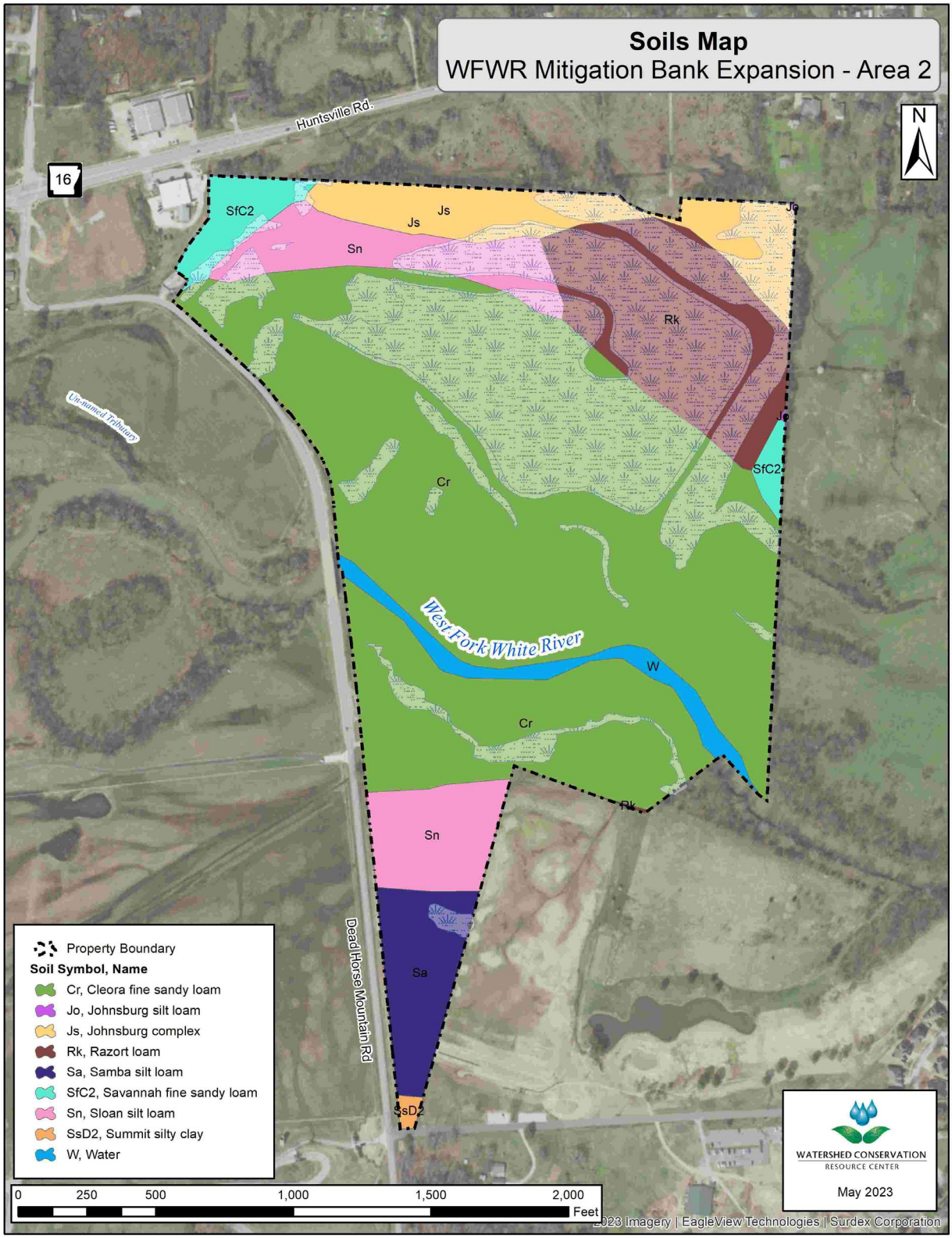

Figure 2 Soils Map for Area 2.

1.4. Baseline Information

The general ecological site characteristics of Area 2 are described as follows:

Wetlands

A wetland delineation was performed by FTN and Associates for Area 2 that included identification of tributaries. 18 wetland areas were observed totaling approximately 34.47 acres (Figure 4). The project area supports a mixture of wetland communities, including emergent, forested depressions, wet meadow, and shrub-scrub communities. The site supported three wetland classifications: riverine, lacustrine, and palustrine. Riverine wetlands were observed along or near the WFWR and along impounded stream reaches. Palustrine wetlands were observed most commonly in western and northwestern portions of the project area. These included emergent, shrub-scrub, and forested wetlands. Lacustrine wetlands were observed associated with a man-made shallow water pond/borrow area. Natural wetland features located near the WFWR, included upland oxbow features that are relatively rare in northwest Arkansas. In addition, wetlands in the northwestern portion of the project area supported wet meadow communities that included a diversity of herbaceous hydrophytes. Conservation actions for wetlands are shown in Figure 4. Wetlands will be restored and expanded by restoring the hydrology and establishing additional wetland plants. Buffers around the wetlands will be improved through the removal of invasive plants and establishing native plants.

Streams

The WFWR, a perennial channel, flows west to east along the southern boundary of the project area and totals, approximately 2,020 linear feet along the southern area of the project area. Restoration of the channel will not be included in the current expansion of the bank.

Three alternate channels or overflow channels were observed along the WFWR. Overflow Channel A totaled approximately 743 linear feet and Overflow Channel B totaled approximately 177 linear feet. Overflow Channel A was approximately 20-25 feet wide and supported a gravel and vegetation substrate. The OHWM height was approximately 2 feet. Alternate Channel B was approximately 15 feet in width, with a silt, gravel, and vegetated bottom. Alternate Channel C extended approximately 538 linear feet and supported a channel width of approximately 20 feet; the substrate composition was similar to Alternate Channels A & B. Four intermittent channel systems were mapped and are described in detail in the wetland delineation report. Channel widths were less than 15 feet; these streams flowed to wetland areas or directly to the WFWR. The length of these features ranged from 194 to 847 feet. Conservation actions for the streams and riparian areas are shown in Figure 4. Streams will be restored or enhanced by creating floodplains, improving the channel pattern, installing structures, and/or improving the vegetation.

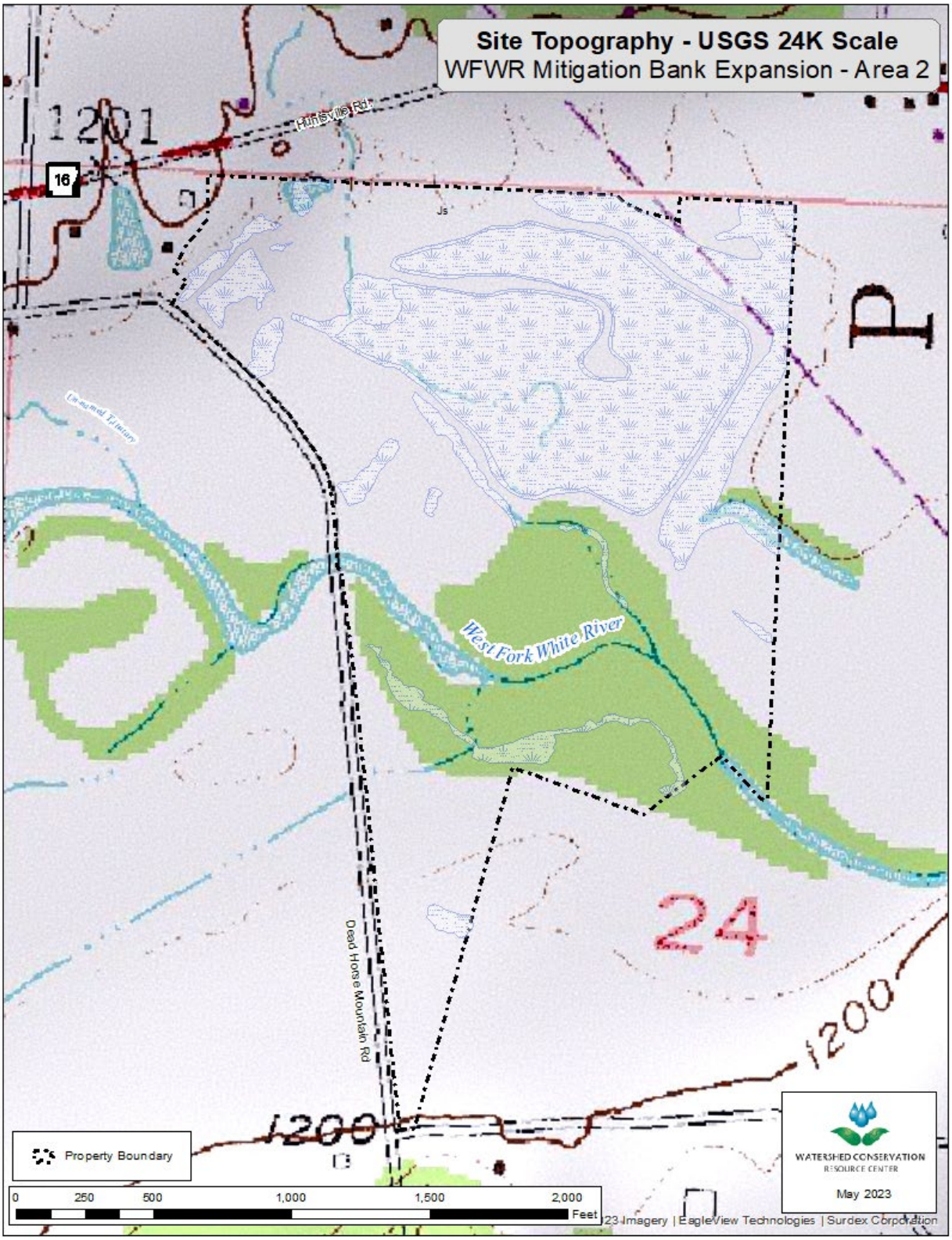

Figure 3 Topography Map of Area 2.

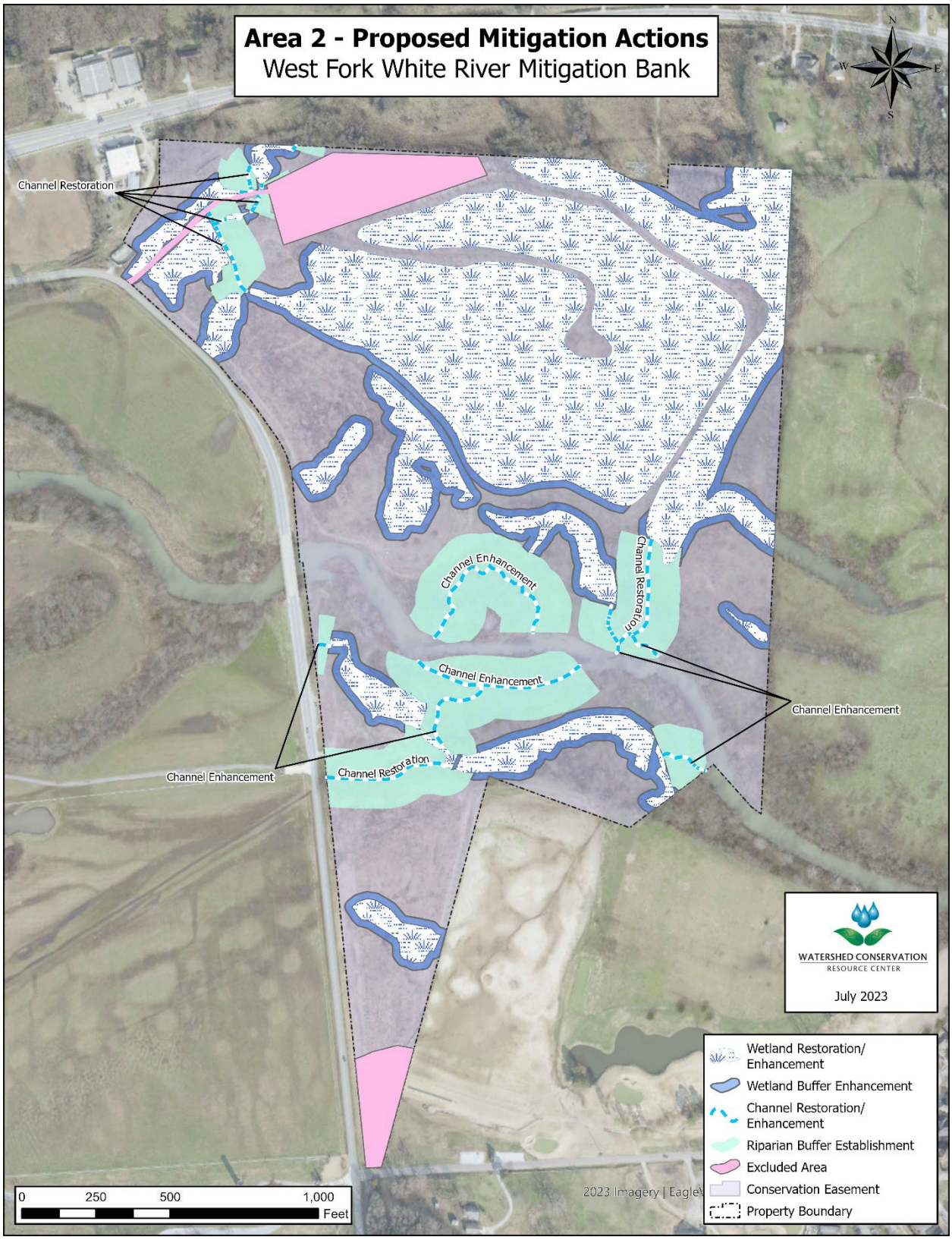

Figure 5 Proposed migration actions for Area 2.