Wakarusa River Corridor Design Development

Fig 1 Wakarusa River Corridor in Eudora.

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Landscape Architecture Kansas State University

Fig 2 Save the Wakarusa River Valley Drawing.

Acknowledgements

This studio project is developed in collaboration with Douglas County, Kansas and Biohabitats Inc.

Thank you to the sponsors of this project: Biohabitats Inc. and Douglas County, Kansas.

Fig 3 Biohabitats company logo.

Fig 4 Douglas County, Kansas company logo.

Fig 5 Baker Wetlands and Discovery Center.

Acknowledgements

During the research and analysis process of this studio project, we've come to learn more about the Native and Indigenous populations who hunt, trade, and partake in ceremonies within the Wakarusa River Corridor and their efforts to utilize the land with sustainability at the forefront of mind. "We acknowledge the Native and Indigenous populations and honor their historical and continued kinship with the land, water, and living and non-living relatives within the place we now call Kansas. Their presence in Kansas has been complex and includes the stewardship of their ancestral and traditional homelands, being displaced here due to resettlement, or traveling through this region due to forced removal" (University of Kansas 2025). We acknowledge the Native and Indigenous populations' commitment to preserving the land and water of this region as we continue research and design implementations.

Fig 6 Wakarusa River Corridor in Eudora, KS.

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Chapter 1:
Regional Introduction and Vision Plan

Fig 8 Baker Wetlands and Discovery Center.

Introduction and Vision Statement

Introduction:

After careful inventory analysis and synthesis of the Wakarusa River Corridor, we were tasked with creating a Vision Plan. This plan should produce a “long-term, aspirational, and comprehensive spatial strategy that outlines a community’s desired future state,” that considers the Ecological, River, and Social aspects of the site. The Ecology Vision Plan should communicate how to maximize connectivity, ecosystem services, and the overall biodiversity. The River Vision Plan should convey how the corridor is utilized in response to flooding/drought and how to “proactively manage water resources for ecological and human needs.” Finally, the Social explains how to “create inclusive, accessible and usable places” to easily interact with nature and other communities within the Wakarusa Corridor area.

Fig 9 Baker Wetlands and Discovery Center.

Vision Statement:

Our proposal for the Vision Plan of the Wakarusa River Corridor highlights the reconnection and preservation of ecological systems, the engagement between people, the connectivity from humans to the landscape, and the respect and understanding of the Wakarusa River floodplain. The combination of these ideas aims to better preserve the culture, character, and beautiful landscapes of Douglas County which are goals that work in tandem with the Douglas County Open Space Plan.

Goals and Objectives

Rehabilitate and preserve natural landscapes and ecological systems in the Wakarusa River Corridor.

- Maintain and create wildlife corridors in human developed areas to sustain habitats.
- Restore fragmented ecosystem corridors by maintaining and reintroducing native plantings.
- Advocate and design for infill development and a slow expansion of urbanism in Lawrence and Eudora.

Establish connections within the various communities in the Wakarusa River Corridor.

- Preserve and promote historic and cultural sites.
- Promote community connections through new developments within the cities
- Educate people about all the previous communities and cultures that have resided on this land through public engagement.

Connect the various communities to the natural landscape without destroying ecology or culture.

- Create trails in natural landscapes while maintaining ecological health.
- Connect natural environments to the cities by increasing access across highways.
- Install signage in natural areas to educate visitors about culture and natural systems.

Respect the Wakarusa River Corridor floodplain.

- Ensure that all design interventions within the FEMA 100-year floodplain can withstand flood events.
- Repair riparian buffer ecosystems through native plantings.
- Allow the Wakarusa River to maintain its floodplain (point bars and cutbanks) without channelization.

River Vision

The River Vision for the regional-scale Wakarusa River Corridor includes repairing sparse riparian buffers with native plantings. The wastewater treatment plant on the site will also be made into a community space with wetland terraces and plants.

Fig 10

Basalt River Restoration is an award-winning project showcasing the riparian buffer and how it connects humans and nature to one another.

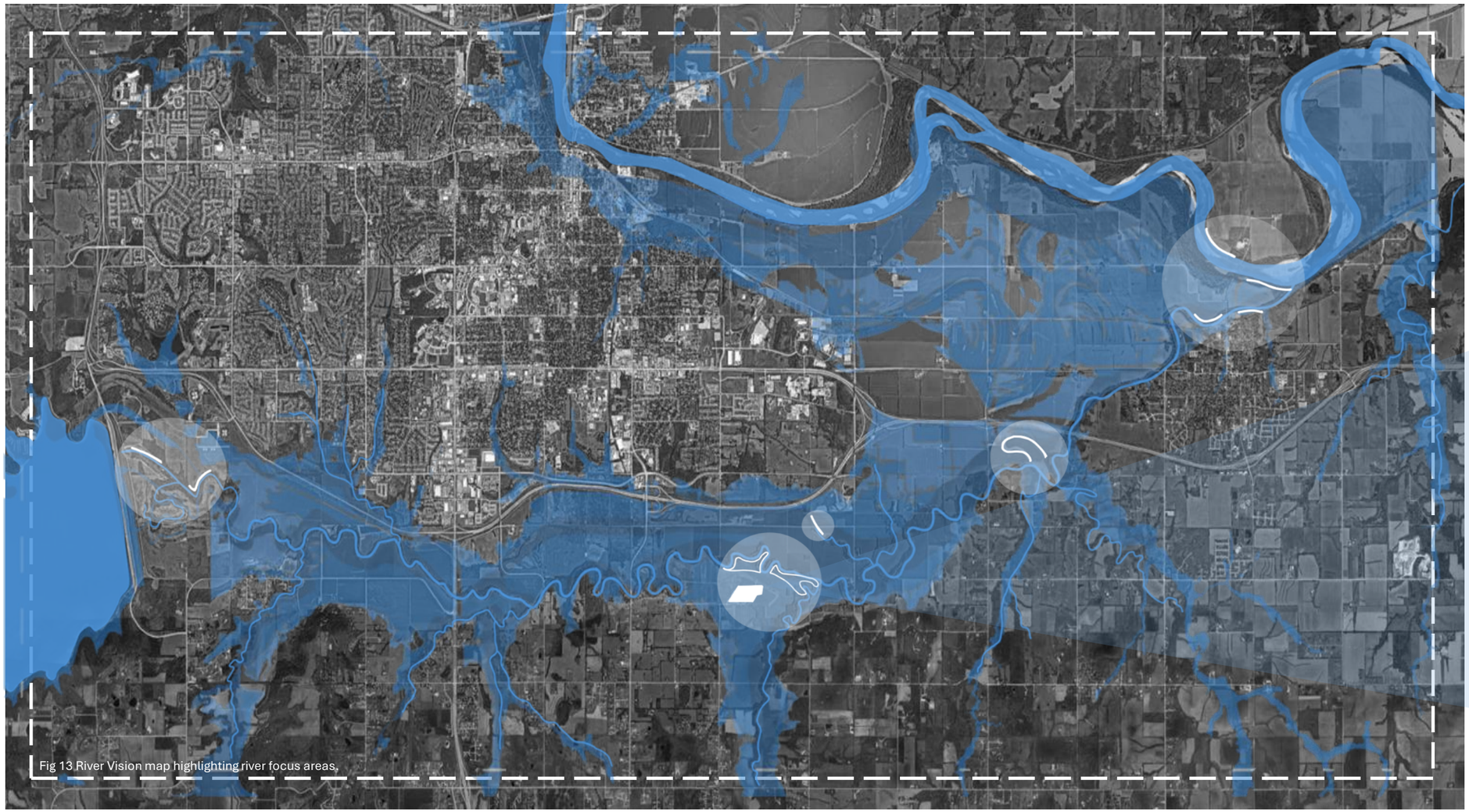

Fig 13 River Vision map highlighting river focus areas.

Fig 11

Mill River Park and Greenway shows the revitalization of habitats along the riparian buffer and the connection of human centered trails.

Fig 12

The Handan Wastewater Purification Terraces is a reclaimed ecological take on a wastewater treatment plant to introduce human interaction and bring back ecological connections.

Ecological Vision

The Ecological Vision for the regional-scale Wakarusa River Corridor includes connecting fragmented ecosystems with native plantings. These connections will be on grade and underneath highways to not disrupt human development and allow corridors for wildlife travel.

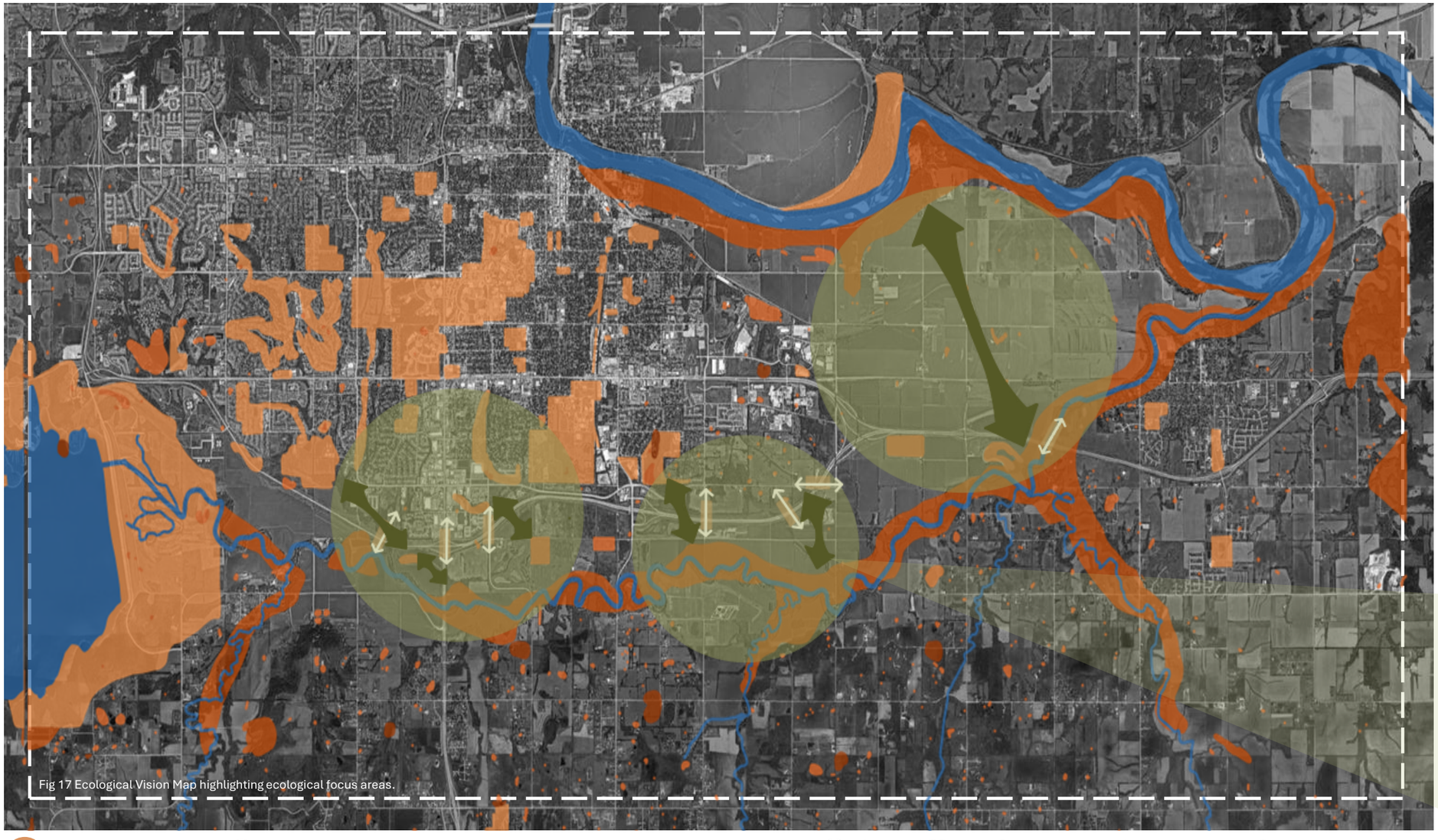

Fig 17 Ecological Vision Map highlighting ecological focus areas.

Fig 14

Fig 15

New Provincial Connection N69 shows ways of creating highways in urban environments while still encouraging underpass landscapes with rivers and agriculture.

Fig 16

Bendway Park features multiple different types of ecosystems in one relative area. In this project they connect these ecosystems through native corridors to increase plant and animal health and safety.

Social Vision

The Social Vision for the regional-scale Wakarusa River Corridor includes connecting existing trail systems together and to proposed social gathering spaces. These social spaces will be hubs for community engagement and historic education with signage on the trails along the way.

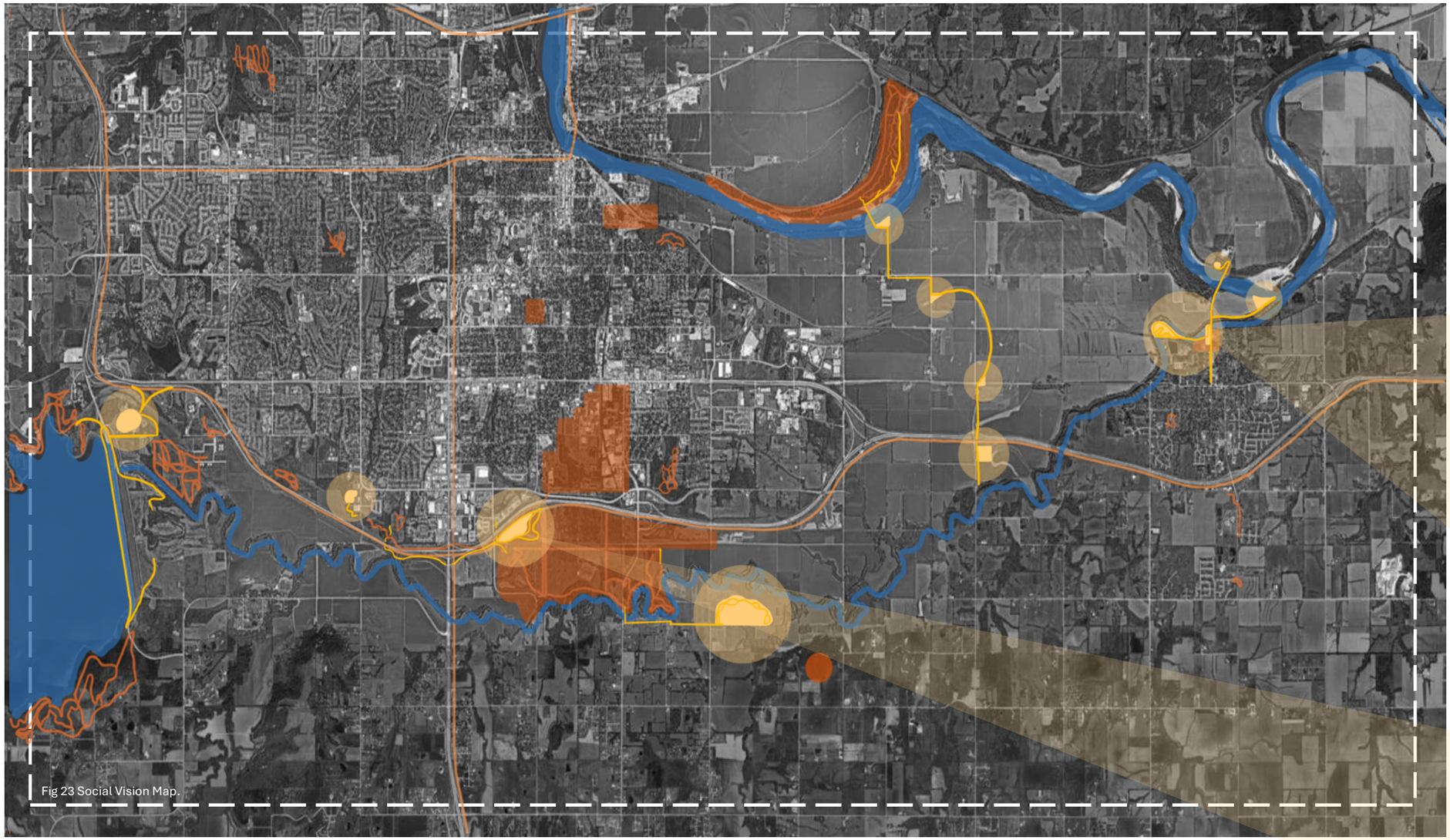

Fig 23 Social Vision Map.

Fig 18

Lawrence and Eudora Existing Trail Signage about local animals and plants.

Fig 19

Fig 20

The Olana Strategic Landscape Design Plan shows how to turn a historical site into a social hub for education and connection.

Fig 21

The Common Ground Garden Incubator at John Taylor Park shows community programming through events in social spaces.

Fig 22

Regional-Scale Vision

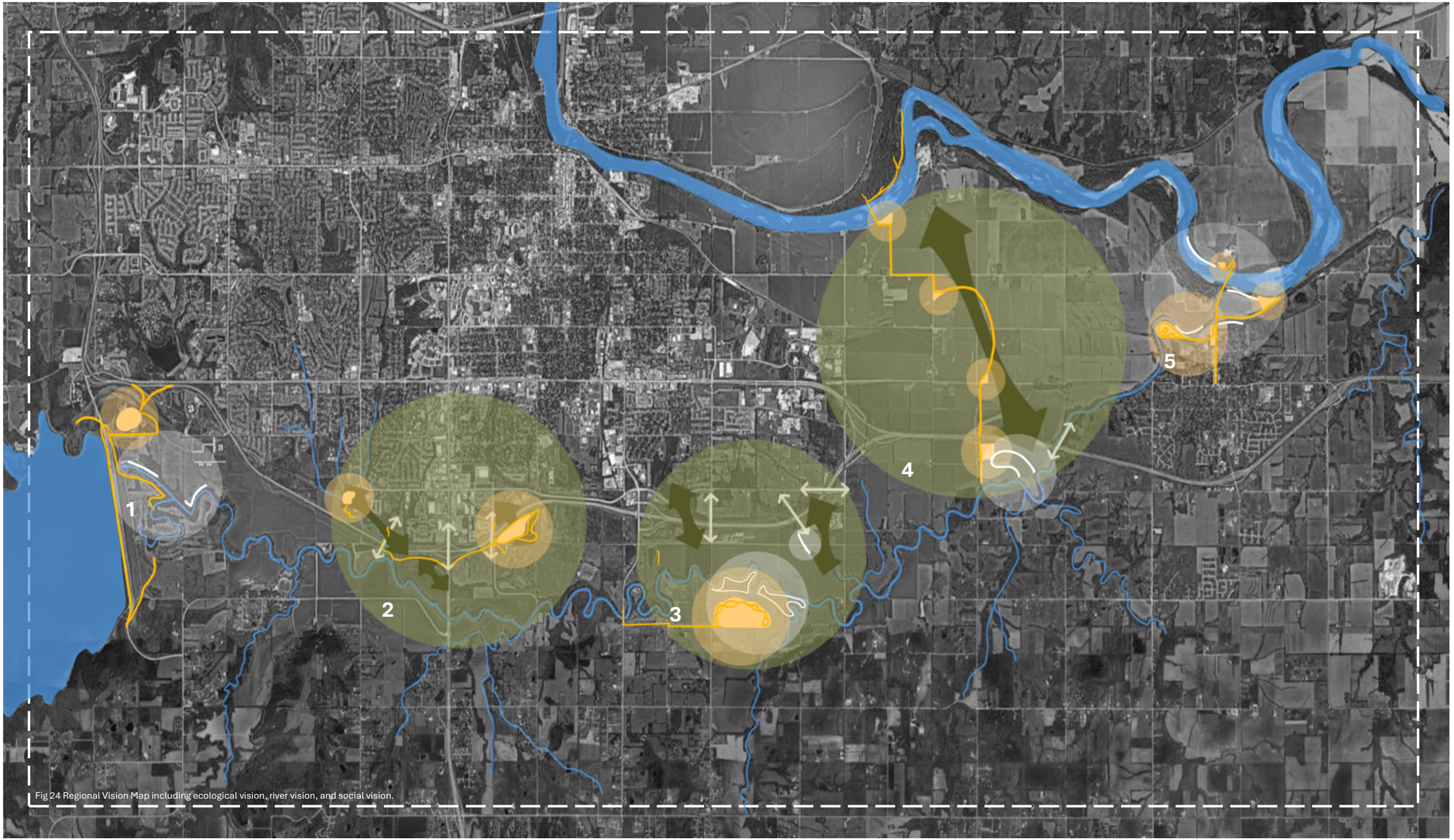

Fig 24 Regional Vision Map including ecological vision, river vision, and social vision.

Social Plan
Social Spaces
River Plan
Riparian Buffer
Ecological Plan
Ecology Corridors

0 0.75 1.5 3 4.5 6 Miles

Chapter 2:

Focus Area Vision Plans

Fig 25 Baker Wetlands and Discovery Center.

Recreational Revitalization Focus Area #1

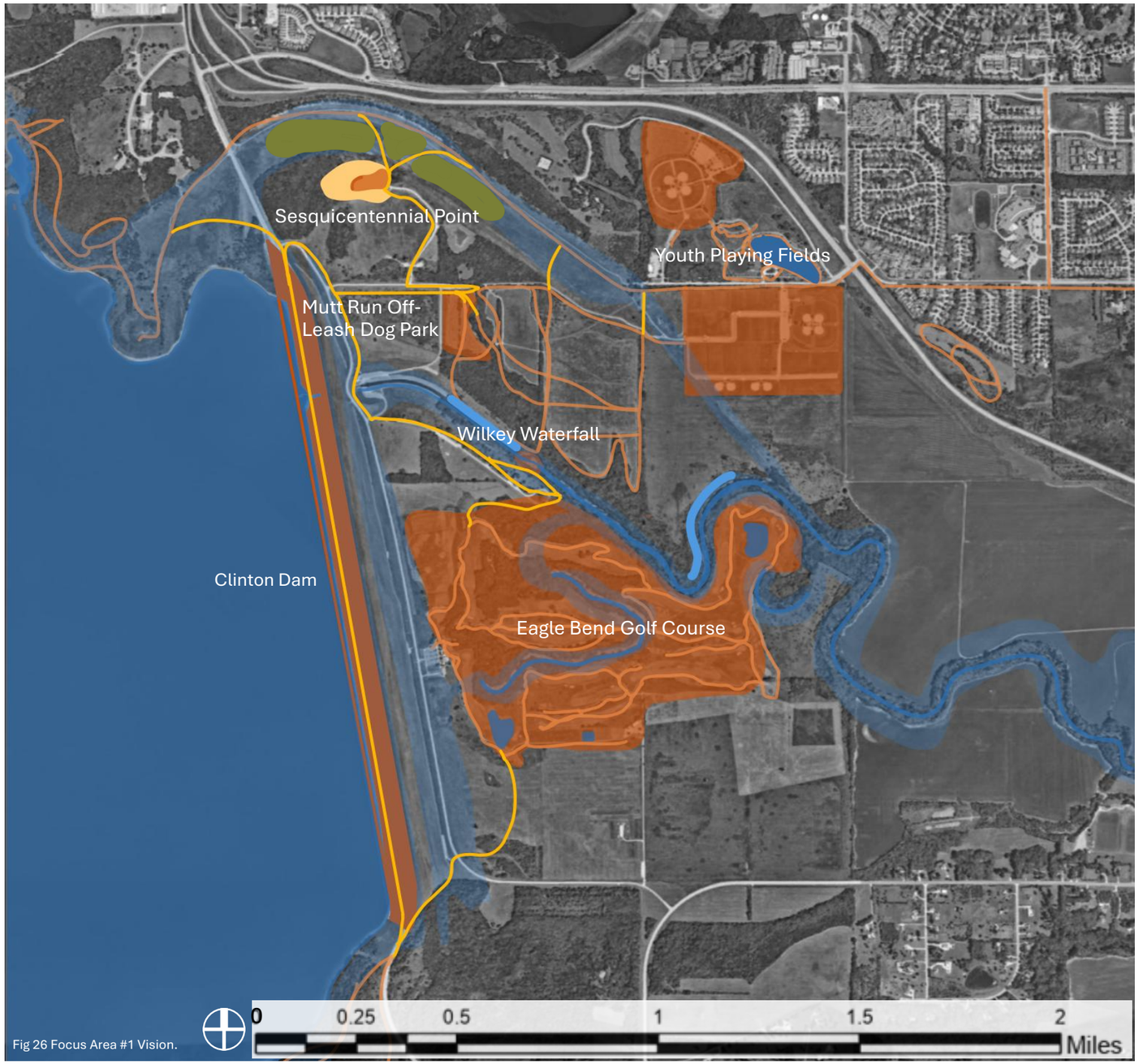

Fig 26 Focus Area #1 Vision.

Existing Trails
Proposed Trails
Proposed Social Space
Proposed Riparian Buffer
FEMA 100-year Floodplain
Existing Waterways
Proposed Ecological Corridor

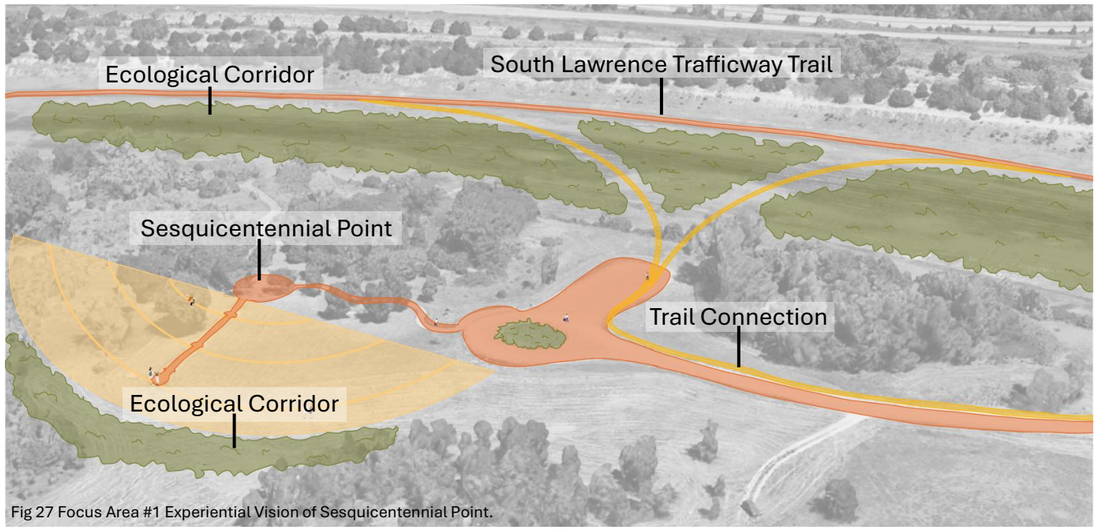

Fig 27 Focus Area #1 Experiential Vision of Sesquicentennial Point.

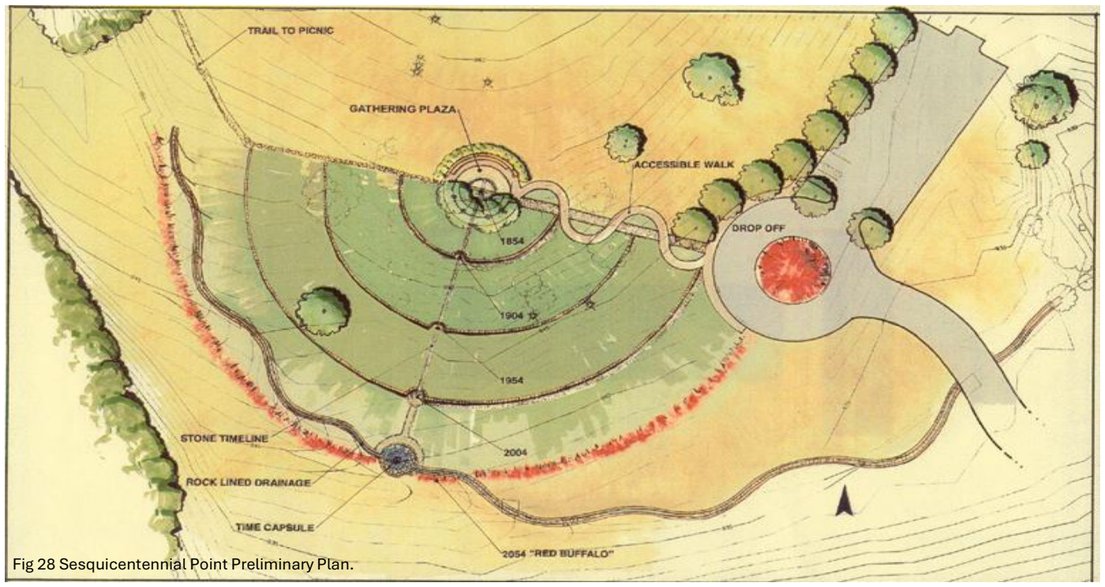

Fig 28 Sesquicentennial Point Preliminary Plan.

With this focus area we want to connect the trails north of and within the Eagle Bend Golf Course to the trails surrounding Clinton Lake. The trails will highlight the Wilkey Waterfall, a natural destination, and the historic and cultural space, Sesquicentennial Point. We aim to revitalize the space and bring it back to its originally planned state by adding vegetation and social spaces. We want to connect the Sesquicentennial Point to the South Lawrence Trafficway Trail to the North. In addition, we want to add more vegetation near these trails and around sparse riparian buffers.

Bringing Nature Back Focus Area #2

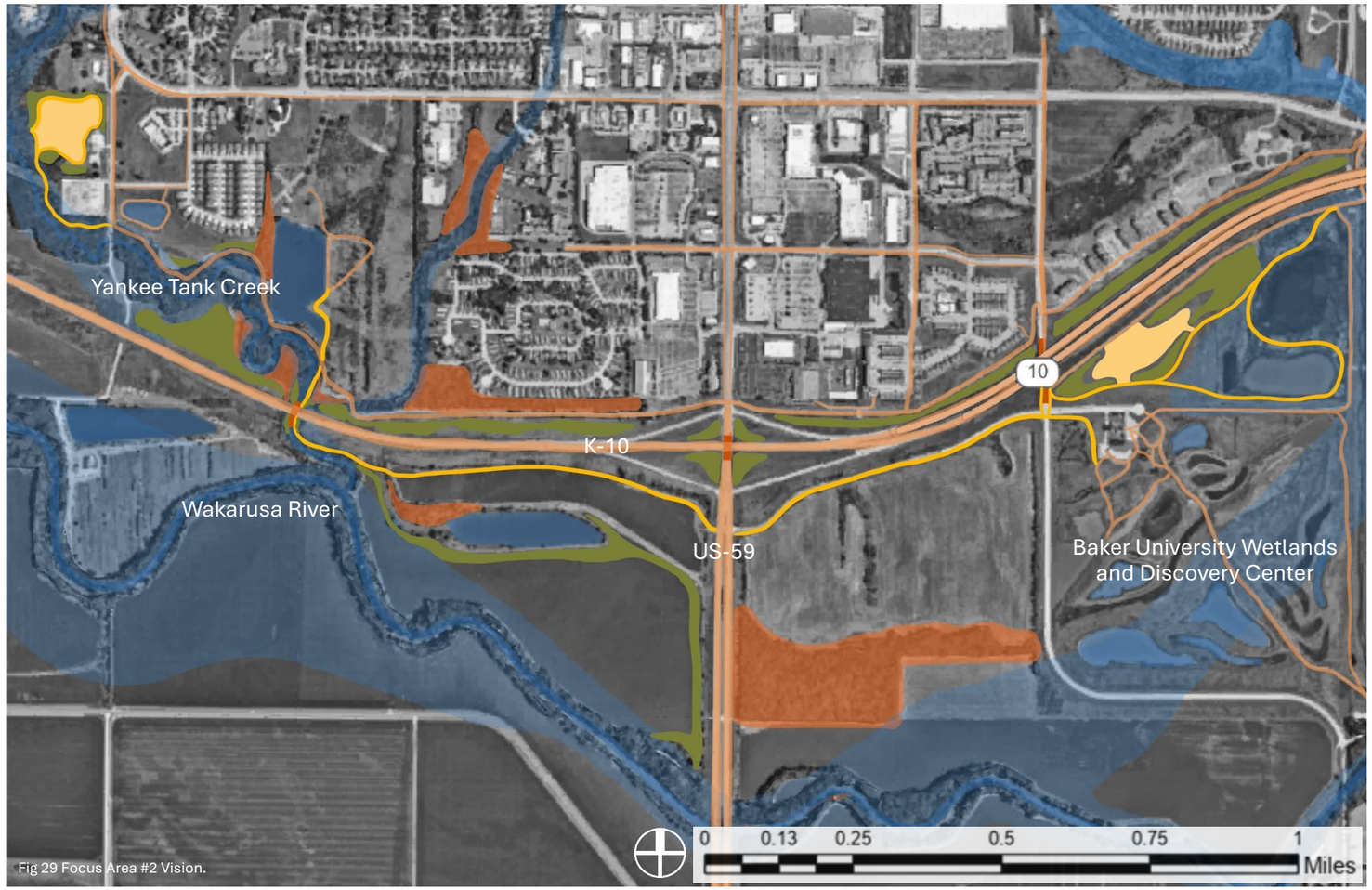

Fig 29 Focus Area #2 Vision.

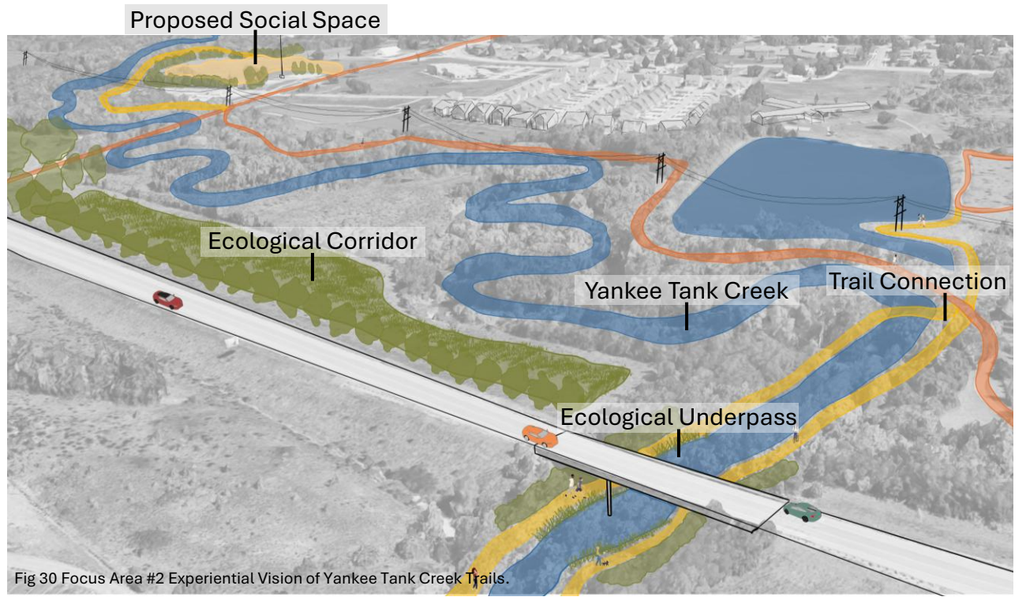

Fig 30 Focus Area #2 Experiential Vision of Yankee Tank Creek Trails.

With this focus area, we want to increase interactions between humans and the natural landscape by utilizing trails. We also want to make safer highway transportation for people and wildlife with the inclusion of ecological underpasses. This focus area is in the 100-year floodplain, so all infrastructure would be built to withstand flood events, and we would implement plantings to lessen flooding. Additionally, two proposed social spaces would encourage people to interact with nature through trail connection.

- Existing Roadways and Trails
- Existing Ecology
- Proposed Ecological Corridor
- Existing Underpass
- FEMA 100-year Floodplain
- Existing Waterways
- Proposed Social Space
- Proposed Trails

Fig 31
Fil Bleu Glatt Regional Design.

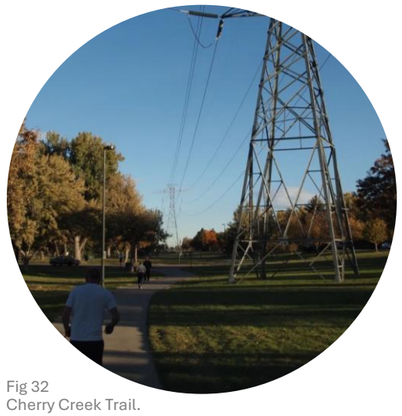

Fig 32
Cherry Creek Trail.

Fig 33
Umea Campus Park.

Community Landscape Restoration Focus Area #3

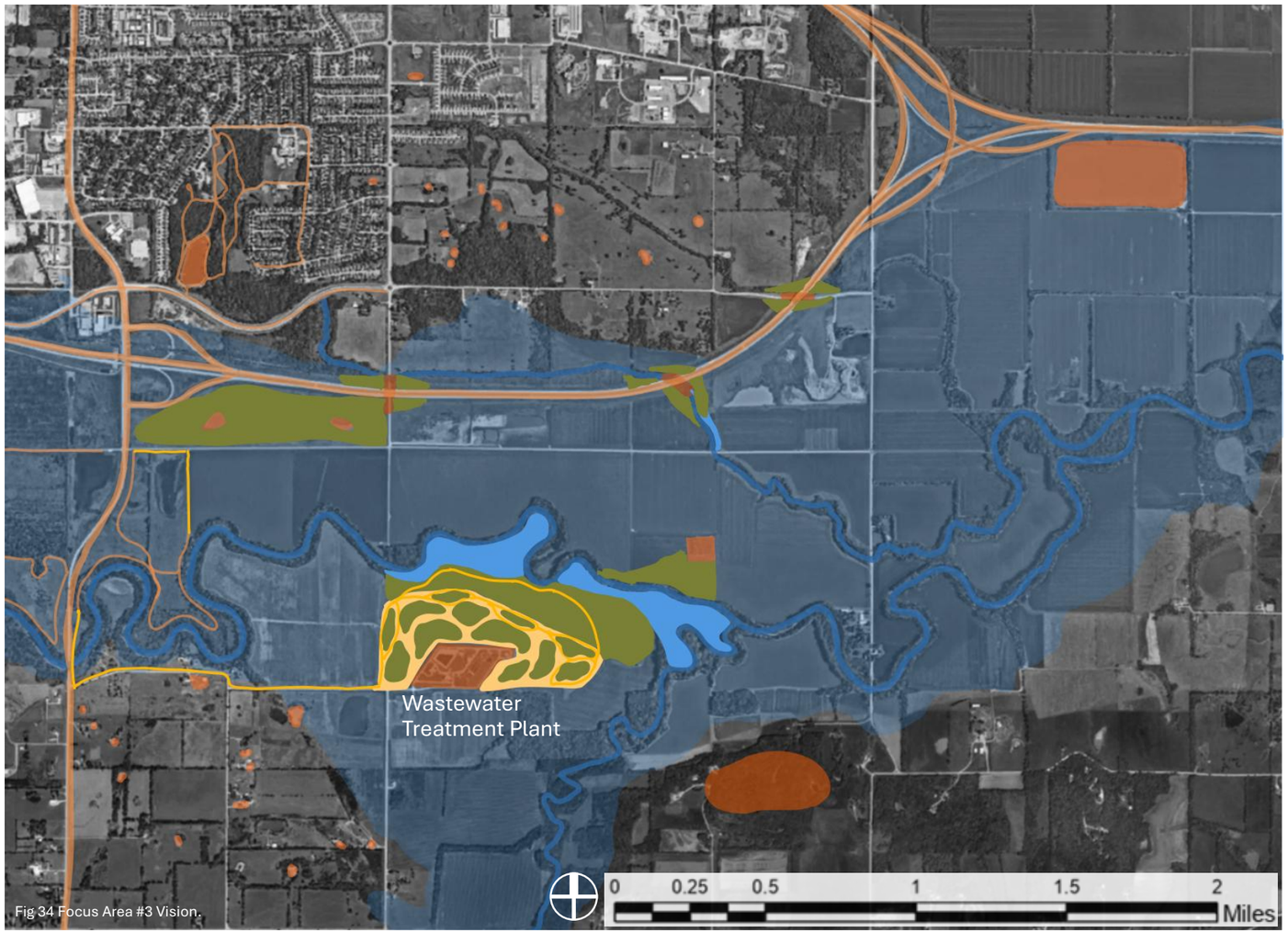

Fig 34 Focus Area #3 Vision.

Existing Roadways and Trails
Existing Ecology
Proposed Ecological Corridor
Existing Underpass
FEMA 100-year Floodplain
Existing Waterways
Proposed Social Space
Proposed Trails
Proposed Riparian Buffer

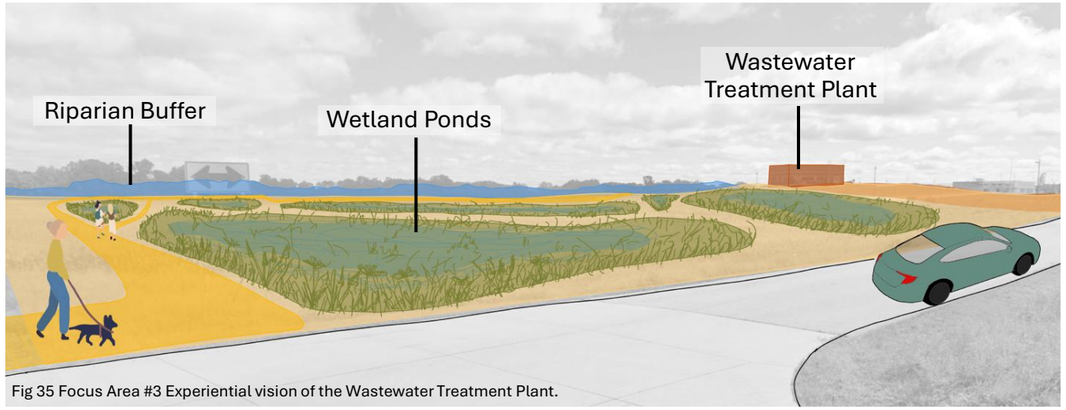

Fig 35 Focus Area #3 Experiential vision of the Wastewater Treatment Plant.

Fig 36 Handan Wastewater Purification Terrace.

With this focus area we aim to highlight the Wastewater Treatment Plant by inviting the community to a more public space while utilizing trails and a natural wetland environment. The area would be more inviting with its aesthetics and native plants to combat the smell. The space is activated with trails connecting the city to more spaces along the river and into the public defined space. We also aim to connect the fragmented ecological spaces such as the forests and wetlands. As well as introducing green space within the underpasses of the highways to maintain a corridor for wildlife and ecological connections.

Socio-Ecological Connections Focus Area #4

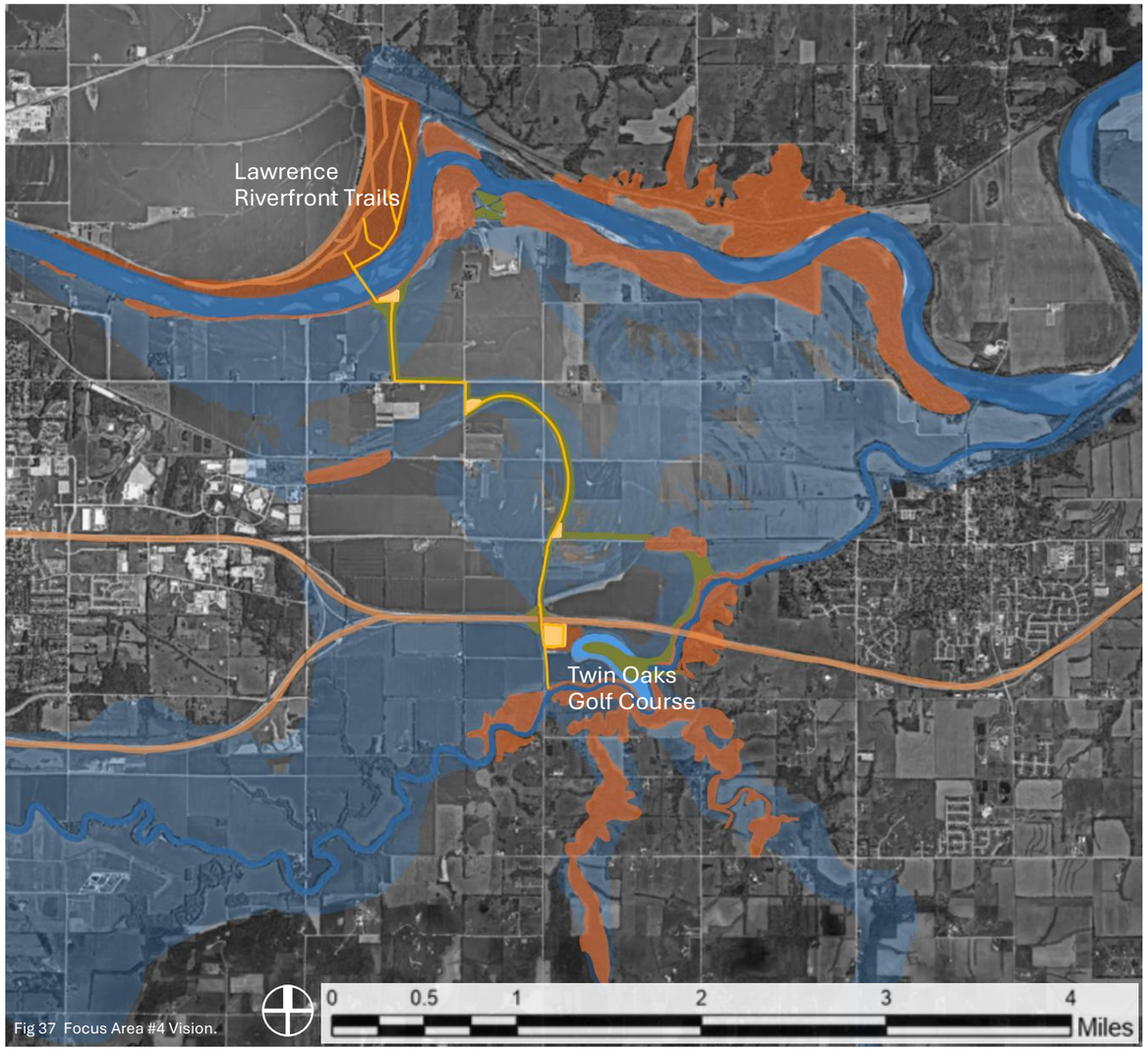

Fig 37 Focus Area #4 Vision.

Existing Roadways and Trails
Existing Ecology
Proposed Ecological Corridor
Existing Underpass
FEMA 100-year Floodplain
Existing Waterways
Proposed Social Space
Proposed Trails
Proposed Riparian Buffer

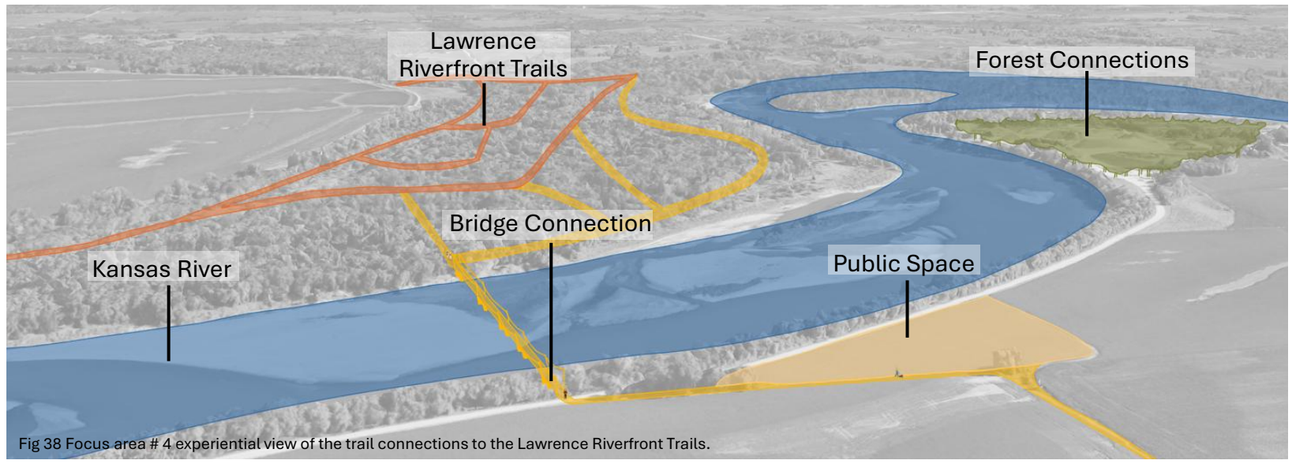

Fig 38 Focus area # 4 experiential view of the trail connections to the Lawrence Riverfront Trails.

With this focus area we aim to connect the Wakarusa River Corridor and the Kansas Rivers. We are proposing a trail system between the two rivers through the spaces in the agricultural land. Along this trail we propose public spaces to allow the community a place to gather and rest. By the Kansas River on the north end of the trail we wish to connect the proposed trail to the existing Lawrence Riverfront trails with a bridge spanning the Kansas river. We also propose ecological greenspaces to connect the fragmented forests and to provide a more relaxing environment along the trail which also acts as a shelter belt for the agricultural lands. We propose a larger riparian buffer and green ecosystem along the Wakarusa River Corridor near the public space on the Twin Oaks Golf Course to strengthen the ecological patterns.

Fig 39
Bold Tram Bridge across the Kansas River.

Fig 40
Accessible trail in the Dalby Soder Skog National Park .

Fig 41
Lawrence Levee Trail .

Eudora River Access Focus Area #5

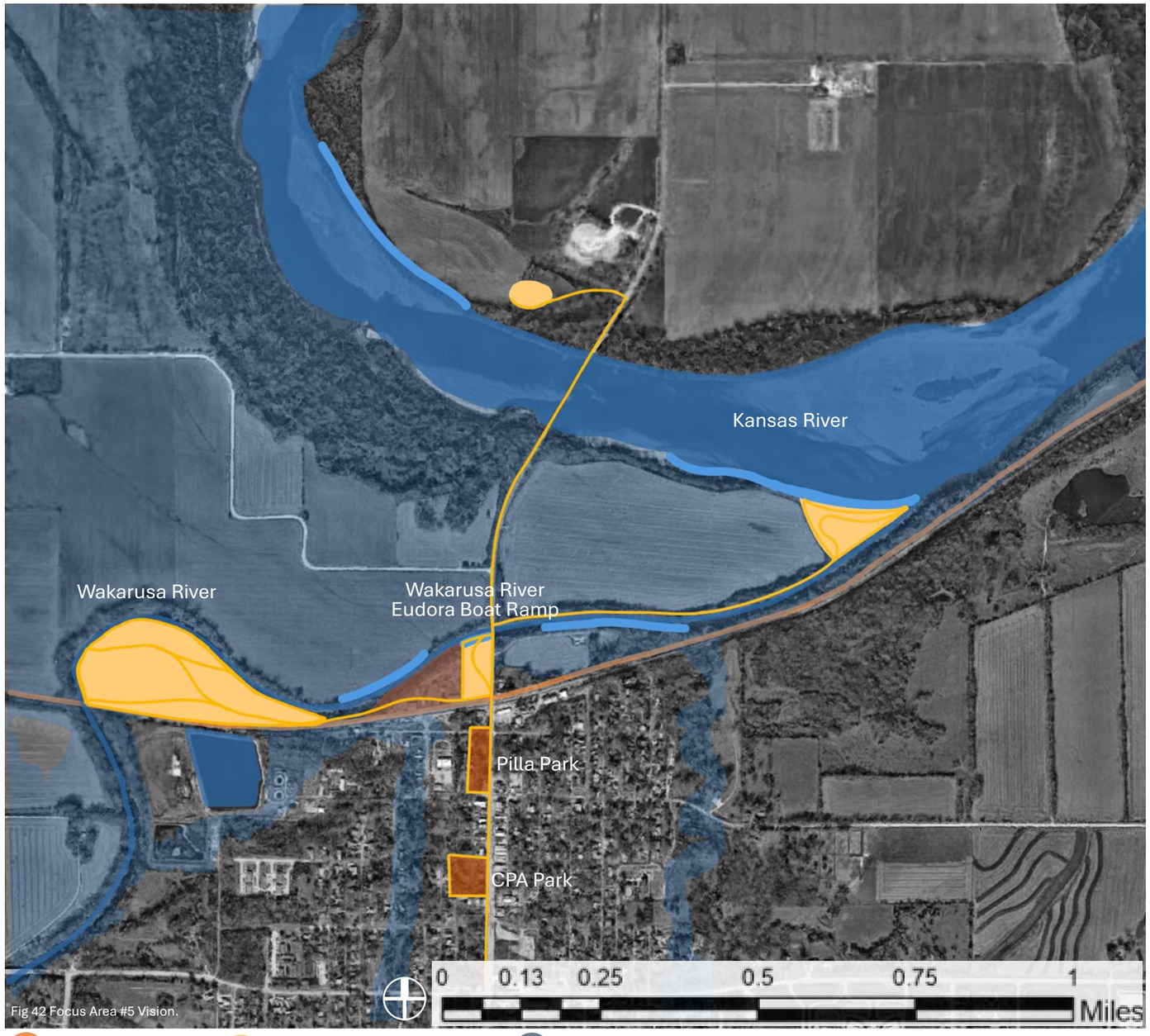

Fig 42 Focus Area #5 Vision.

Existing Railroad
Proposed Social Space
FEMA 100-year Floodplain
Proposed Trails
Proposed Riparian Buffer
Existing Waterways

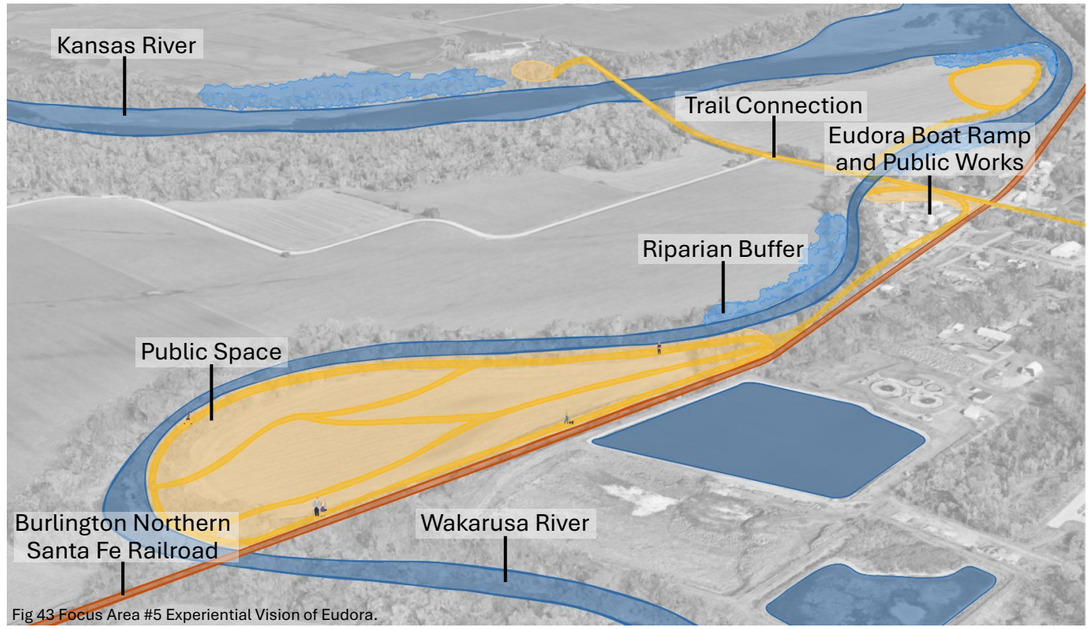

Fig 43 Focus Area #5 Experiential Vision of Eudora.

Fig 44 McCartney Boat Ramp.

In this focus area we want to increase public access to the Wakarusa and Kansas Rivers through public spaces. We want to beautify and increase safety near the rivers and throughout the city by increasing access and public open green space. We also want to promote trails within Eudora to these various public spaces and between the Wakarusa and Kansas Rivers. Lastly, we want to increase riparian buffers in sparse areas with native plantings to facilitate flora and fauna growth.

Chapter 3:
Eudora Introduction and Vision Plan

Fig 45 Wakarusa River Corridor in Eudora, KS.

Goal Statements and Design Concepts

Encourage better relationships between humans and ecology regarding the river floodplain and riparian corridors.

- Design with natural materials to connect humans to nature.
- Enlarge riparian buffers to create connections for wildlife.
- Create signage across the site to educate visitors about natural ecology.

Increase social connection to the site, facilitate community events, and maintain town character.

- Replicate the design language and character of Eudora in new designs.
- Create a gathering space to host community events.
- Connect existing and proposed trails and sidewalks directly into the site.

Design for complex and layered experiences across the site to be used by all user groups and abilities.

- Meet the needs of all age groups with targeted programmed activities.
- Create spaces for different types of passive and active recreation.
- Create accessible programmed spaces and circulatory systems.

Ensure sustainability in our design to create a well-used and community-based design.

- Design incrementally to match the pace of Eudora's city plans.
- Reuse materials from demolished structures and pavement in the design.
- Repurpose existing structures into gathering spaces and observation decks.

Our proposal for Eudora's Riverfront Access creates a shared public recreation space that highlights nature and community events. Our design is achieved using three phases: Phase 1 to fix and update the existing features, Phase 2 for the assessment and revitalization of the brownfield site, and Phase 3 for building permanent infrastructure and finalizing plantings. With this design we aim to create a place for community events, such as the numerous 5k events that take place in Eudora by creating a large central plaza and pavilion with existing structures. We aim to create spaces for all people by ensuring different levels of activity and separation of spaces.

This design will be based in the aesthetics and goals of Eudora's community to ensure the longevity and use of the design. In addition, we plan on designing sustainably by reusing materials and repurposing existing structures. We also aim on creating connections with ecology, widening riparian buffers, creating runoff infiltration rain gardens on edges, and creating ecological meadows. Overall, with this design we want to create a place to further Eudora's community pride and connections while also connection ecological sites for flora and fauna to thrive.

Eudora Site Vision Plan

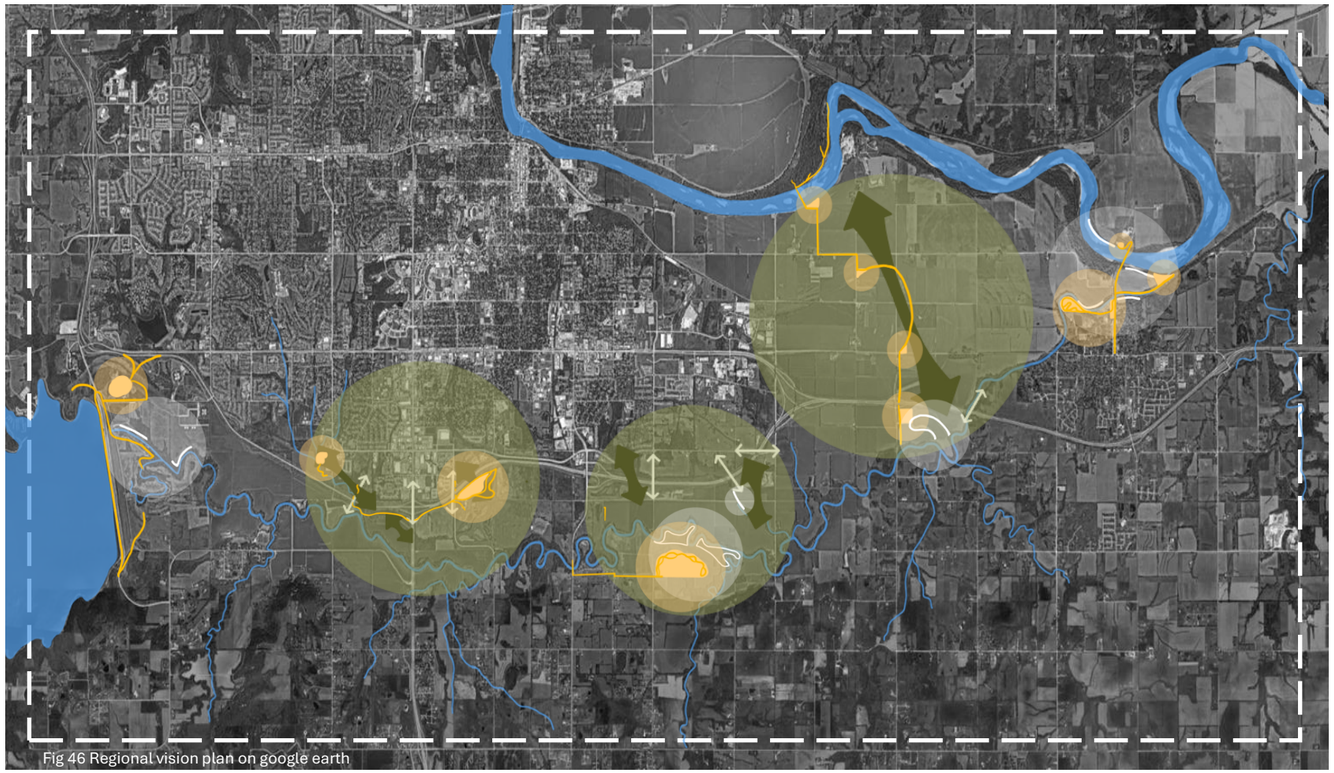

Fig 46 Regional vision plan on google earth

Wakarusa Vision Plan

0 0.75 1.5 3 4.5 6 Miles

Social Plan | Social Spaces | River Plan | Riparian Buffer | Ecological Plan | Ecology Corridors

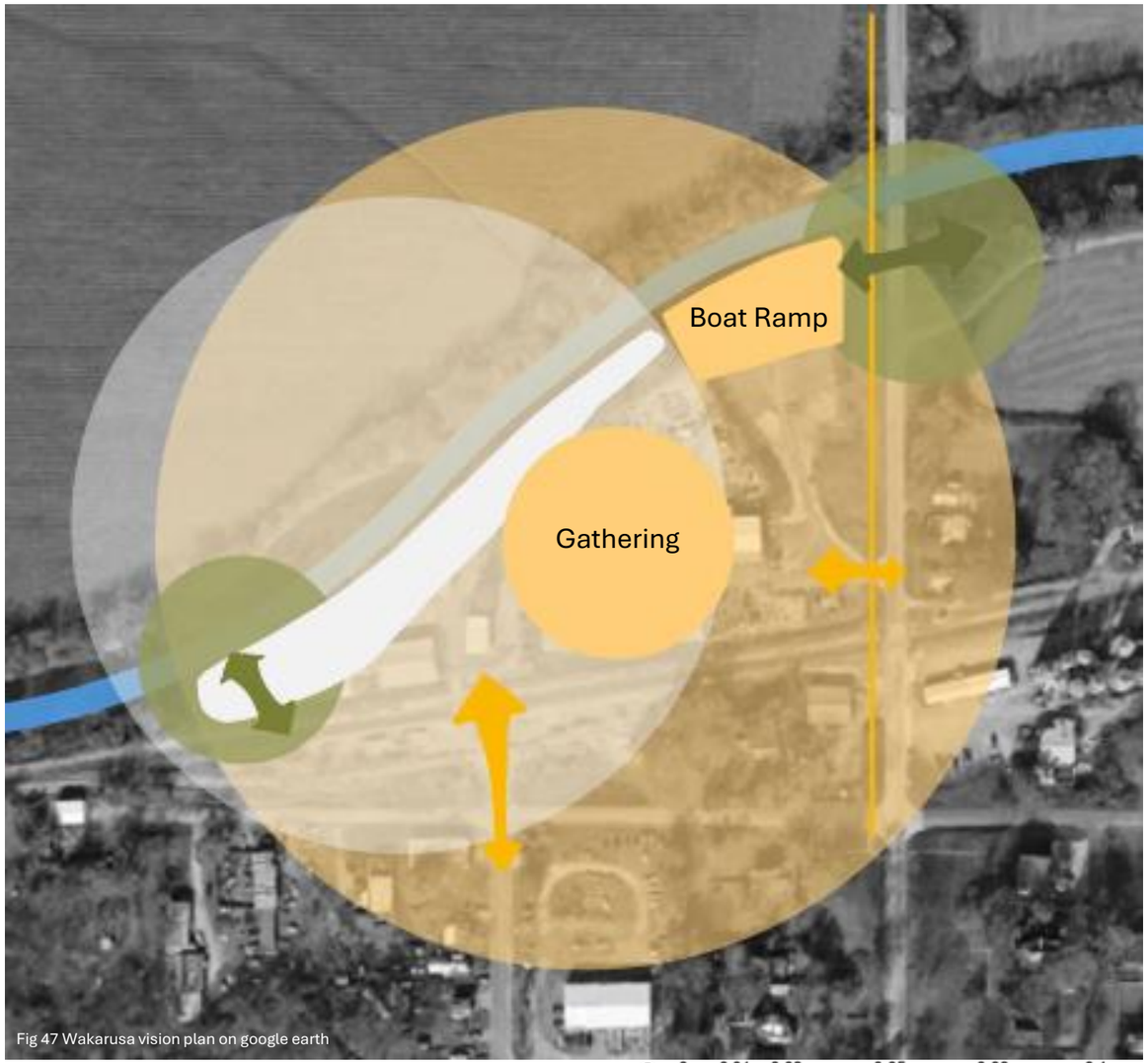

Fig 47 Wakarusa vision plan on google earth

Eudora Vision Plan

0 0.01 0.03 0.05 0.08 0.1 Miles

Social Plan | Social Spaces | Human Access | River Plan | Riparian Buffer | Ecological Plan | Ecology Corridors

Chapter 4:

Eudora Site Design

Fig 48 Wakarusa River Corridor in Eudora, KS.

Illustrative Site Plan Drawing

The Site Plan illustrates the new and existing contours, the spaces, their materiality, and the relationships to adjacent spaces. The central Gathering Space is defined by a different ground material and by existing structures. Adjacent to the right is the Active Meadow with Water Play and Natural Play spaces. Further right is the primary parking lot with the Boat Ramp access and a Rain Garden on the site boundary. To the left of the Gathering Space is the Passive Meadow with low-lying landforms and trails for lounging and quiet meandering. Further right is the Wooded Area where multiple Nature Nooks are held for fishing, bird-watching, and other passive recreation.

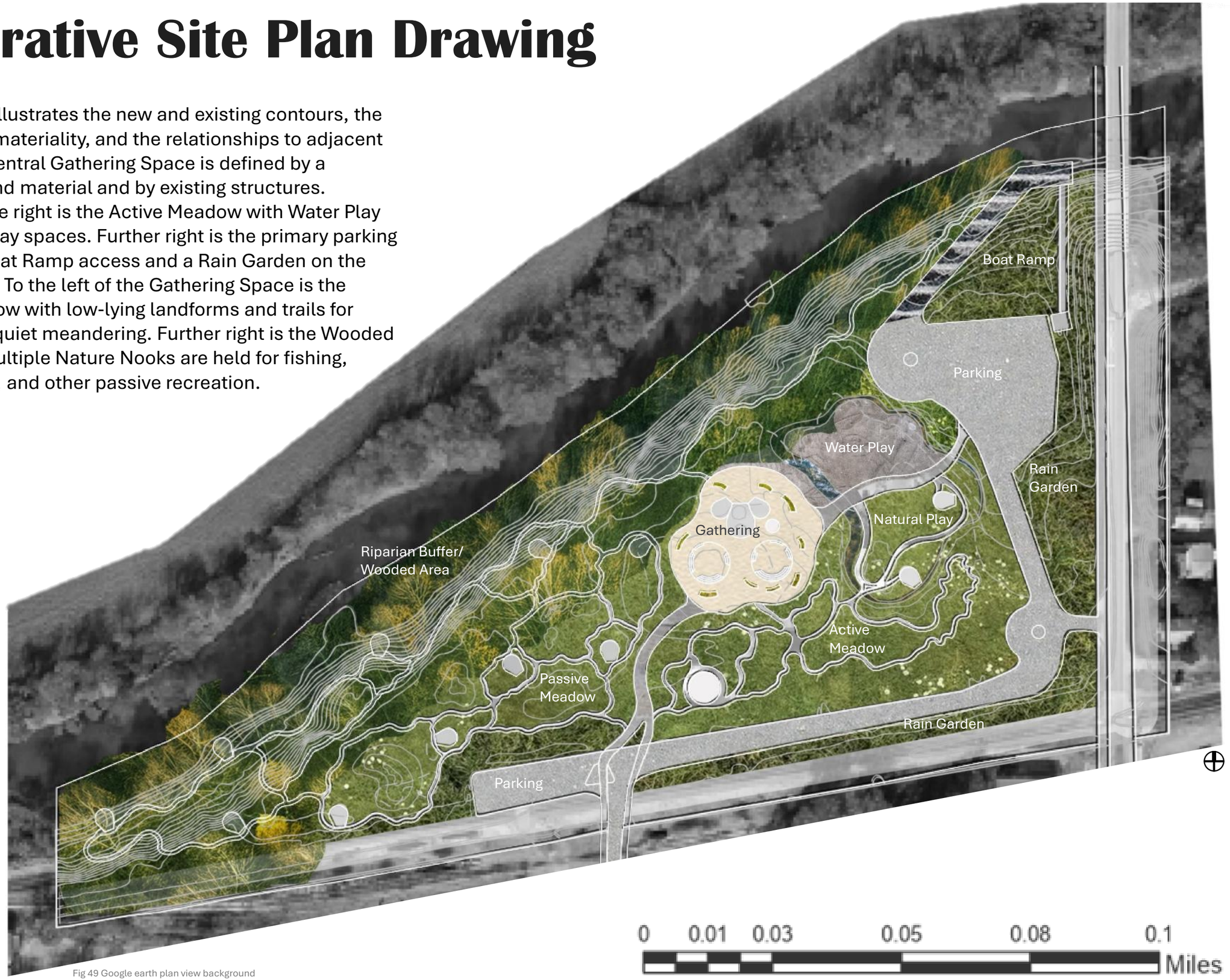

Fig 49 Google earth plan view background

Site Sections

Fig 50 Google earth background

1

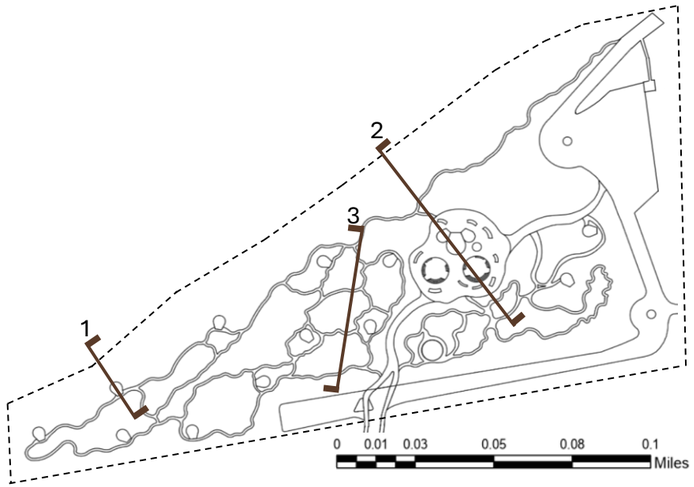

Fig 51 Google earth background

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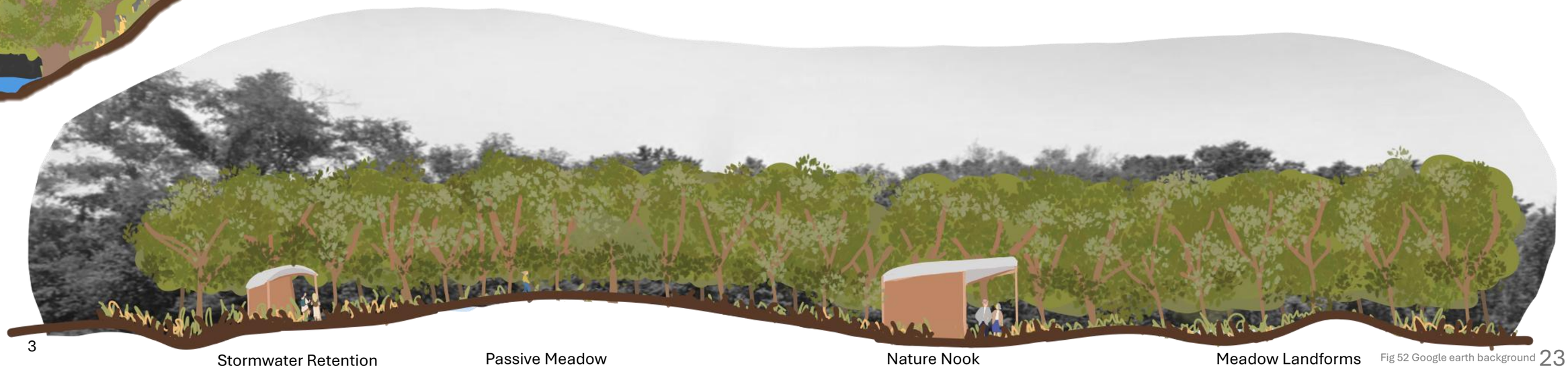


3

Fig 52 Google earth background

Perspective Views

1 Fig 53 Google earth background

The Water Play space featured in this image is a play space that contains a naturalistic stream containing rocks and many naturalistic boulders that water shoots out of for a fun play experience for all users.

2 Fig 54 Google earth background

The Wakarusa Boat Ramp depicted in this image has been updated to include a better access route and a new naturalistic Gathering Space with boulder seating. The image is being viewed from the newly added sidewalk on the left of Main Street.

Fig 55 Google earth background

3 Fig 56 Google earth background

This image shows the entrance into the newly designed Eudora Embracing Connections Park. The sculptural element in the roundabout draws people in. The view offers a glimpse into the Active Meadow and the main Gathering Space.

Landform Study Models

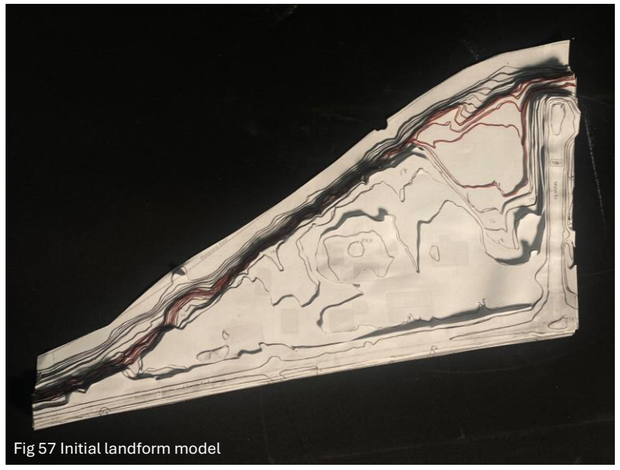
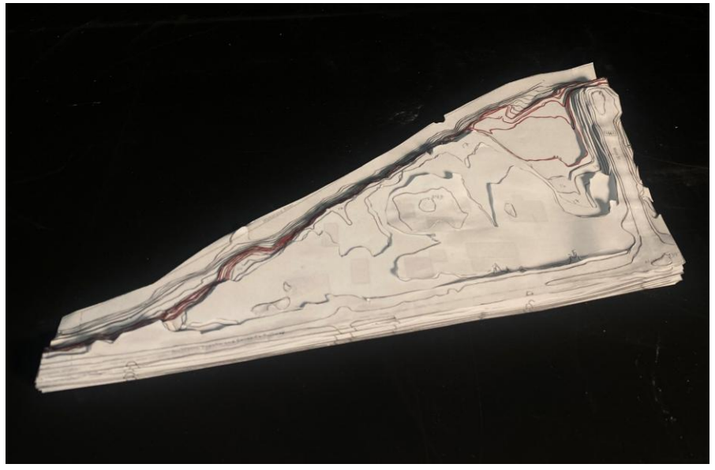
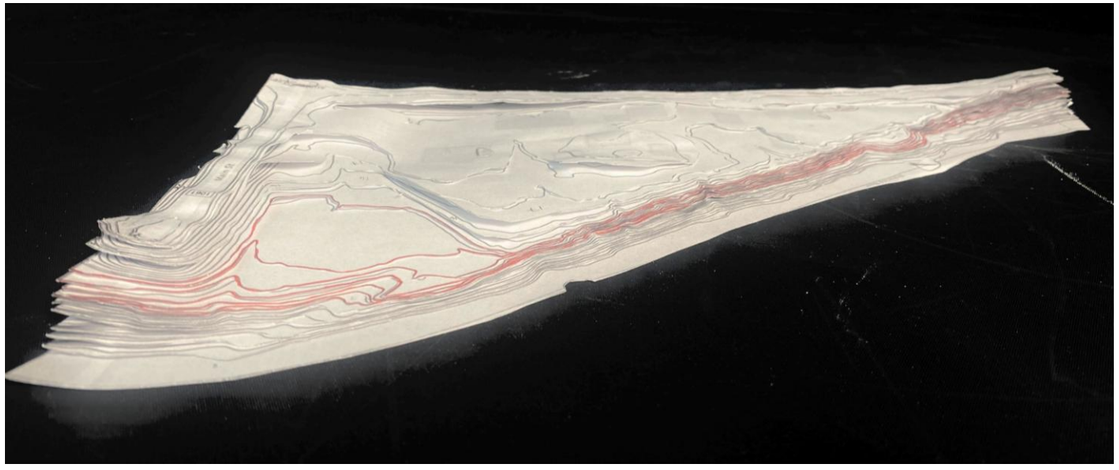


Fig 57 Initial landform model





Initial Landform Study

This model shows the Eudora Site's topography and contours before changes were made.

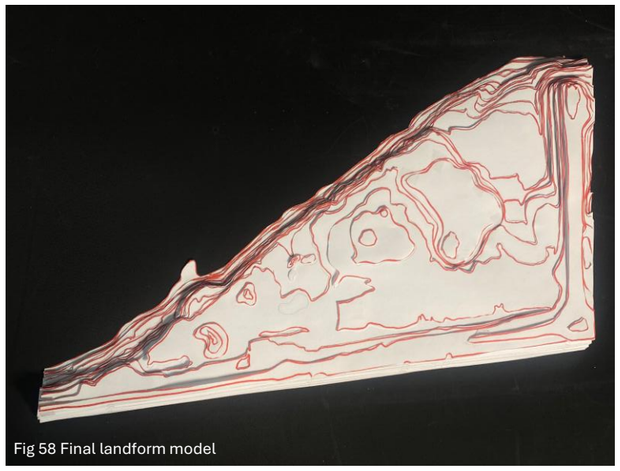
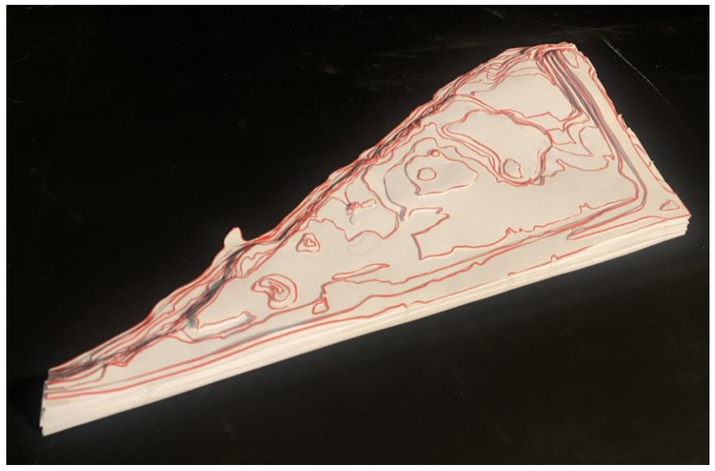
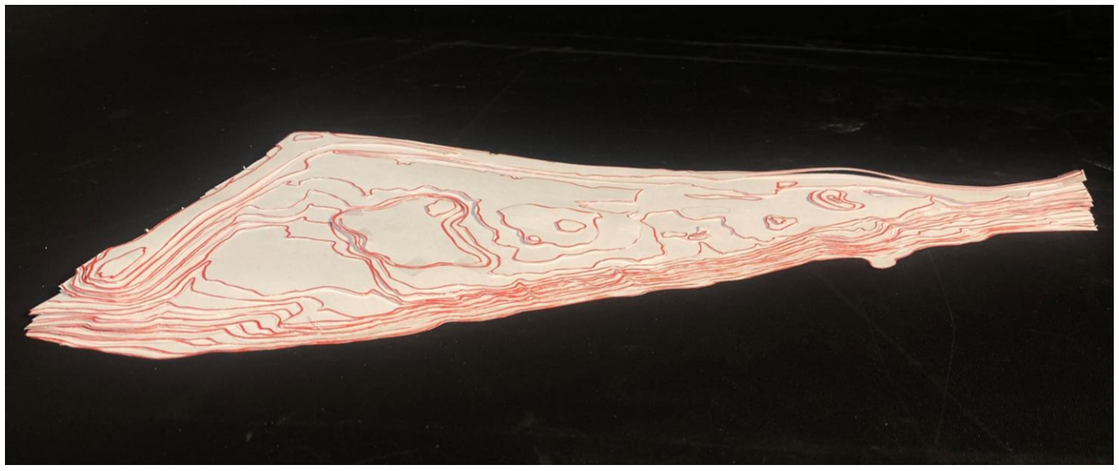


Fig 58 Final landform model





Final Contours

This model shows the final designed topography and contours for the Eudora Site including new tiers for rain gardens, stormwater detention basins, and the expansion of contours for design details.

Chapter 5:
Eudora Site Design Diagrams

Fig 59 Wakarusa River Corridor in Eudora, KS.

Phase 1: Current Site Additions and Begin Plantings

Phase 1 Goals:

- Propose sidewalks to connect from southern sidewalk to northern proposed trails
- Assess soils below concrete/otherwise
- Update boat ramp area and fishing facilities
- Create bathroom in existing pavilion
- Plant rain gardens for runoff infiltration
- Widen riparian buffers through plantings
- Begin ecological buffers inside the site
- Plant trees to begin wooded areas

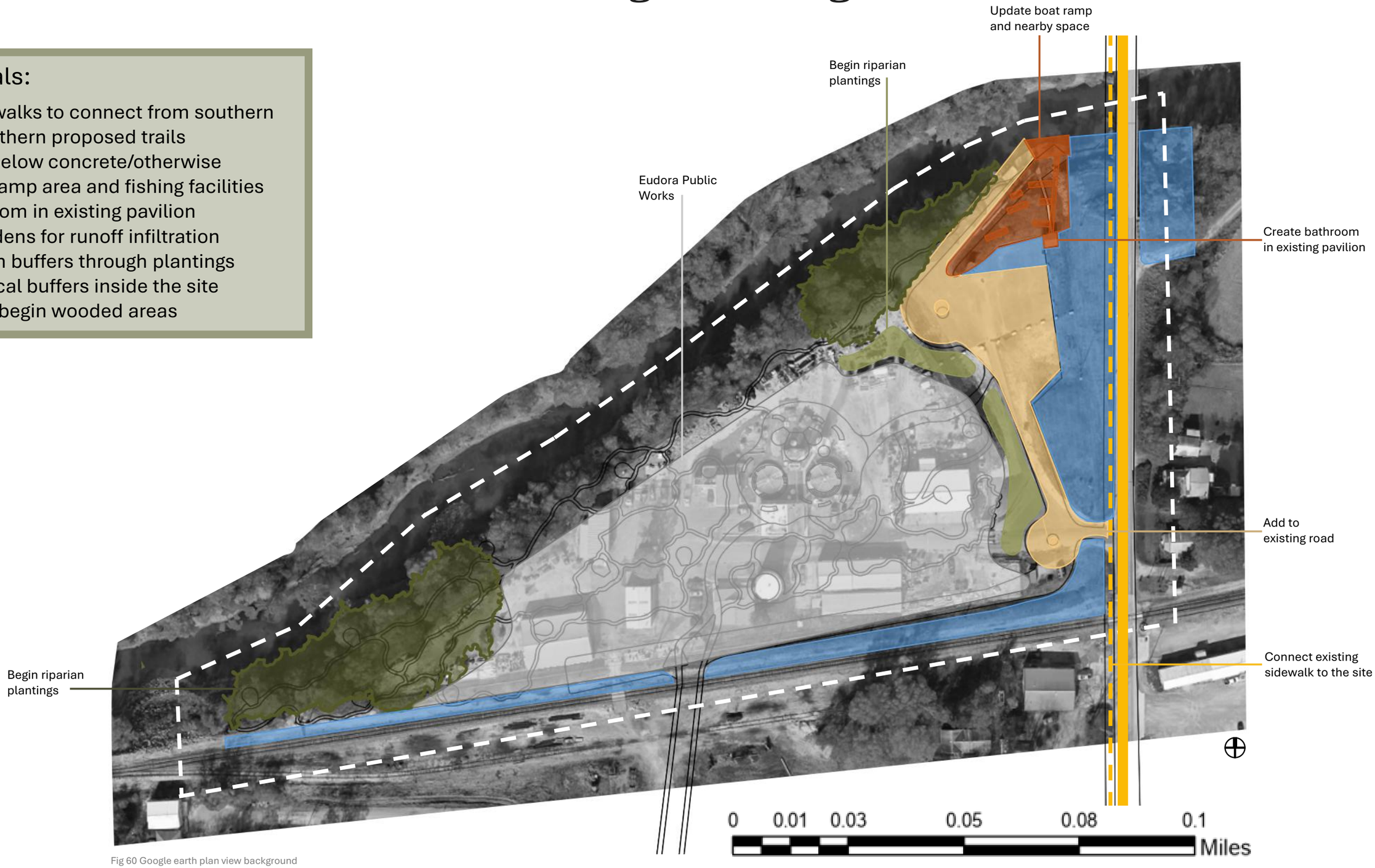


Fig 60 Google earth plan view background

Phase 2: Assessment + Revitalization of Brownfield/Build Small Facilities

Phase 2 Goals:

- Lead and asbestos testing on current materials
- Remove unwanted buildings and cap opened pipes
- Keep metal roofing, stone, circular tanks, white towers
- Recycle windows and doors
- Remove unwanted pavement
- Assess uncovered soils
- Bioremediation
- Phytoremediation
- Plant remaining wooded areas
- Build southern road and parking
- Create on grade trails through the site
- Incorporate signage

Fig 61 Google earth plan view background

Phase 3: Build Permanent Infrastructure and Finalize Plantings

Phase 3 Goals:

- Lay concrete for pavilion structures
- Build structures and fire pits
- Build primary pavilion and stage
- Create play areas
- Create water area
- Build boardwalks
- Finalize plants in meadows
- Install hammocks in wooded areas

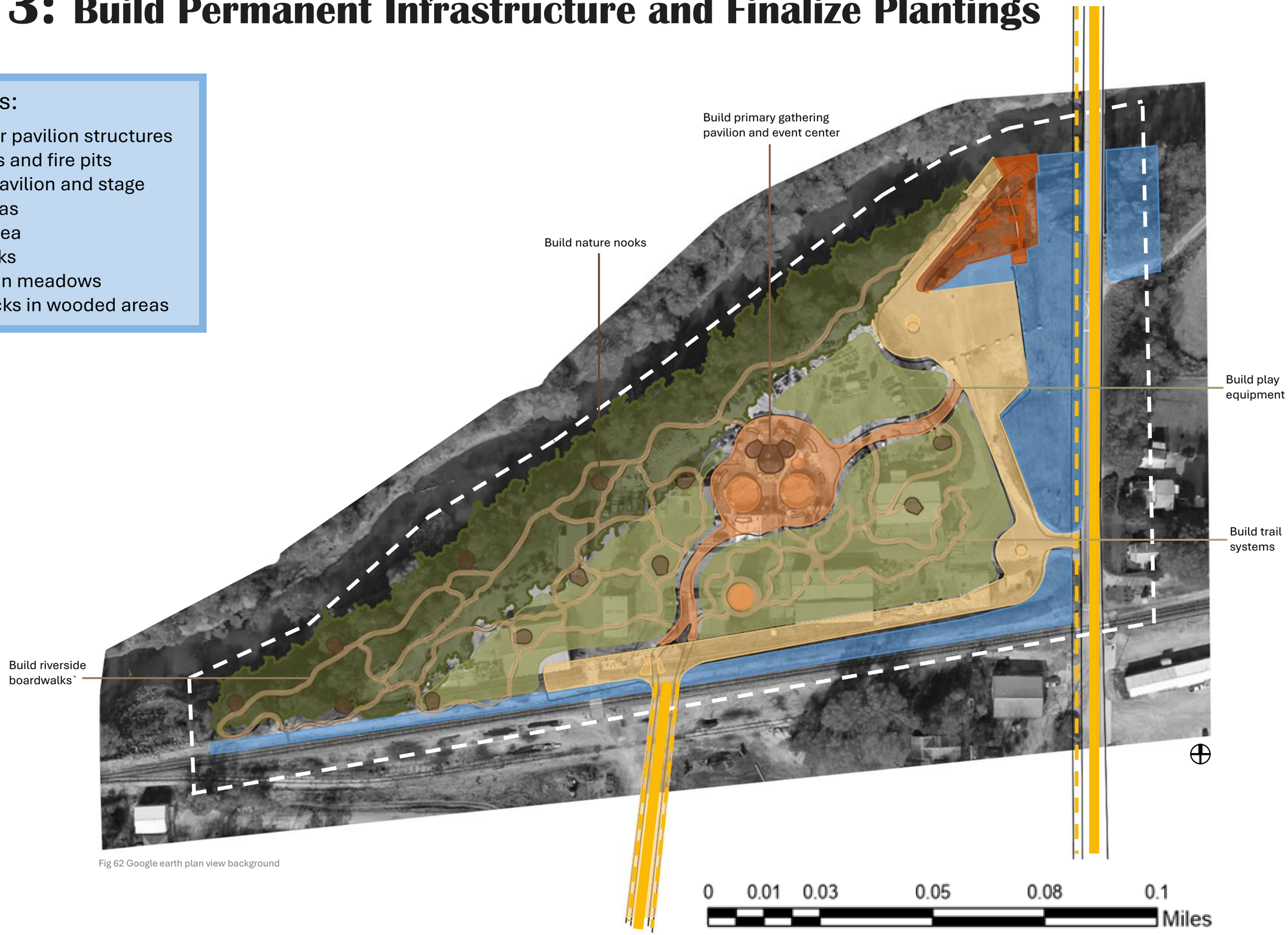


Fig 62 Google earth plan view background

Programming and Activities

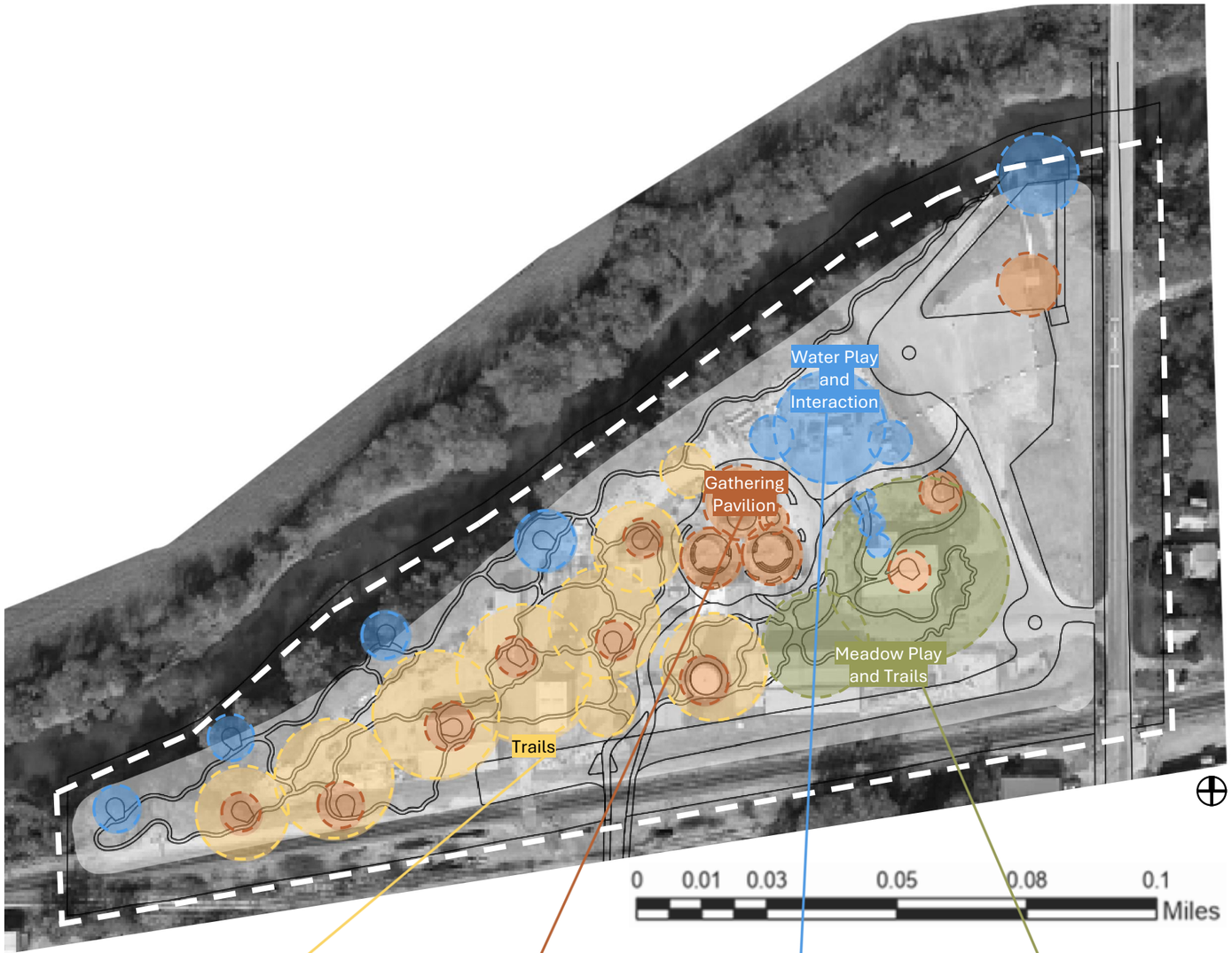


Fig 63 Google earth plan view background

Programming

Fig 65
Permeable Trails and Concrete Boardwalks

Fig 66
Constellation Amphitheater Pavilion

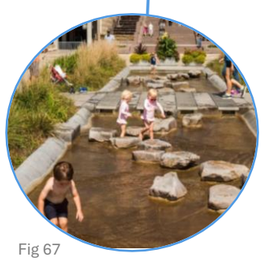


Fig 67
Man-made Stream Play Element

Fig 68
Meadow with Natural Play Elements

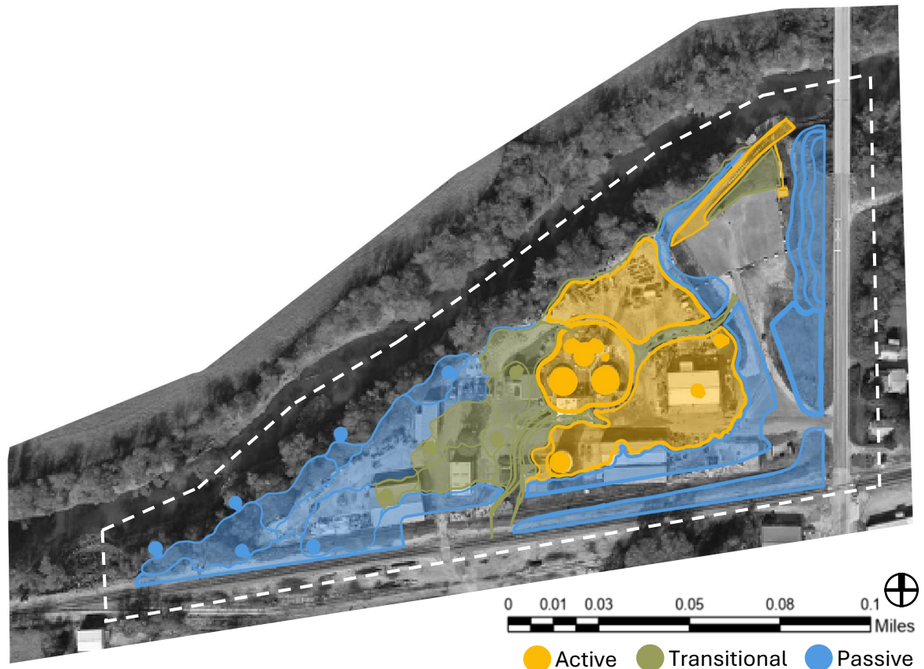


Fig 64 Google earth plan view background

Active vs Passive Space

The site's programming focuses on natural play elements, designated fishing spaces, better boat ramp access, and increased plantings to reduce site flooding.

Throughout the site's circulation, there's permeable paving and concrete boardwalks that weave between active and passive spaces, often designating the trails as a transitional space.

Typical planting areas of the riparian buffer, rain gardens, and planting strips are categorized as passive spaces due to their low activity and quiet atmospheres.

The active spaces are defined as areas with higher programmed activity and are the more social spaces of the design. Gathering structures, the constellation amphitheater pavilions, often serve as active spaces.

User Analysis

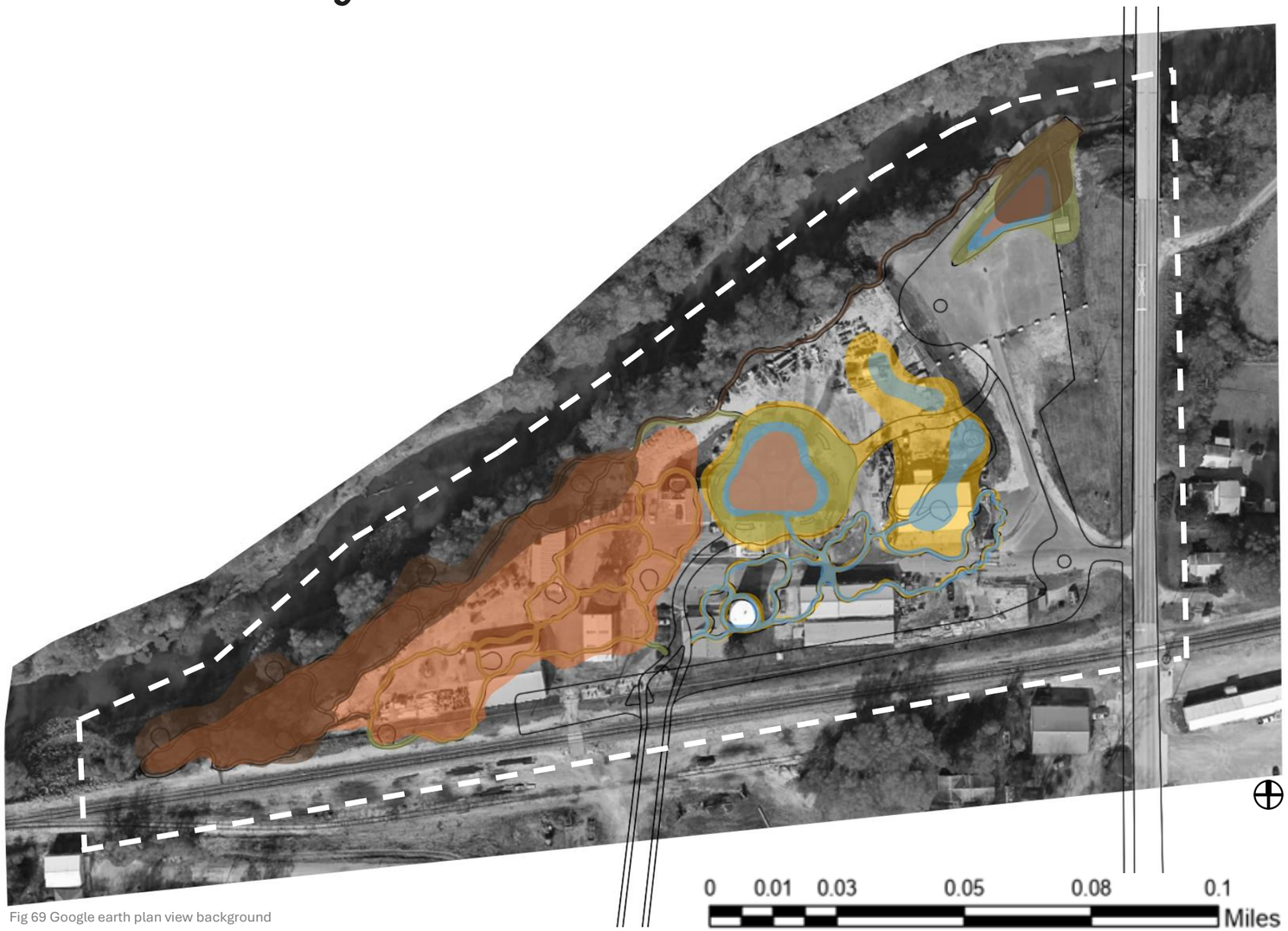


Fig 69 Google earth plan view background

Fig 70 Google earth plan view background

Children (0-12)

Jackson White, 7
Eudora Elementary School Student

- Jackson will use the various water and natural play spaces when visiting the site with his parents, and he will use the trails to walk his dog Buster and enjoy nature.

Fig 75 AI generated image

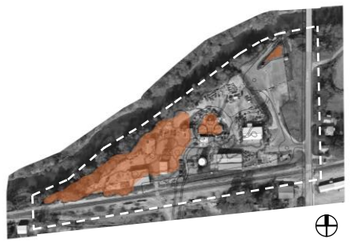


Fig 71 Google earth plan view background

Teenagers (13-19)

Maya Tran, 14
Eudora High School Student

- Maya is very active in school and will use the site a respite from this. Maya will hang out with her friends around fire pits in nooks. On her own, she will utilize the site to study and lounge.

Fig 76 AI generated image

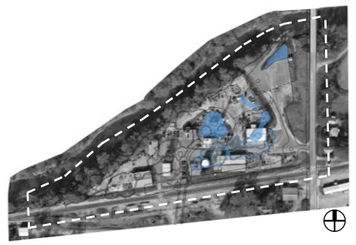


Fig 72 Google earth plan view background

Parents (30-39)

Stephanie Meyers, 32
Nursing home receptionist and mother of two

- Stephanie will use the trails, the hammocks, and the pavilions on the site. She will also use the spaces and nooks near playgrounds to watch over her children while they play.

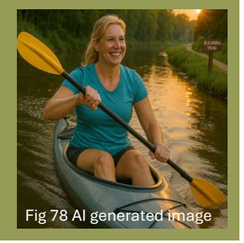
Fig 77 AI generated image

Fig 73 Google earth plan view background

Active Adult (40-49)

Alyssa Sterling, 46
Dietician, 5k Event Planner

- Alyssa is married with one kid, she would walk to the site and use the trails for exercise. She brings her kayak onto the River using the boat Ramp to practice for her next 5k race.



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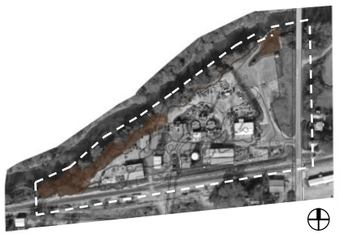
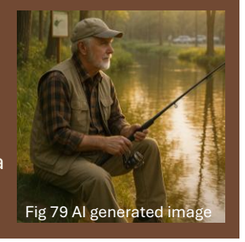


Fig 74 Google earth plan view background

Elders (60-79)

Bill Carlisle, 68
Retired, Boy Scout Troop volunteer

- Bill would enjoy the natural and wooded areas with educational signage. He would also enjoy the solitary fishing nooks near the Wakarusa River as places to teach his grandkids to fish.



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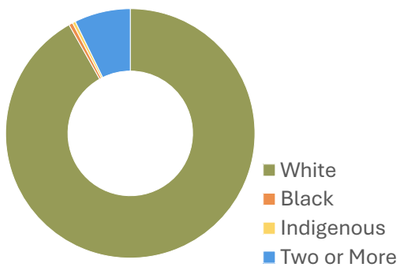
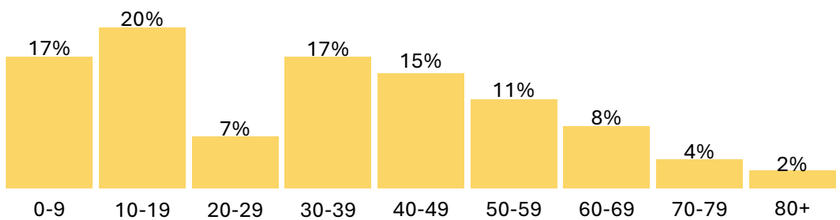


Population by Race

Fig 80 Eudora Comprehensive Plan data



Population by Age Group

Fig 81 Eudora Comprehensive Plan data

Spatial Hierarchy and Circulation

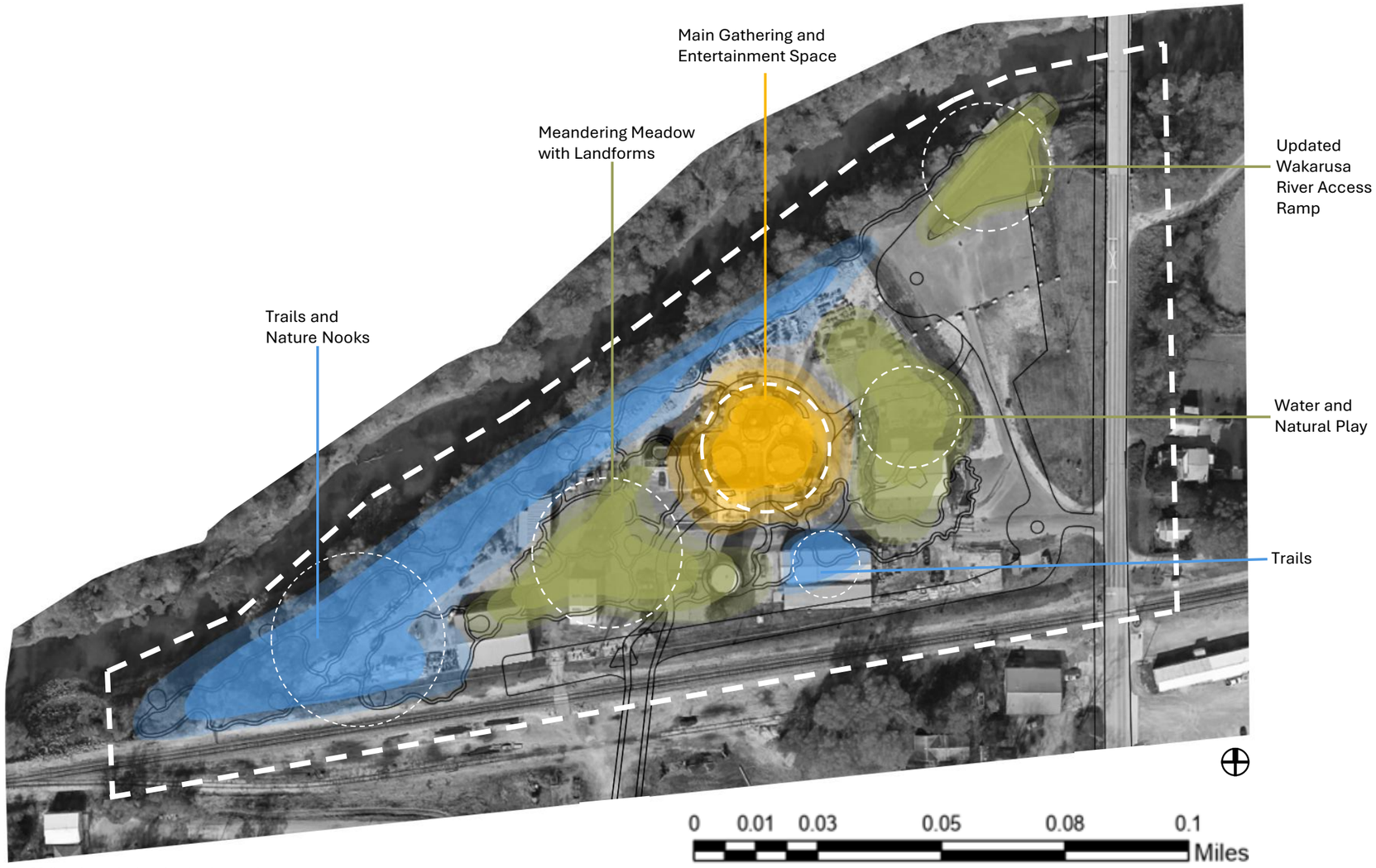


Fig 82 Google earth plan view background

Hierarchy of Spaces

Primary Space Secondary Spaces Tertiary Spaces

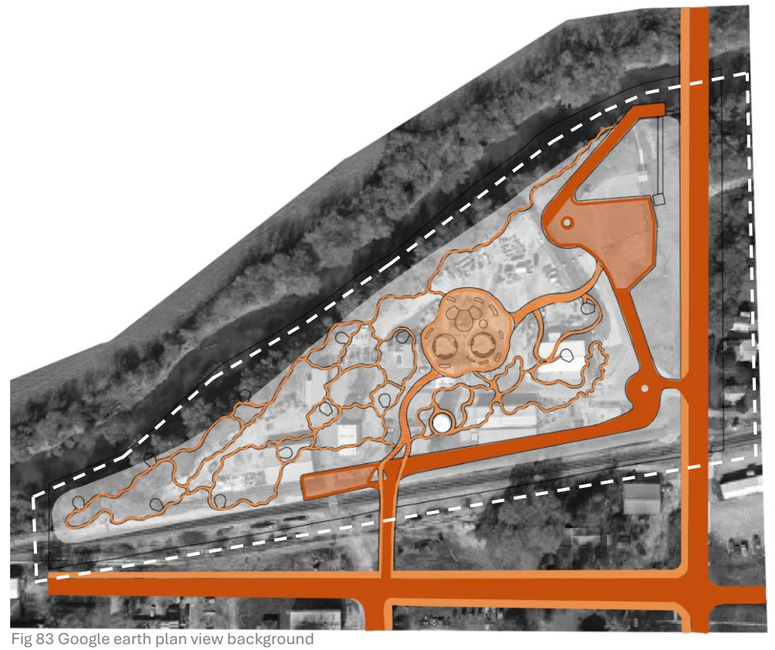


Fig 83 Google earth plan view background

Circulation

0 0.01 0.03 0.05 0.08 0.1 Miles

Vehicular Permeable Pedestrian Boardwalk Pedestrian

The primary space in this design is the central gathering space and event facility. This space contains a large overhead structure, which holds a stage beneath for community events.

The secondary spaces consist of the two play spaces and passive meadow with meandering trails around rolling hills. The tertiary spaces are circulatory trail systems with some respites in small nature nooks for fishing or birdwatching.

The site has two vehicular access points that lead directly into parking lots. The southern lot and raised boardwalks near the gathering space and the cliffs' edge are outside of the flood plain. All other paths are on grade and are ADA accessible.

Sustainability through Flood and Adaptive Reuse

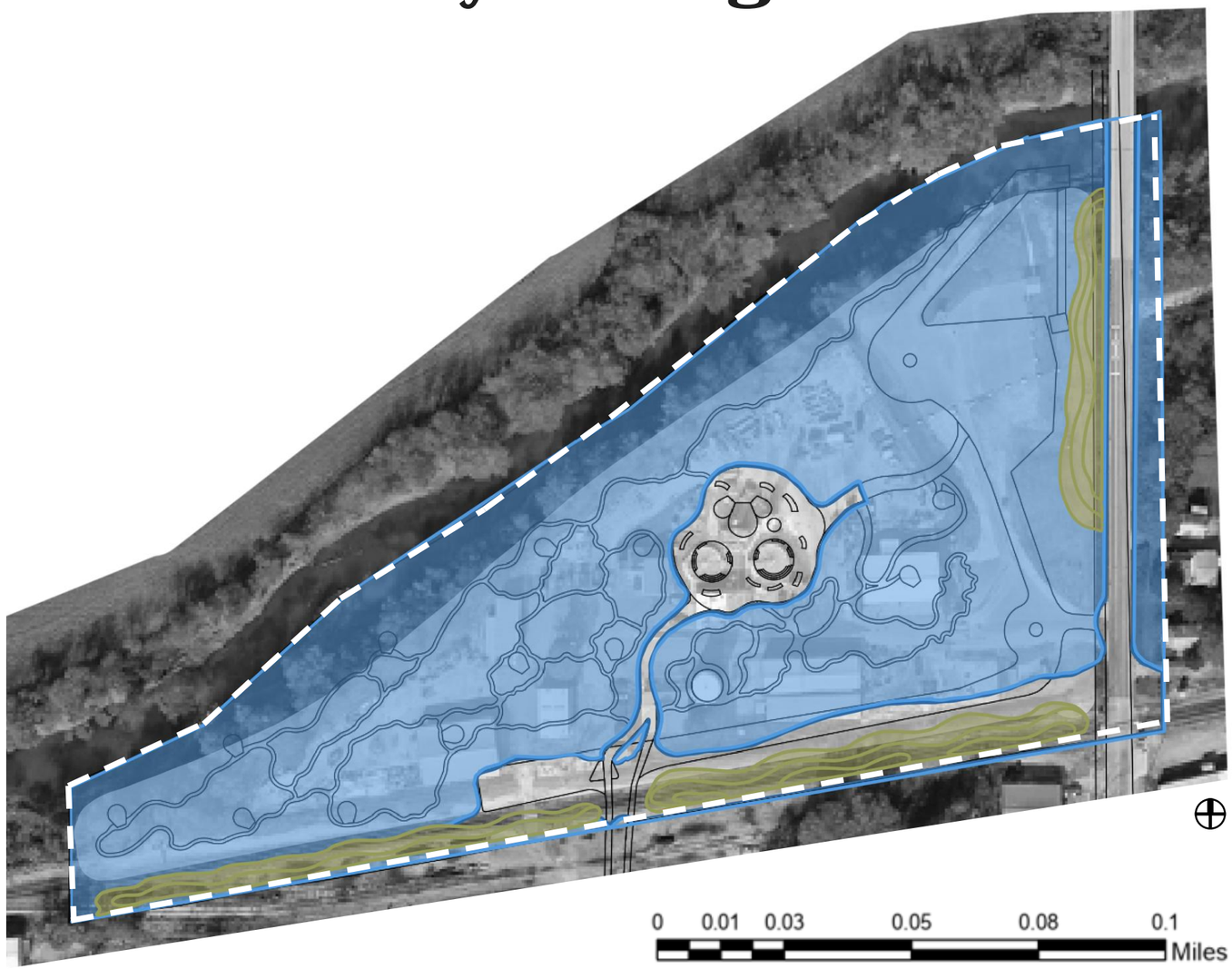
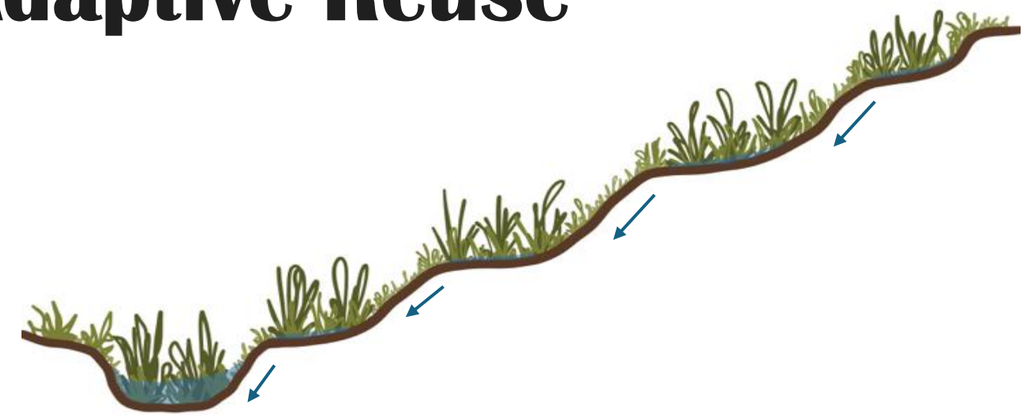


Fig 84 Google earth plan view background

Site Usability Within Floodplain

Floodplain Rain Gardens Usable Design



Rain Garden Structure

Tiered-structured rain gardens, implemented on steep slopes of the site borders, aim to help mitigate stormwater and lessen the amount of highway runoff entering the site.

Fig 85 Google earth plan view background

Adaptive Reuse of Existing

Ecology and Connectivity

Fig 88 K-State Meadow

Meadow (Kansas State University – The Meadow)

- Little Bluestem
- American Beak Grain
- Plains Coreopsis
- Purple Prairie Clover
- Sweet Coneflower
- Buffalo Grass
- Plains Sedge
- Indian Grass
- Quack Grass

Fig 90 Kansas City rain garden

Rain Garden (Kansas City – Bush Creek Community Rain Garden)

- Marsh Milkweed
- Black Eyed Susan
- New England Aster
- Cardinal Flower
- River Oats
- Purple Coneflower
- Wild Ageratum
- Blue Sage
- Wild Quinine

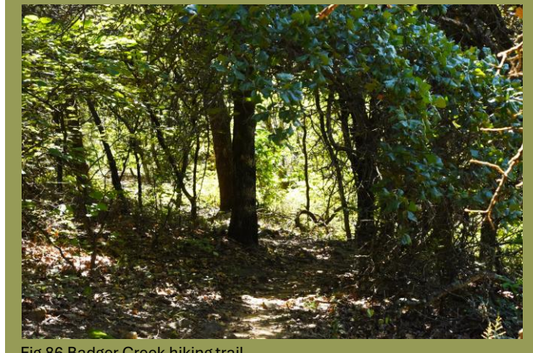


Fig 86 Badger Creek hiking trail.

Wooded Area (Badger Creek)

- Green Ash
- Hackberry
- Eastern Cottonwood
- Bur Oak
- Black Walnut
- Honey Locust
- American Plum
- Sandbar Willow
- Choke Cherry

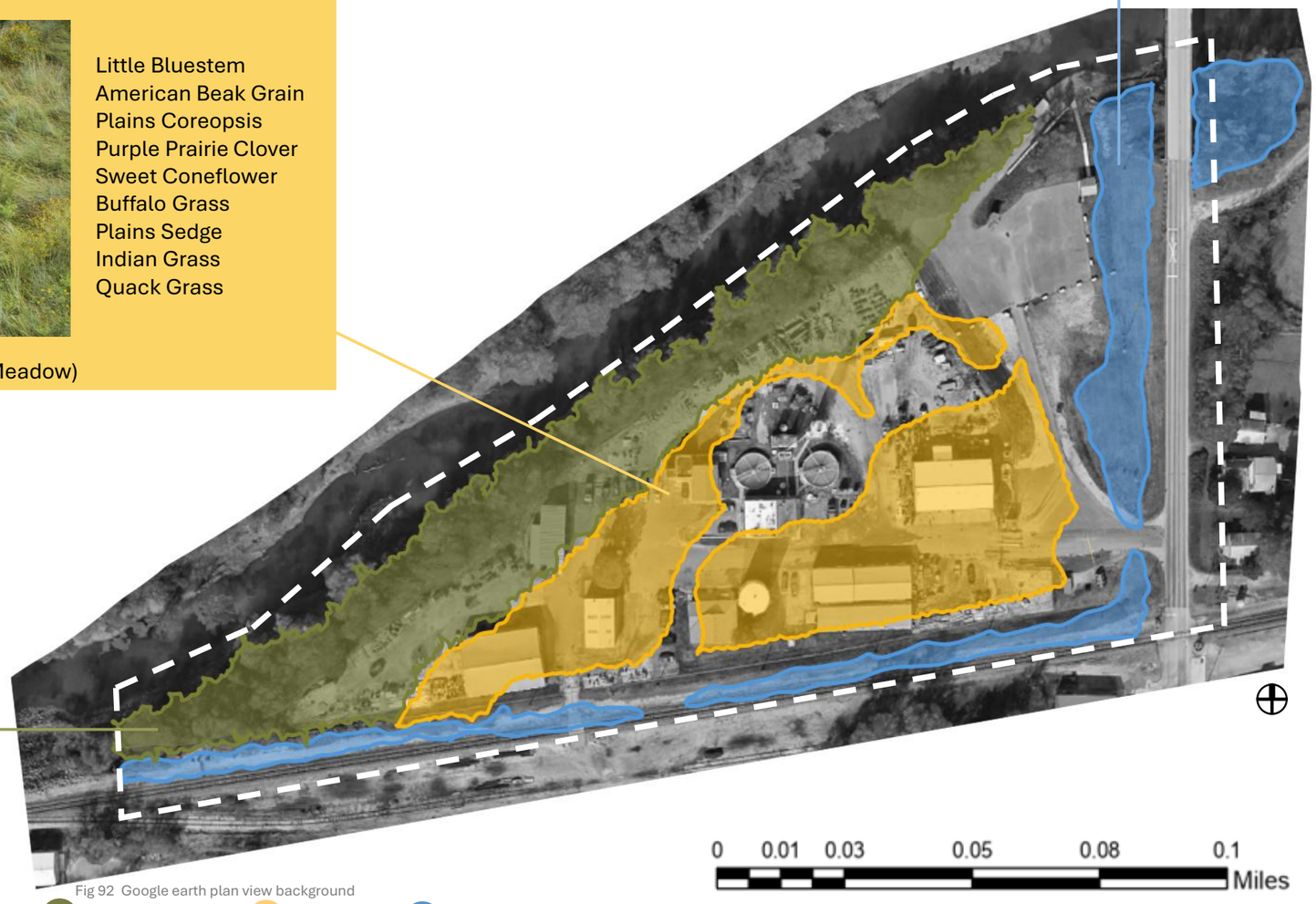


Fig 92 Google earth plan view background

References

AllTrails “Best Trails in Lawrence.” Accessed February 20, 2025. https://www.alltrails.com/us/kansas/lawrence.

City of Eudora. 2020. “City of Eudora: Comprehensive Plan 2040.” Accessed February 20, 2025. https://www.cityofeudoraks.gov/DocumentCenter/View/1508/Eudora-Comprehensive-Plan_w-Appendix_2020-12-19.

City of Lawrence. 2023. “Plan 2040: A Comprehensive Plan for Unincorporated Douglas County & The City of Lawrence.” Accessed February 20, 2025. https://assets.lawrenceks.org/pds/planning/plan-2040/Plan-2040.pdf.

Douglas County Board of County Commissioners. 2024. “Douglas County Open Space Plan: Preserving Douglas County’s Future Together.” Accessed February 12, 2025. https://storymaps.arcgis.com/stories/504ed462eb144a1f9e343aa3e2bdba84.

Douglas County. “Douglas County Geoportal.” Accessed February 12, 2025. https://gis.dgcoks.gov/portal/apps/experiencebuilder/experience/?block_id=layout_864_block_8&id=082d52b6a1ae4f0c87ecdf2d18bd2b3f&page=Home.

Douglas County Heritage Conservation Council a. “Douglas County Natural Landmarks.” Accessed February 21, 2025. https://storymaps.arcgis.com/stories/c5d270ea3b2345939464fab503484e88.

Douglas County Heritage Conservation Council b. 2023. “Rural Historic Resources Guide, Douglas County: An Opportunity Guide for Rural Historic Resources in Unincorporated Douglas County, Kansas.” Accessed February 24, 2025. https://www.dgcoks.gov/sites/default/files/2023-10/rural_historic_resources_guide_final.pdf.

EPA a (Environmental Protection Agency). August 2016. “What Climate Change Means for Kansas”. https://www.epa.gov/sites/default/files/2016-09/documents/climate-change-ks.pdf

EPA b (Environmental Protection Agency). Updated 2025. *Land Use: What are the Trends in Land Use and Their Effects on Human Health and the Environment?* Accessed February 18, 2025. https://www.epa.gov/report-environment/land-use.

Explore Lawrence. “Historic Trails: Follow in the Footsteps of Pioneers.” Accessed February 22, 2025. https://www.explorelawrence.com/things-to-do/history-heritage/historic-trails/.

FEMA (Federal Emergency Management Agency). Updated July 8, 2020. “Floodway” Accessed February 19, 2025. https://www.fema.gov/about/glossary/floodway.

Google Earth. Updated October 2024. https://earth.google.com/web/@38.94608389,-95.09228906,249.52582647a,4994.25682138d,35y,1.38207181h,0t,0r/data=CgRCAggBMikKJwolCiExVHo0NWNKdjVxbk1CQVRLNWJhYk83VWM5dEN6RVE0VHUgAToDCgEwQgIIAEoHCLWdtF4QAQ.

Kansas Department of Wildlife and Parks. “Wildlife Sightings.” Accessed February 17, 2025. https://ksoutdoors.com/Wildlife-Habitats/Wildlife-Sightings.

Kansas Geological Survey. “Geo Facts”. Accessed February 18, 2025. https://www.kgs.ku.edu/geokansas/geokansas/sites/default/files/docs/OC_factsheet1.pdf.

Kansas Historical Society. “Kansas Historical Markers: Douglas County.” Accessed February 21, 2025. https://www.kansashistory.gov/p/kansas-historical-markers/14999#d.

Kindscher, Kelly, Jennifer M. Delisle, Leanne M. Martin, and Erica Staab. February 15, 2016. “A Natural Areas Inventory of Douglas County in Northeast Kansas”. Accessed February 20, 2025. https://kindscher.ku.edu/wp-content/uploads/2016/03/Douglas-County-Inventory-Report-Final-15Feb2016.pdf.

Lawrence Bird Alliance. 2024. “Birding Guide 2024.” Accessed February 17, 2025. https://www.lawrencebirdalliance.org/digital-birding-guide-for-northeastern-kansas.

Lawrence, Kansas. “Community Crime Map.” Accessed February 22, 2025. https://lawrenceks.org/police/crime-map/.

Lawrence, Kansas. “Lawrence, Kansas ArcGIS Geoportal.” Accessed February 23, 2025. https://geoportal-lawrenceks.hub.arcgis.com/datasets/sewer-network-structure-1/explore?location=38.947696%2C-95.245210%2C12.51.

Legends of Kansas. 2025. “Wakarusa River, Kansas.” Accessed February 18, 2025. https://legendsofkansas.com/wakarusa-river-kansas/.

Midwestern Death Trip. “Prehistoric Mounds and Archeological Sites of Kansas.” Accessed March 8, 2025. https://midwesterndeathtrip.com/prehistoric-mounds-and-archeological-sites-of-kansas/.

National Register of Historic Places. “Kansas – Douglas County – Historic Districts.” Accessed February 22, 2025. https://nationalregisterofhistoricplaces.com/KS/Douglas/districts.html.

University of Kansas. 2025. “Land Acknowledgement.” Accessed February 25, 2025. https://civilrights.ku.edu/one-university-land-acknowledgement.

Unmistakably Lawrence. “Sesquicentennial Point.” Accessed March 8, 2025. https://www.explorelawrence.com/listing/sesquicentennial-point/7520/.

Wakarusa River Valley Heritage Museum. “About US.” Accessed February 26, 2025. https://www.wakarusamuseum.org/copy-of-exhibits.

Figures

Figures

Figures