

#### **ACKNOWLEDGMENTS**

#### TRWD BOARD OF DIRECTORS

Leah M. King, President
James Hill, Vice President
Mary Kelleher, Secretary
C.B. Team
Paxton Motheral

#### **TRWD TEAM**

Dan Buhman, General Manager
Alan Thomas, Deputy General Manager
Darrell Beason, Chief Operations Officer
David Geary, Reservoirs Director
Lexi McCalip, Floodway and Construction Director
Paris Sanchez, RLA, Landscape Architect Manager
Natasha Hill, Director of Outreach and Communications

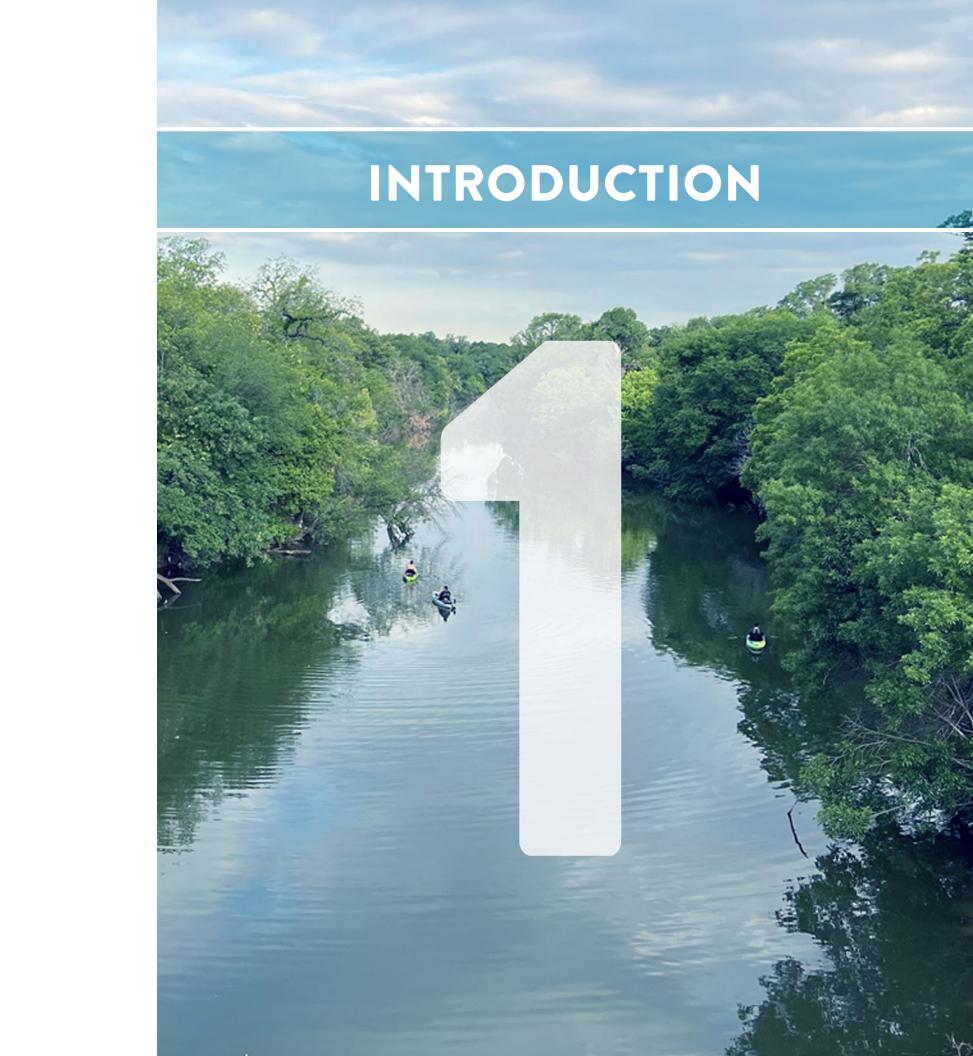
#### **PLANNING TEAM**

Philip Neeley, PLA, ASLA, Dunaway Adam Brewster, PLA, ASLA, Dunaway Kourtney Gomez, Dunaway Brian Trusty, PROS Consulting



## **CONTENTS**

| 1 | INTRODUCTION                       | 6   |
|---|------------------------------------|-----|
|   | Recreation Master Plan             | 10  |
| 2 | EXISTING CONDITIONS                | 12  |
|   | History                            | 15  |
|   | Study Areas                        | 17  |
|   | Floodway Character Zones           | 19  |
|   | Lake Area Character Zones          | 27  |
| 3 | PUBLIC INPUT ·····                 | 32  |
|   | Listening to Stakeholders          | 35  |
|   | Responding to Stakeholder Feedback | 42  |
|   | Influencing Plans                  | 44  |
| 4 | VISION & GOALS                     | 50  |
|   | Core Recreation Values             | 53  |
|   | Goals                              | 55  |
|   | Strategic Initiatives              | 57  |
| 5 | CONCEPT PLAN & RECOMMENDATIONS     | 62  |
|   | Program                            | 65  |
|   | Proposed Recreational Improvements | 67  |
|   | Events                             | 69  |
|   | Trails                             | 71  |
|   | Trinity Trails & Floodway Projects | 73  |
|   | Lake Area Projects                 | 88  |
|   | Recommendations                    | 94  |
|   | Trinity Trails Projects            | 95  |
|   | Floodway Projects                  | 97  |
|   | Lake Area Projects                 | 99  |
| 6 | APPENDIX ·····                     | 102 |
|   | Maintenance Standards              | 106 |
|   | Market Analysis                    | 109 |
|   | Pro Forma                          | 111 |
|   | Trinity Trails Projects Schedule   | 119 |
|   | Floodway Projects Schedule         | 121 |
|   | Lake Area Projects Schedule        | 123 |

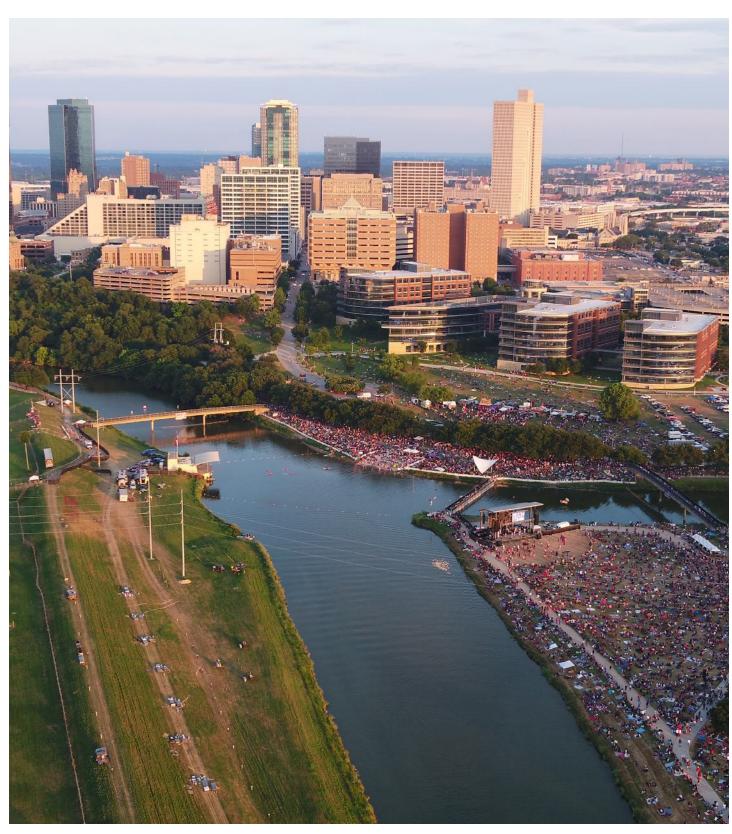




## INTRODUCTION

The Tarrant Regional Water District (TRWD) was established in 1924 and has become the regional provider of water supply and flood management for Tarrant County and 10 additional North Texas counties. The third mission - Recreation - is a byproduct of the natural resources owned by TRWD for accomplishing its primary missions of water supply and flood control. The focus of this Recreation Master Plan is to create alignment between the public, partners, TRWD Board of Directors, and staff in order to define the district's unique role in the recreation landscape. From the over 100 miles of trails along the floodways, to destination amenities such as Panther Island Pavilion, Eagle Mountain Park, and Twin Points Park, TRWD provides tremendous value to local residents and communities. The district also provides regional attractions that draw visitors from beyond the immediate study area of this Recreation Master Plan.

This Master Plan is based upon various input from local communities across Tarrant County – including user groups, key stakeholders, and community leaders. Having a new plan will help guide the district in expanding and enhancing the user experiences and complement the offerings and amenities of other regional partners. TRWD will continue to provide stewardship of the natural resources under its management, adding to the quality of life throughout Tarrant County.



Fort Worth Fourth Festival

#### **RECREATION MASTER PLAN**

This Plan establishes a vision for a safe interconnected system of trails, parks, and natural spaces along the banks of Trinity River, shores of the Tarrant County lakes, and other areas controlled by TRWD.

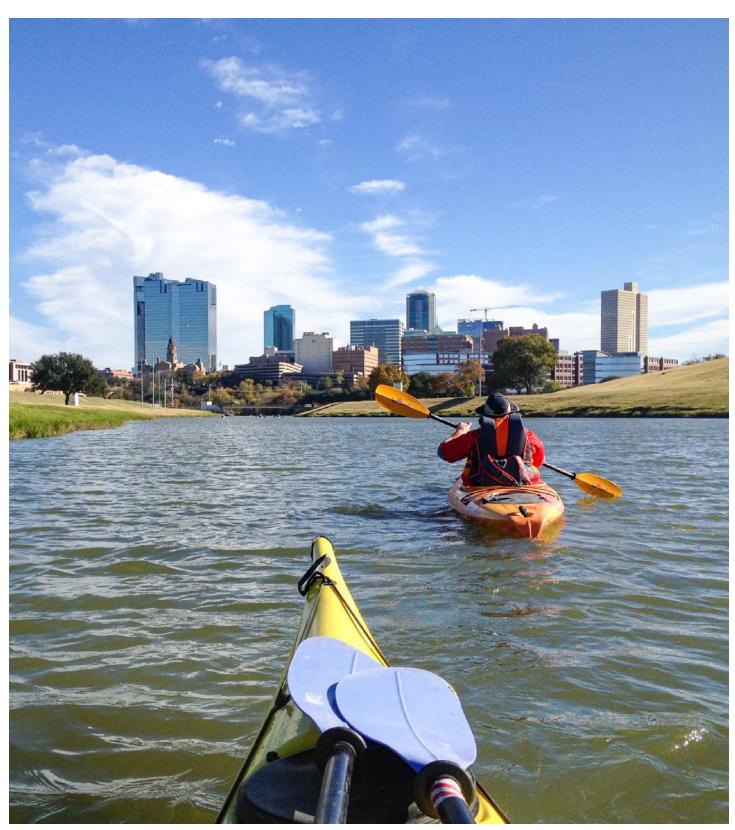
Attracting people and wildlife from around the region, these waterways and lands have a myriad of users and influences to consider. So, a broad range of stakeholders including municipalities, agencies, advocacy groups, and individual community members were engaged to provide input.

This project seeks to build on existing plans and leverage existing assets with new high-quality enhancements that improve recreational access, enhance quality of life, and promote environmental awareness and water conservation.

AS PART OF TRWD'S 100-YEAR
CELEBRATION, THE DISTRICT
SEEKS TO DEFINE A
CLEAR VISION FOR RECREATION &
OPEN SPACE OPPORTUNITIES.

# EXISTING CONDITIONS





Downtown Fort Worth views from the Trinity River

## **EXISTING CONDITIONS**

The planning process began with a tour of TRWD resources, allowing the Dunaway Team a firsthand look at the TRWD-owned properties and recreation resources. Additionally, the Team was provided with a wealth of existing information, including previous maps, studies, GIS files, roadways, parking, utilities, hydrology and drainage information, and historical planning efforts. This exhaustive dataset was beneficial to the Team in understanding current activities, as well as allowing the planning Team to appreciate the unique characteristics of each property.

In addition to the analysis of TRWD's physical attributes, the planning Team reviewed all previous recommendations for programs and services. This encompassed a holistic examination of programs and services offered by both TRWD and other organizations, ensuring a comprehensive understanding of the potential collaborative opportunities to enhance the recreational mix. The study areas are shown on the map provided on page 17. The existing conditions maps and in-depth analyses for each study area (refer to pages 19 - 30) have played a pivotal role in shaping the overarching planning process. These insights facilitated meaningful discussions with TRWD leaders on planning goals, objectives, and potential recreational programming elements.







Recreation activities over the years

#### **HISTORY**

The Trinity River is a crucial Texas waterway that has influenced the development of North Texas, ever since the people first settled along its banks. Originally a small outpost, on the bluffs overlooking the confluence of the Clear Fork and West Fork, Fort Worth is now a major city intertwined with the Trinity River.

Throughout the years, there have been significant changes to both the river and the city; each impacting the other. The river provided water for drinking, agriculture, and transportation fueling the city's expansion from the sleepy town on the bluffs to a sprawling modern city that eventually encroached on the river's natural floodplain. Tragically, neighborhoods and businesses in low-lying areas were devastated twice by catastrophic floods, in 1922 and 1949, resulting in multiple deaths and millions of dollars in damages. This led to the implementation of critical flood control measures including, the floodway levee systems built at Marine Creek Lake and Cement Lake. Transforming the once meandering river into a grass-lined channel, these measures have been extremely successful in reducing flood risk throughout the city.

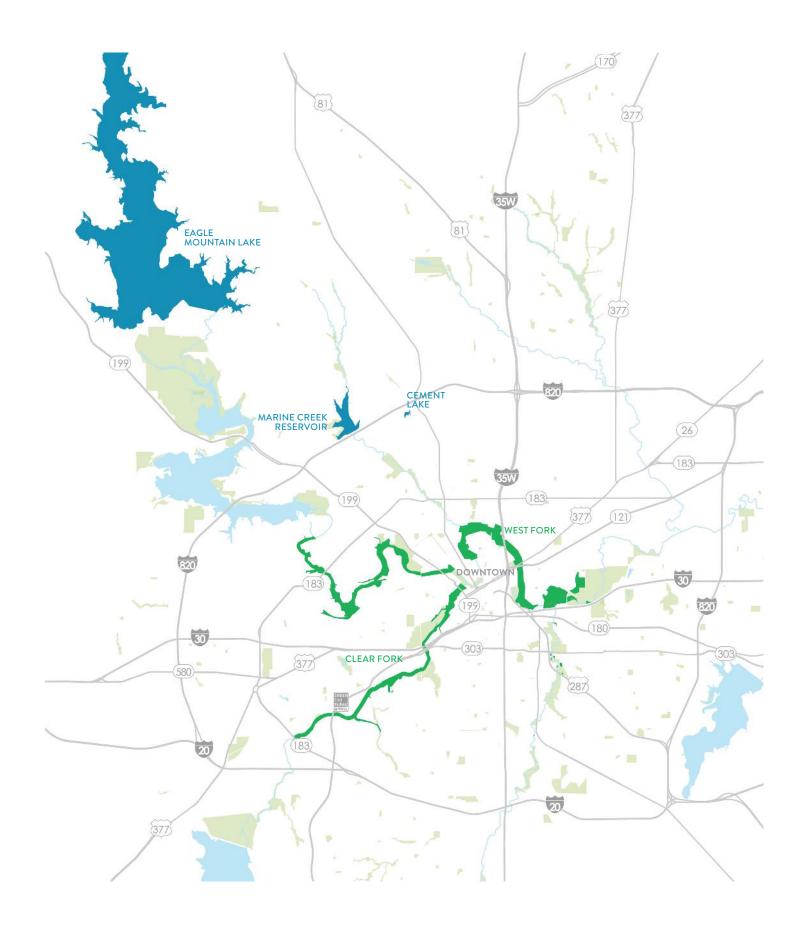
Initially, these channels were uninviting and gained a reputation as an illegal dump site, giving many residents a negative impression of the river. In 1971, Streams & Valleys. Inc. formed as an advocacy group for promoting the Trinity River as the 'City's most valuable resource'. The hard work of this group, TRWD, and partner agencies has spurred a host of beautification efforts, community events, and recreation

projects bringing people back to the river banks and helping to shift public sentiment toward one of appreciation and stewardship. The various areas along the Trinity are now a major recreational amenity and draw for the City hosting daily users and civic celebrations throughout the year.

TRWD is continually evaluating how best to meet the rising water demands of the growing region. No water supply project has been more impactful to the Tarrant County landscape than Eagle Mountain Lake. The dam for this 8,738 acre reservoir was finished in 1931, and the lake was finally filled to conservation level 10 years later. Since then, the lake shores have transitioned from rural ranches to a collection of lake front communities. Boat ramps, marinas, and private docks provide the access to water for recreational boaters, skiers, anglers and swimmers. Parks around the lake allow visitors to escape to nature and enjoy rugged hiking, scenic views, and sandy beaches just minutes from downtown Fort Worth.



Major Ripley A. Arnold Statue



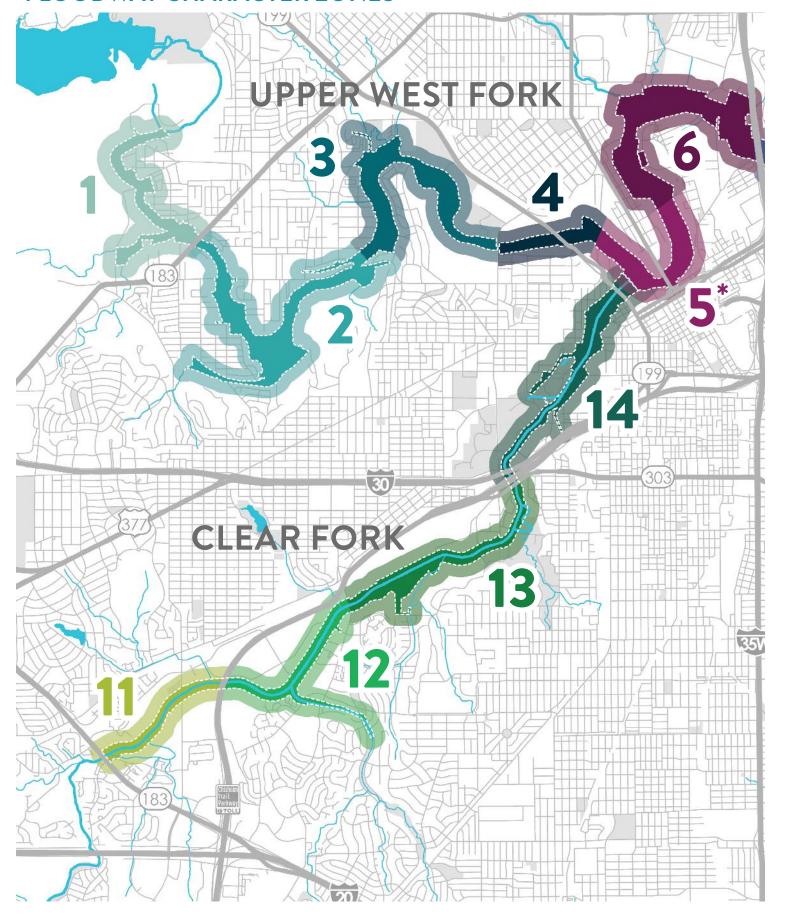
#### **STUDY AREAS**

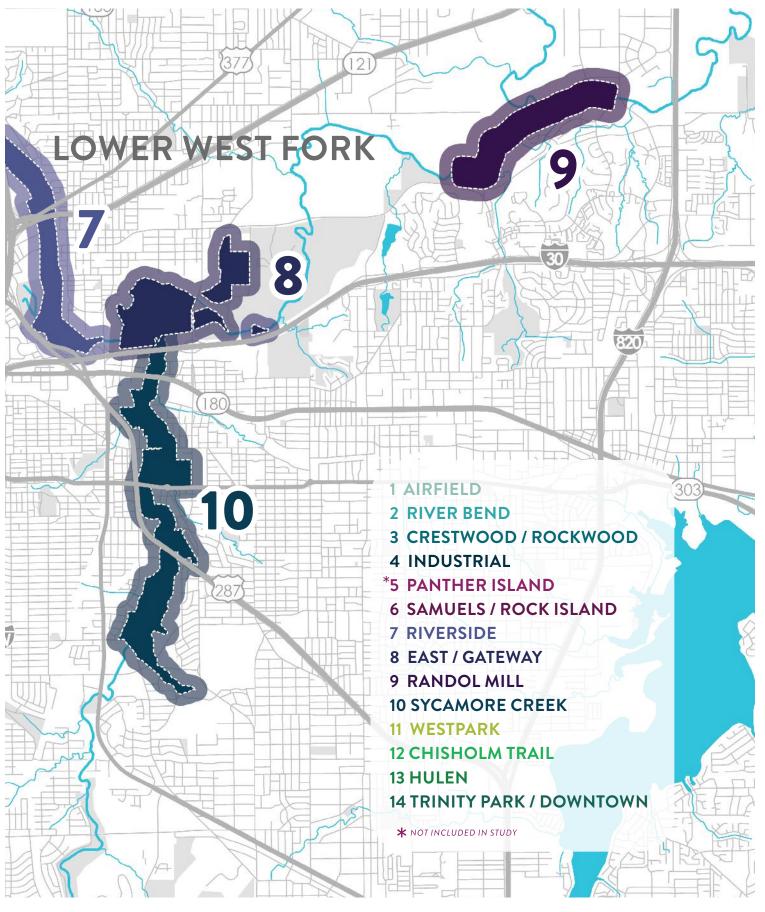
The areas addressed in this planning effort include the Trinity River region, encompassing the Trinity River Floodway (comprising the West Fork, Clear Fork, and major tributaries), Eagle Mountain Lake (encompassing Eagle Mountain Park, Twin Points Park, and the Walnut Creek property), Marine Creek Reservoir, and the Cement Lake property. An overview of the study area is presented on the map on this page.

To provide a foundational understanding, detailed existing conditions maps and analyses for each study area were compiled (refer to pages 19 - 30). These visual aids and analytical insights played a crucial role in the planning process, fostering substantive discussions related to planning goals, recreational needs, and potential programming elements.

The visual representation of these study areas in this section offer a spatial context for the planning endeavors, providing a better understanding of the geographical distribution and potential interconnections within the Trinity River region. The existing conditions maps document some of the unique characteristics of each area. These insights gave the planning Team a foundation for informed decision-making as related to regional recreational development.

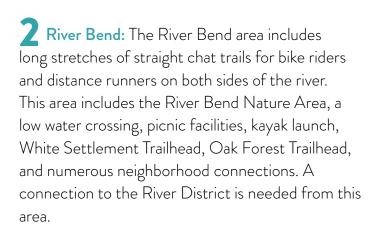
#### **FLOODWAY CHARACTER ZONES**





#### **UPPER WEST FORK**

Airfield: This area is an underutilized segment with surrounding natural destinations. These destinations include Airfield Falls Conservation Park Trailhead. Other Assets in this area include the maintenance roads on both sides of the river that provide trails and a low water crossing at US 183/Westworth Boulevard. There are opportunities here for loop trails, more trailhead enhancements, and development.



3 Crestwood/Rockwood: Good views of the downtown Fort Worth skyline are seen here when headed south. Existing chat trails are mainly on the South/Crestwood side. There are neighborhood connections at Brookside Drive, Deering Road, Barabara Road, and Isbell Court. Surrounding influences include Anderson-Campbell Park, Rockwood Park & Golf Course, Westside Little League Park, Crestwood neighborhood, and variety of grasses & trees.







4 Industrial: This long straightaway includes an old railroad bridge, and educational signage. The north side of the river is vacant land and some residential communities. The south side of the river is predominantly industrial use. Some opportunities to consider are a trail connection to Oakwood Cemetery and the Northside neighborhood.







#### **LOWER WEST FORK**

**6** Samuels/Rock Island: This area includes trails, picnic facilities, bike racks, a bridge crossing over Marine Creek, and Hogsett and Cold Springs Trailheads. The wider section of the river presents an opportunity for water recreation. An opportunity to link Riverside Park to Marine Creek and a connection to Delga Park should be considered. This area is a possible relocation for the Metroplex Ski Club.



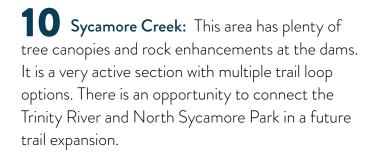
Riverside: Located in the shadow of downtown just east of I-35 this segment includes the 4th St Trailhead, 4th St low water crossing, Opal's Farm, planned kayak launch, picnic facilities, playground, bike share, and connections to Riverside Park and Greenway Park. The east side of the river is missing trail segments in the north portion of the riverside park and a trail crossing at Riverside Park could provide a recreational trail loop.



**8** East/Gateway: This portion of the river includes long straightaways making it desirable for rowing. Recreational assets include the Fort Worth Rowing Club, the Trinity River Oxbow, and a low water crossing east of Beach Street. There is potential for improvements to the valley storage area. Surrounding influences include Hope Church, I-30, and Gateway Park.



**9** Randol Mill: This span of floodway includes a recently constructed trail from Quanah Parker Park and runs along the southern edge of the Trinity River up to Handley Ederville Road. This is an ideal spot for pedestrians living in the Riverbend neighborhood and visitors of Quanah Parker Park to experience a deeply shaded trail segment along the West Fork.







#### **CLEAR FORK**

Westpark: The Westpark area has concrete & soft surface trails, picnic facilities, bike racks, River Park Trailhead, and the Southwest 183 trailhead near 183 bridge. The riverbed, downstream of the dam, creates a unique shallow water exposed rock riffle complex. The old oxbow could benefit from a bridge connection.



12 Chisholm Trail: The channel in this section includes the only rock shelf in the floodway. Recreational assets in this area include concrete and chat trails all along the north bank, a low water crossing at Press Cafe, picnic facilities, bike racks, bike share, a signature bridge structure suspended from Clearfork Main Street bridge, and the Riverglen Trailhead with parking.



13 Hulen: There are concrete and chat trails near the railroad switch yard while the south bank includes chat trails for a portion of the segment. The eastern portion has a single concrete trail with a trail bridge installed near I-30. Here you can also find a fishing pier, bike share station, bike racks, kayak launch, picnic facilities, channel with areas of exposed surface rock along the bank, and Crystelle Waggoner Trailhead near the Woodshed restaurant.



## 14 Trinity Park/Downtown:

This area is run in partnership with the city of Fort Worth and includes plenty of tree canopies and rock enhancements at the dams. It is a very active section with multiple trail loop options. There are concrete and chat trails of various widths, the Trinity Trails Trailhead, bike racks, bike share, canoe chutes, ADA fishing pier, grill, kayak launch, playground, picnic facilities, the signature Phyllis J. Tilley Memorial Bridge, Rotary Plaza Trailhead, and four dams with rock boulders (one is crossable). A majority of Trinity Park is owned and operation by the City of Fort Worth and included in the PROS Plan.



| Inventory of Recreational Resources along the Floodway |                 |                 |            |  |  |  |
|--|-----------------|-----------------|------------|--|--|--|
|  | Upper West Fork | Lower West Fork | Clear Fork |  |  |  |
| Total Trail Miles                                      | 26.9            | 35.1            | 43.2       |  |  |  |
| Trailheads   | 7               | 9               | 18         |  |  |  |
| Kayak Launches   | 3               | 1               | 5          |  |  |  |
| Emergency 911 Signs                                    | 74              | 108             | 71         |  |  |  |
| Bike Racks   | 1               | 9               | 24         |  |  |  |
| Doggie Pots  | 5               | 5               | 15         |  |  |  |
| Drinking Fountains                                     | 6               | 9               | 27         |  |  |  |
| Misters  | 3               | 3               | 6          |  |  |  |
| Park Benches   | 55              | 55              | 307        |  |  |  |
| Pedestrian Bridges                                     | 11              | 15              | 20         |  |  |  |
| Picnic Tables  | 14              | 50              | 99         |  |  |  |
| Trash Receptacles                                      | 22              | 77              | 157        |  |  |  |
| Portable Restrooms                                     | 3               | 8               | 13         |  |  |  |
| Shelter / Pavilions                                    | 7               | 11              | 17         |  |  |  |
| Slow Zones   | 0               | 0               | 16         |  |  |  |
| Trail Signs  | 19              | 22              | 86         |  |  |  |
| Trail Arts   | 18              | 6               | 3          |  |  |  |
| Historical Markers                                     | 6               | 7               | 2          |  |  |  |
| Geocache Locations                                     | 6               | 8               | 14         |  |  |  |
| Designated Fishing Locations                           | 0               | 1               | 5          |  |  |  |
| Wildflower /Natural Areas                              | 134.6 ac        | 77.7 ac         | 70 ac      |  |  |  |

#### LAKE AREA CHARACTER ZONES



Eagle Mountain Lake: This lake was constructed in 1931 for flood control and water supply.

Secondarily, it is very popular for boaters with 6 marinas, 6 boat ramps, 2 camping areas, and a large water supply. The lake is primarily in Tarrant County with the north portion in Wise County. It provides water supply for multiple municipalities including Fort Worth, Azle, Briar, Newark, and Pelican Bay. The shoreline is primarily residential with some private land and natural areas.

2 Indian Creek: Indian Creek property, nestled along Indian Creek Drive just off Morris Dido Newark Road, bordering the serene shores of Eagle Mountain Lake. Once a fishing camp, this picturesque area boasts a rich history and natural beauty. Near The Resort neighborhood, it offers an opportunity to be a tranquil retreat for outdoor enthusiasts and nature lovers alike.

**3** Eagle Mountain Park: Some recreational assets at Eagle Mountain Park include nature trails, informational signage, pavilions, parking, primitive picnicking, water fountains, and portable restroom enclosures. The area is overall rugged terrain and shoreline surrounded by mostly undeveloped property, agricultural use, and direct access from Morris Dido Newark Rd (FM 1220). Opportunities here could include expanded hiking trails, nature learning, public shoreline access, and fishing. All future opportunities need to be conscious of environmentally sensitive areas.







Walnut Creek: This significant watershed flowing into Eagle Mountain Lake includes a large natural area with dynamic riparian habitat and densely wooded canopy. The area is neighbored by Shady Grove Park, Walnut Creek Elementary School, and residential communities. All future opportunities need to be conscious of this environmentally sensitive area. This property provides potential for enhanced access and educational opportunities, expanded nature trails, swimming, and fishing.

Twin Points Park: This park includes dayuse access to the swim cove and is home to AYA ballfields. Recreational activities include swim beach, picnicking, volleyball, BBQ grills, boat launches, restrooms, snack & retail vendors, horseshoes, natural areas, and paddlesports. The park is situated on the south end of Eagle Mountain Lake on a peninsula between two natural points. There are opportunities for potential vendor expansion for recreation and retail, and increased shade picnicking. All future opportunities need to be conscious of environmentally sensitive areas.

6 Marine Creek Reservoir: This 250 acre reservoir is the northern-most flood control reservoir in the Fort Worth floodway. Limited boat traffic creates a quiet atmosphere and a well-stocked fishing area. The lake should be no-wake for public safety purposes. Recreational amenities include boat ramps, fishing piers, rowing club, concrete trail loops and neighborhood connections, disc golf, kayak launch, Ten Mile Trailhead, and picnic shelters.







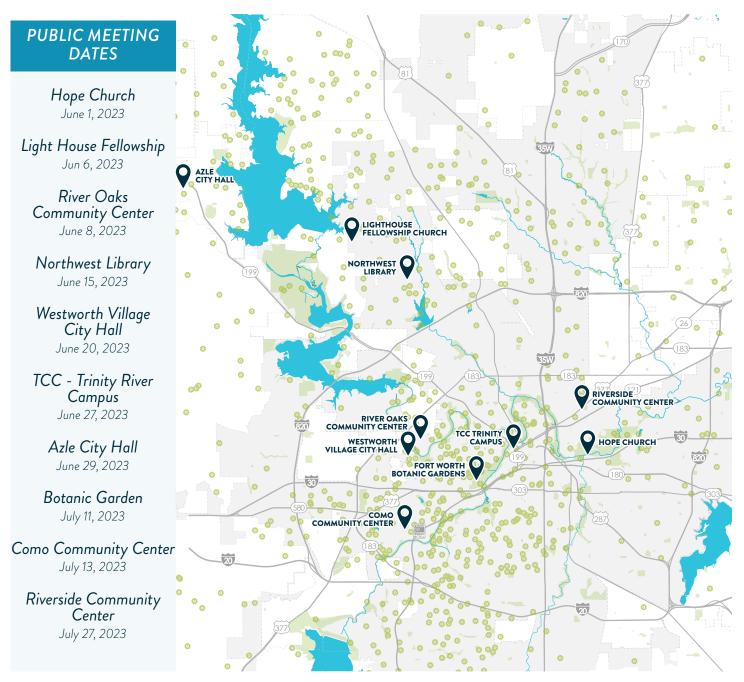
Cement Lake: This property provides for the North Texas High School Rodeo Association, Pioneer Youth Baseball & Softball Association, Eagle Mountain Saginaw ISD FFA and 4H club barns, horse boarding for Tarrant County Sheriffs Department, and the Saginaw Youth Association. The biggest opportunity for Windy Ryon is to reorganize the fields and parking for a more efficient layout.



| Inventory of Recreational Resources of the Lake Areas |              |                     |                  |  |  |  |
|---|--------------|---------------------|------------------|--|--|--|
|   | Marine Creek | Eagle Mountain Park | Twin Points Park |  |  |  |
| Total Trail Miles                                     | 7.2          | 5.8                 | 0.4              |  |  |  |
| Trailheads  | 2            | 1                   |                  |  |  |  |
| Kayak Launches  | 2            |                     |                  |  |  |  |
| Emergency 911 Signs                                   | 66           | 16                  |                  |  |  |  |
| Bike Racks  |              | 1                   |                  |  |  |  |
| Doggie Pots   | 4            |                     |                  |  |  |  |
| Drinking Fountains                                    | 1            | 2                   | 2                |  |  |  |
| Misters   | 1            |                     | 2                |  |  |  |
| Park Benches  | 32           | 7                   | 8                |  |  |  |
| Pedestrian Bridges                                    | 14           |                     |                  |  |  |  |
| Picnic Tables   | 5            | 8                   | 30               |  |  |  |
| Trash Receptacles                                     | 8            | 4                   | 15               |  |  |  |
| Portable Restrooms                                    | 3            | 2                   | 5                |  |  |  |
| Shelter / Pavilions                                   | 2            | 2                   | 6                |  |  |  |
| Trail Signs   | 8            | 4                   |                  |  |  |  |
| Geocache Locations                                    | 1            |                     |                  |  |  |  |

## PUBLIC INPUT





10 Community Meetings were held through the city (See list above and map for meeting locations).

An online survey was also created to receive responses and respondent locations are represented in the map above by green dots. Responses came from the 10 county region surrounding the DFW metroplex.

Tarrant County residents provided a majority of the online responses.

### **PUBLIC INPUT**

One dynamic step in the planning process was public engagement. The Team outlined an approach to community engagement that would tap-into diverse user groups and stakeholders. This strategy included in-person community meetings, an online survey, and targeted stakeholder discussions. As expected, people were ready to share ideas about recreational amenities. The planning team recorded this feedback, which helped in developing high-level programming ideas for future recreation at TRWD properties.

Ten (10) community meetings were held across different geographical areas throughout Tarrant County. These meetings were conducted in June and July of 2023, drawing participants from various recreational groups. These sessions commenced with presentations about TRWD's recreational assets and events, followed by interactive discussions with the Dunaway Team. Attendees actively engaged in expressing their preferences and concerns, which helped in identifying recurring themes.

Meanwhile, an online citizen survey was hosted on the TRWD website, allowing citizen feedback in addition to the community meetings. Responses and data collected from each meeting and the online survey were compiled and categorized by major categories. This broad public outreach helped the Dunaway Team and TRWD leaders formulate a recreation program list.

#### LISTENING TO STAKEHOLDERS

#### **COMMUNITY MEETINGS**

The planning Team conducted ten in-person meetings at locations distributed around the county. Each location was in close proximity to one of the study areas, and all meetings were open to the public, fostering participation from a broad spectrum of community members. Attendees included various user groups: cyclists, runners, walkers, fishing enthusiasts, kayakers, and naturalists providing a comprehensive range of perspectives and inputs.

Each meeting began with a presentation providing an overview of TRWD's existing recreational assets and events. This was followed by open discussions and an interactive break-out session where participants provided feedback on the following categories: Trails & Trailheads, Water Recreation, Park Amenities, and Events. Additionally, there was a notable volume of comments concerning Safety & Operations.



Public Meeting at Hope Church June 1, 2023





Public Meeting at Lighthouse Fellowship Church June 6, 2023

#### **COMMUNITY MEETING RESULTS**

The format of these meetings promoted interaction between participants and allowed attendees to express a passion for a particular aspect of the plan. The three most common discussion tropics were the Trinity Trail expansion, improved rowing and paddling access, and additional natural areas and landscape improvements.

Trail users represented a majority of attendees at each meeting including avid cyclists, leisure walkers, and everyone in between. This diverse group desired improved safety in high traffic/use areas, enhanced security measures, and more frequent rest areas and trailheads.

Paddle crafts include canoes, stand up paddleboards, and kayaks. These popular outdoor activities allow users to exercise while exploring local waterways. Requested improvements from these users included upgraded launches, portage improvements at dams, and trailhead upgrades, that include boat trolley accommodations. These users often enjoy exploring unimproved river segments, natural shorelines and wildlife habitats.

Fishing enthusiasts, including those that fish from the shore, boats, and kayaks, were well represented at every public meeting. This user group utilizes many of TRWD's assets including trailheads, trails, piers, docks, boat ramps, dams, and bridges in search of a perfect fishing spot. Because of their direct interaction with the water this group was also highly sensitive to habitat preservation and water quality.

Overall, the general sentiment at the in-person public meetings was positive. Each user group expressed a desire for improvements to be high quality and a seamless user experience.

#### **COMMON THEMES**

#### TRAIL EXPANSION

Majority of attendees were trail users and recommended more trails, safety & security improvements, shade, more frequent rest areas, and additional designed trailheads.

#### **ROWING + PADDLING**

Increased popularity in water recreation brought users to request upgraded launches, portage improvements, boat trolley accommodations, and opportunities to explore naturalized areas.

#### **FISHING + WATER ACCESS**

All types of fishers were well represented in the community meetings and all expressed utilizing existing amenities. Recommendations focus on the preservation of habitat and water quality.

#### **ONLINE SURVEY**

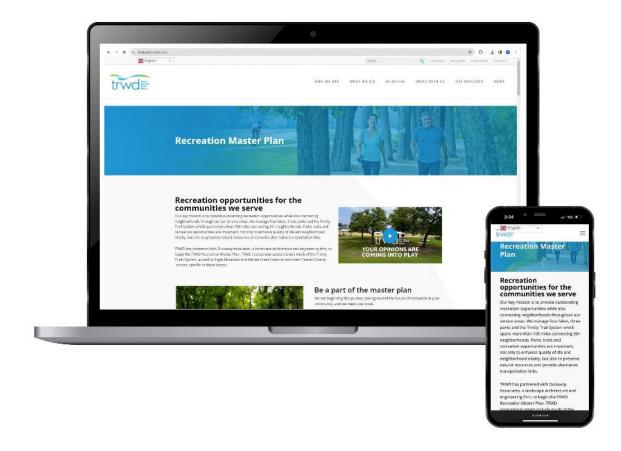
To help establish the priorties for this plan, an online survey was developed to gain public feedback.

Available online for 8 weeks, this survey recorded 957 respondents, mostly from Tarrant County but reaching as far as Grayson County. The map on page 33 provided illustrates the region-wide draw of the TRWD trails and parks.

Responses were again sorted into categories to evaluate trends and compare feedback with the inperson meeting data. Many comments echoed the same concerns and desires as the in-person meetings. This consistency in feedback across different mediums strengthens the validity of the collected data and

indicates that the identified issues are indeed significant to the community.

The online survey included a section for written comments, enabling respondents to offer more specific and detailed feedback. This resulted in numerous responses that furnished in-depth input and background information crucial for ensuring the direction of the plan and effectively representing the community's voice.



TRWD hosted a citizen survey on their website

#### **SURVEY RESULTS**

Trail users were the most represented group of online respondents, consisting of 32% of all comments. Many comments were specific like wider concrete trails, or more soft surface trails, or additional pavement markings and signage. Others were aspirational and overarching, such as the desire to create a 'Unified system' with 'inspiring spaces'.

Parks and Facilities comprised a significant amount of input with 25% of all online responses. These comments largely fell into two categories: a desire for more park amenities and a desire for more natural areas and landscape improvements. Topping the list of requested park amenities were clean and safe restrooms followed by shaded rest areas with drinking fountains. Another common request in this category was to expand native grass and wildflower areas and the number of shade trees along the trails.

Water Recreation, 13% of online comments, focused mainly on the creation of more family friendly water play opportunities. The requests included swim beaches, natural swimming areas, and overall water access.

Safety & Operations including stewardship programs, maintenance, and security, made up 28% of online comments. Safety & Operations, which affects all user groups, should be considered with the addition of all new improvements.

Events & Festivals rounded out the remianing 2% of comments.



Percentages based on 1,333 total respondents





FORT WORTH
BOTANIC GARDEN



BOTANICAL RESEARCH INSTITUT

















#### STAKEHOLDER INTERVIEWS

Stakeholder meetings were held with a dozen agencies and municipalities, and advocacy groups for this plan. These meetings were conversational in style, allowing stakeholders to interact with other members and generally share ideas among the group. Generally, the stakeholders viewed TRWD's recreational and natural resources as assets complementary to each organization's various missions. Summarized statements and common themes discussed in these meetings include:

#### Trail Expansion

Tarrant County's growing population needs more trails. Future projects will be more difficult to build and require multi-agency collaboration and coordination.

#### Lake Parks

TRWD lake properties need more outdoor recreation opportunities and park amenities. Adjacent communities provide an opportunity for these resources.

#### Natural Areas

TRWD has the opportunity to provide access to natural landscapes and incorporate more pause points where users can observe and appreciate nature.

#### Education & Awareness

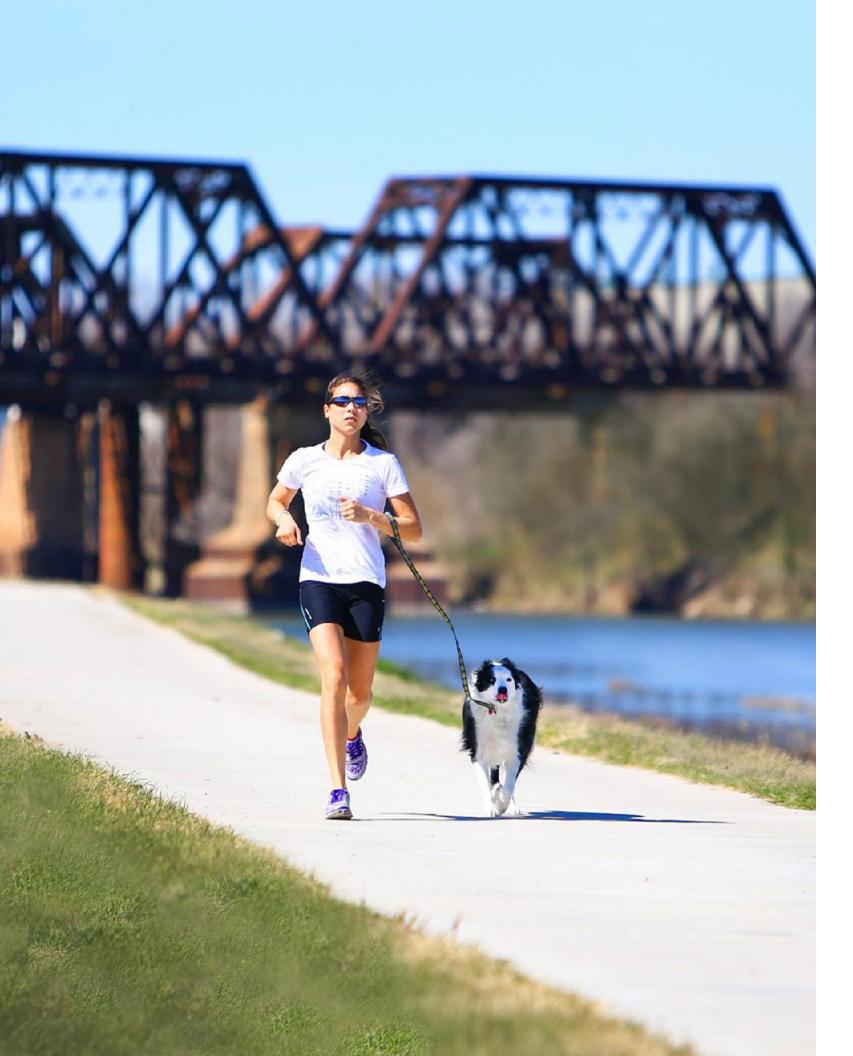
The land and waterways are a community asset and the District should promote this through programming, communication, design, and signage that compliment the District's environmental stewardship and water supply mission.

#### **Placemaking**

People are inherently drawn to water.

New developments along the floodway and lake areas need to incorporate thoughtful 'placemaking' and 'outdoor recreational opportunities' to celebrate these natural resources.





#### RESPONDING TO STAKEHOLDER FEEDBACK

The themes and information gathered from the public and stakeholders were tools used to inform and direct the planning process.

Feedback gathered included both quantative and qualitative information that identified the following needs and desires of the various recreational users and stakeholders:

#### Inspire Planning Concepts

The varied perspectives and general enthusiasm of the public, advocacy groups and stakeholders inspired the planning concept to serve the wide-ranging recreational needs of the community.

#### **Create Priority Projects**

The geographic distribution of meetings and survey respondents provided insight into the local dynamics throughout the study area. Some areas need improved trail access and connectivity while others face challenges due to heavy use. This local understanding helped to create priority projects that increase recreational opportunities across Tarrant County.

#### **Guide Future Improvements**

Many ideas expressed by stakeholders are general sentiments like enhance safety, provide quality distinctive design, increase naturalized areas and plant more trees. These sentiments will help guide future improvements and operational process decisions.

#### **Outline Potential Partnerships**

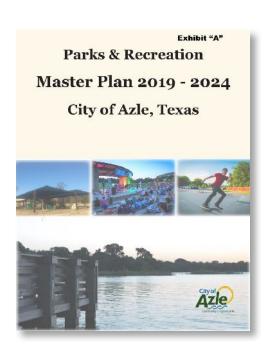
Advocacy groups and agencies with overlapping services areas and compatible goals were engaged providing an understanding of other active transportation systems area recreation providers. This information will be utilized to outline potential partnership opportunities.





## TRINITY RIVER VISION: NEIGHBORHOOD & RECREATION ENHANCEMENT PLAN

This plan aims to transform the Trinity River corridor into a dynamic and resilient urban environment that offers recreational opportunities, fosters economic growth, and celebrates the cultural heritage of Fort Worth. Key components include riverfront development, urban renewal, flood control, and cultural amenities.



#### **AZLE PARKS & RECREATION MASTER PLAN**

The Azle Parks and Recreation Master Plan serves as a road map for enhancing the quality of life for residents, promoting community health and wellness, and fostering a sense of place and belonging in Azle through the provision of accessible, diverse, and well-maintained parks and recreational amenities. The plan covers needs assessment, vision and goals, inventory and analysis, community engagement, strategic recommendations, an implementation plan, and a review of policies and guidelines.



#### **GOOD NATURED: GREENSPACE INITIATIVE**

The "Good Natured Green Space Initiative" in Fort Worth is a comprehensive program aimed at expanding and enhancing the city's green spaces to promote environmental sustainability, public health, and community well-being.



## CONTINUE TO THE STATE OF THE STRATEGIC MASTER PLAN SUI CIT

#### TRWD STRATEGIC PLAN

The TRWD Strategic Plan was approved to serve as a guide on how TRWD will continue to enrich communities and improve quality of life through water supply, flood protection, and recreation.

The plan focuses on the following: an opportunity to invest in their people, meet the rapid growth in their communities, fulfill their role in the Central City Flood Control project, support local stakeholders in the development of Panther Island, further enhance fiscal responsibility, and improve community stewardship.

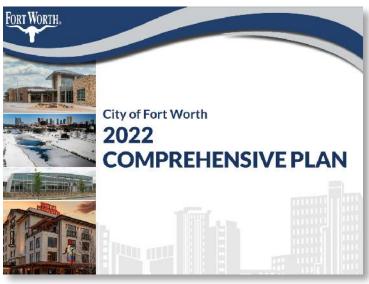
#### CONFLUENCE: THE TRINITY RIVER STRATEGIC MASTER PLAN

This plan builds on past planning efforts to continue the evolution in the river system. It centers on sustaining a healthy and thriving river that connects citizens and communities, catalyzes economic development, and offers an abundance of active transportation and recreational amenities for the region.



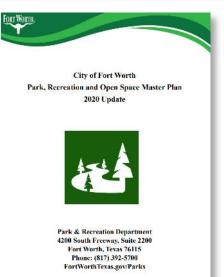
#### PANTHER ISLAND STRATEGIC VISION

HR&A updated the strategic vision for Panther Island and it is characterized by a comprehensive approach to creating a vibrant and sustainable community by including a distributed and connected open space network, featuring both active and passive public spaces at various scales with unique programming. Ensuring continuous public waterfront access is a priority, with signature waterfront public spaces and pathways along the canals and entire waterfront.



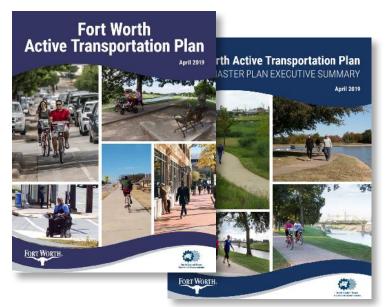
## CITY OF FORT WORTH 2022 COMPREHENSIVE PLAN

The Comprehensive Plan is the City of Fort Worth's official guide for making decisions about growth and development. The Plan is a summary of the goals, objectives, policies, strategies, programs, and projects that will enable the city to achieve its mission of focusing on the future, working together to build strong neighborhoods, develop a sound economy, and provide a safe community.



## CITY OF FORT WORTH PARKS, RECREATION AND OPEN SPACE MASTER PLAN

Park and recreational opportunities are primarily offered through the Park & Recreation
Department, whose mission is "to enrich the lives of our citizens through the stewardship of our resources and the responsive provision of quality recreational opportunities and community services." Additionally, the City of Fort Worth has developed an interdepartmental Open Space Conservation Program to identify and preserve high-quality natural areas for future generations.



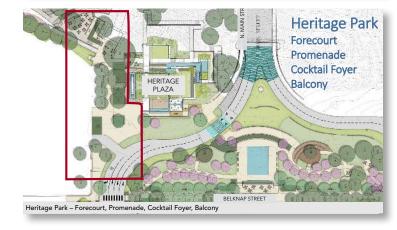
## CITY OF FORT WORTH ACTIVE TRANSPORTATION PLAN

The Fort Worth Active Transportation Plan serves as an update to the city's 2010 Bike Fort Worth Plan and the 2014 Walk Fort Worth Plan, and the city's first ever citywide trails master plan. Active transportation includes walking, bicycling, wheelchair use, and all non-motorized means of travel for transportation and recreation.



## OTHER RELEVANT PLANS & PLANNING EFFORTS

Other planning efforts were reviewed to be incorporated and considered when planning for the Trinity River Recreation Plan. Some of these plans include the Gateway Park Master Plan and the Heritage Park Master Plan.



## VISION & GOALS





The Trinity River corridor is a major destination in the DFW region

## **VISION & GOALS**

It was important to define a clear vision and supporting goals to guide the implementation of this Master Plan. With the vision and goals as the foundation, a series of strategic initiatives help frame future capital investment by the District.

The **Vision** is comprised of core recreational values

- Safety, Resource Stewardship, and Community
Enrichment. These values are a guide, helping
the District to provide a vibrant recreational
environment that will benefit visitors and steward
natural resources.

The supporting **Goals** focus on four key things:
Stream, River, Watershed and Lake Health;
Creating Natural Resource Advocates;
Community Health; and Connecting
Communities. All of these foster a stronger
connection between the local community and their
natural surroundings.

And finally, six **Strategic Initiatives** will help guide actual capital projects year-by-year. These include: Safety & Security Enhancements; Continued Trail Developments and Key Connections; Support Water Recreation; Environmental Education, Programming and Events; Expand Natural Land Management Processes; and Facilitate Strategic Partnerships. By integrating these initiatives in planning recreational improvements, daily users and group activities will be enriched.





#### **CORE RECREATION VALUES**

Utilizing the extensive community input received during the planning process – along with collaborative work sessions with TRWD leaders – the following Core Recreation Values were established.

#### **SAFETY**

The TRWD is committed to public safety at every level. This includes all efforts to expand and improve recreational opportunities. Safety is important for neighborhoods adjacent to District assets and access points, as well as safety for those enjoying trails, waterways, and parks.

#### **RESOURCE STEWARDSHIP**

For 100 years, the District has protected natural resources as part of their overall mandate. This includes the management of environmental assets, as well as the responsible stewardship of financial resources. Education, transparency, and accountability will continue to be keys to success

#### **COMMUNITY ENRICHMENT**

Over the decades, the District has focused on enriching the lives of the people they serve. This includes flood protection and providing a reliable water supply. But this also includes providing recreational opportunities where possible, either directly or through creative partnerships.

#### RECREATION MISSION GOALS AND OBJECTIVES

These four goals are vital in how the District approaches all decisions impacting the local communities and surrounding environment.

Stream, River, Watershed and Lake Health ensures both the protection and availability of water for future generations.

Create Natural Resource Advocates that help champion conservation and recreational development.

Community Health focuses on physical and mental health through active lifestyles in the outdoor environment.

Connecting Communities emphasizes providing access to recreational amenities for all residents.

#### GOAL 1

#### Promote Healthy Ecosystems

Enhance the health of streams, rivers, and lakes through responsible land utilization to ensure a balance of recreational opportunities and environmental impacts allowing for the cleanest surface water for our communities.

**Objective 1.1:** Implement a comprehensive watershed protection program, including the establishment of reservoir buffer properties, to safeguard water quality.

**Objective 1.2:** Restore prairies, wetlands, and riparian corridors to promote diverse flora and fauna, enhancing ecological balance and habitat quality.

#### GOAL 2

#### Foster Environmental Advocacy

Engage the public to cultivate a community of natural resource advocates who appreciate and protect local ecosystems.

**Objective 2.1:** Organize programming, festivals, and events—such as Mayfest, Flyfest, Trash Bash, Kid Fish, and Youth Hunts—to promote awareness, appreciation, and respect for natural resources.

Objective 2.2: Provide outdoor education initiatives, including stream trailers, watershed experiences, and partnerships with the FWISD Outdoor Learning Center, Texas Girls' Choir, and Girl Scouts Camp, to encourage public engagement with nature and enhance environmental literacy.

#### **GOAL 3**

#### **Enhance Community Health and Well-Being**

Improve the health and well-being of community members by providing diverse opportunities for exercise, social interaction, and connection with the natural world.

Objective 3.1: Develop and maintain safe and accessible lakes, trails, parks, and open spaces—such as Twin Points, Eagle Mountain Park, and Airfield Falls Conservation Park—to promote active living and social interaction.

Objective 3.2: Cultivate partnerships with organizations like Opal's Community Garden, the Girl Scouts, and local outdoor learning centers to leverage open spaces for community gardens, educational programs, and health initiatives.

#### **GOAL 4**

#### **Strengthen Community Connections**

Build trails, waterways, public art, parks, and greenbelts that connect people and neighborhoods, fostering personal relationships and promoting community identity and stability.

Objective 4.1: Expand the Trinity Trails and National Paddle Trail networks, including the development of trail bridges, portages, and crossings, to enhance connectivity and accessibility between neighborhoods.

**Objective 4.2:** Create community spaces and organize events like Fort Worth Fourth (FW4TH) to celebrate culture and promote community engagement.

#### STRATEGIC INITIATIVES

Building on the core recreational values and goals, six (6) strategic initiatives were identified for this Master Plan. These strategic initiatives provide a framework to support all recommendations and future capital projects. These will help the District in planning projects and pursuing key partners to bring new projects to reality.

- U
- **SAFETY & SECURITY ENHANCEMENTS**
- 2 cc
  - CONTINUE TRAIL DEVELOPMENTS AND KEY CONNECTIONS
- SUPPORT WATER RECREATION
- ENVIRONMENTAL EDUCATION, PROGRAMMING, AND EVENTS
- 5 EXPAND NATURAL LAND MANAGEMENT PROCESSES
- 6 FACILITATE STRATEGIC PARTNERSHIPS

## 1 SAFETY & SECURITY ENHANCEMENTS

Improving and maintaining safety of recreational sites and amenities, as well as that of users and visitors of these assets is not only a core recreation value of this plan, but a strategic initiative through which projects will be identified and prioritized. Projects and recommendations that are founded in the safety initiative could include, but not be limited to lighting, access and egress to parks and trails, signage, emergency response options, site and facility design, and environmental protection.



## CONTINUE TRAIL DEVELOPMENTS AND KEY CONNECTIONS

Continuing to develop trails and key connections that link neighborhoods, districts, and communities both physically and socially is a high priority initiative of this master plan. With over 100 miles of existing trails along the Trinity River and tributaries, the trail network is a highly valued social and recreational asset across Tarrant County. Building on that success into the future is one of the most important priorities heard from the community with better and more access, improved connectivity, and overall trail improvements where possible and needed.



## 3

## SUPPORT WATER RECREATION OPPORTUNITIES

Supporting and enhancing water recreation opportunities along the floodway and at the lakes and parks is also a strategic initiative of this master plan. There are broad and diverse interests in water-based recreation amongst existing user groups, as well as segments of the community that may not currently utilize TRWD water recreation assets. Recommendations within this master plan are designed to properly manage water recreation opportunities and to enhance safety and accessibility to both the floodways and TRWD-managed lakes.





## ENVIRONMENTAL EDUCATION, PROGRAMMING, AND EVENTS

Developing environmental education amenities at key locations to help the public to learn more about water conservation, natural resources, and regional stewardship is a priority to TRWD. Engaging the public and park visitors in both personal and community-based resource stewardship principles better supports TRWD in its ability to meet its objectives in this part of their organizational mission. Provide places and spaces where programs and events can be held to promote environmental learning.





## EXPAND NATURAL LAND MANAGEMENT PROCESSES

Stewardship of our natural resources through eco-friendly practices and sustainable land management techniques prioritizes the health and resilience of our ecosystems. Promoting biodiversity, restoring native habitats, and managing invasive species supports healthy rivers, lakes, wetlands, forests, and open spaces. One key technique for achieving these goals is prescribed burns, which help maintain healthy ecosystems by reducing the buildup of flammable vegetation, improving soil quality, and encouraging the growth of fire-resistant plants. These efforts will foster a deeper appreciation for our natural resources, encouraging residents to become active participants in conservation initiatives.





## FACILITATE STRATEGIC PARTNERSHIPS

Facilitating strategic partnerships with other agencies and organizations that help provide a wide range of recreational resources and events is an important goal of this master plan. TRWD is one organization in a much larger ecosystem of park and recreation providers in the Tarrant County region and has an important role to play. In order to best meet the needs of communities and neighborhoods, as well as the organizational effectiveness of TRWD, strategic partnerships are critical to the overall success of meeting community needs.



## CONCEPT PLAN & RECOMMENDATIONS





Downtown Fort Worth views from the Trinity Trails

## **CONCEPT PLAN**

Recreation is an activity done for enjoyment; refreshment of strength, spirit, mind, and body; encompassing an array of activities for leisure and enjoyment.

TRWD's recreational system is recognized as a leading provider of public trails, water recreation, and open space in Tarrant County. The backbone of which is the Trinity River, linking everyday sites with popular destinations and hidden gems along the floodway. The parks, trails, and lakeside properties along Eagle Mountain Lake, Marine Creek Reservoir, and Cement Creek Lake round out TRWD's recreational offerings. Each with a different character and history, they provide county residents distinctly different opportunities to access water, escape to nature, gather and play.

The concept plan builds on information gathered from site analysis, the public outreach process, existing influencing plans, stakeholders, and district input to establish an approach for implementing recreational improvements across the district. This process required the development of a program and identified potential projects that increase safety & security enhancements, continue trail developments and key connections, support water recreation, promote environmental education, facilitate strategic partnerships, and expand natural land management processes.

























#### **PROGRAM**

The planning team and TRWD representatives developed a final program list as a result of the input received. The program is a defined list of possible amenities or recreational activities that are suitable for the District.

Below are the recommended programming items that should be considered when implementing the proposed recreational improvements on the following pages.

## **Trail Developments**

& Key Connections
Concrete Multi-Use Trails Separate Use Trails Soft Trails & Nature Paths Signature Trailheads Restrooms Picnic Stations Rest Areas Shaded Areas Play Zones Equestrian Trails Parking Areas Bridges & Crossings Signage & Wayfinding Specific Areas for Lighting Enhanced Underpasses Public Art Displays Misting Stations

#### Water Recreation **Opportunities**

Kayak & Canoe Launches Accessible Docks & Ramps Portage Improvements Boardwalks Fishing Piers & Platforms Fly Fishing Areas Designated Fishing Areas Boat Ramps Paddlesports Areas Active Swimming Zones

#### **Environmental Education Amenities**

Landmark Environmental Pavilion Nature Center Interpretive Signage Demonstration Areas Prairie Restoration Pollinator Gardens Wildflower Areas Wetland Zones Wooded Areas Bank Restoration Birdwatching Spots

#### PROPOSED RECREATIONAL **IMPROVEMENTS** EAGLE MOUNTAIN This chapter describes projects dedicated to Extensive efforts have been made to LAKE enhancing recreational development along the conceptualize and develop ideas for various Trinity River. It is a comprehensive overview opportunity areas along the river. These of initiatives focusing on Trail Developments concepts are rooted in maximizing the & Key Connections, Water Recreation recreational potential of the Trinity River, Opportunities, and Environmental Education ensuring that it becomes a vibrant hub for Amenities. These projects are carefully crafted outdoor activities and leisure. One of the to guide and support recreational development primary aims of these projects is to introduce and programming along the scenic Trinity new recreational opportunities while expanding River. Additionally, aspects of these projects existing ones. By diversifying recreational and initiatives and their anticipated outcomes offerings along the river, we strive to cater to are the focus of this chapter. the diverse interests and preferences of the community, fostering a dynamic recreational landscape. viability. MARINE CREEK LOWER WEST FORK UPPER WEST FORK **CLEAR FORK** SYCAMORE CREEK BENBROOF

This work plays a critical role in helping Tarrant Regional Water District successfully plan and fund future projects. By identifying the District's objectives and resources, they can more effectively guide and grow support for recreational development and programming. Continuing to foster existing key partnerships and considering new stakeholders plays a crucial role in the sustainable development and management of recreational amenities along the Trinity River. These partnerships enable the District to tap into additional resources, expertise, and community engagement opportunities, ensuring long-term success and viability.

As we delve further into this chapter, you'll discover detailed descriptions of projects tailored to each of the river sections.

Additionally, we'll highlight critical initiatives aimed at catalyzing growth and development in the surrounding areas, contributing to the overall vitality and appeal of the Trinity River corridor. It's important to note that each river segment presents unique conditions that have been analyzed during the data-gathering stages.







#### **EVENTS**

The District organizes and hosts several events each year that support the overall mission to enhance the quality of life and enable active lifestyles in North Texas communities. Primary events include:

Fort Worth's Fourth is a lively Independence Day celebration that brings the community together for a day filled with music, food, and fun activities, culminating in a spectacular fireworks display over the Trinity River. It enhances community spirit by highlighting the beauty of Fort Worth's waterways.

**Trash Bash** is a community clean-up event that invites volunteers to help remove litter from local parks and waterways. It promotes environmental stewardship, encourages community participation, and raises awareness about the impact of pollution on local ecosystems.

Mayfest is a cherished local festival, Mayfest celebrates the Trinity River with a variety of activities including live music, arts and crafts vendors, and family-friendly entertainment. It emphasizes the importance of the river in the community's culture and environment, fostering a sense of pride and responsibility among residents.

Flyfest focuses on fishing and outdoor recreation, Flyfest includes competitions, workshops, and activities for all ages. This event educates participants about water conservation and responsible fishing practices, reinforcing the connection between recreation and environmental sustainability.

Other organizations also promote and host a wide range of events each year. The District can continue to coordinate with these organizations but should look to those groups to take the lead in organizing and implementing seasonal events. This will keep the District in a leading stewardship role while allowing community groups to enjoy civic activities along the waterways and adjacent lands.



















# **TRAILS**

The Trinity Trails network is widely recognized throughout Texas as one of the State's finest examples of connecting local communities. This network links neighborhoods, districts, and special use areas in a variety of ways. The types of trails offered include:

### **Concrete Trails**

TRWD standards for concrete trails are 11' wide for primary trails and 8' wide for neighborhood connections. All new trail construction should be in accordance with American Association of State Highway and Transportation Officials (AASHTO) for striping, signage, and construction standards. Specific conditions and heavy use areas may require additional improvements above AASHTO minimum requirements and may include speed limit enforcement, traffic calming measures, wider trail widths, and other safety measures.

## **Soft Surface Trails**

Soft surface trails throughout the system are typically constructed using crushed gravel or chat. They are often variable widths and serve multiple functions providing service access and recreation. These trails should be maintained with a smooth surface that accommodates all users.

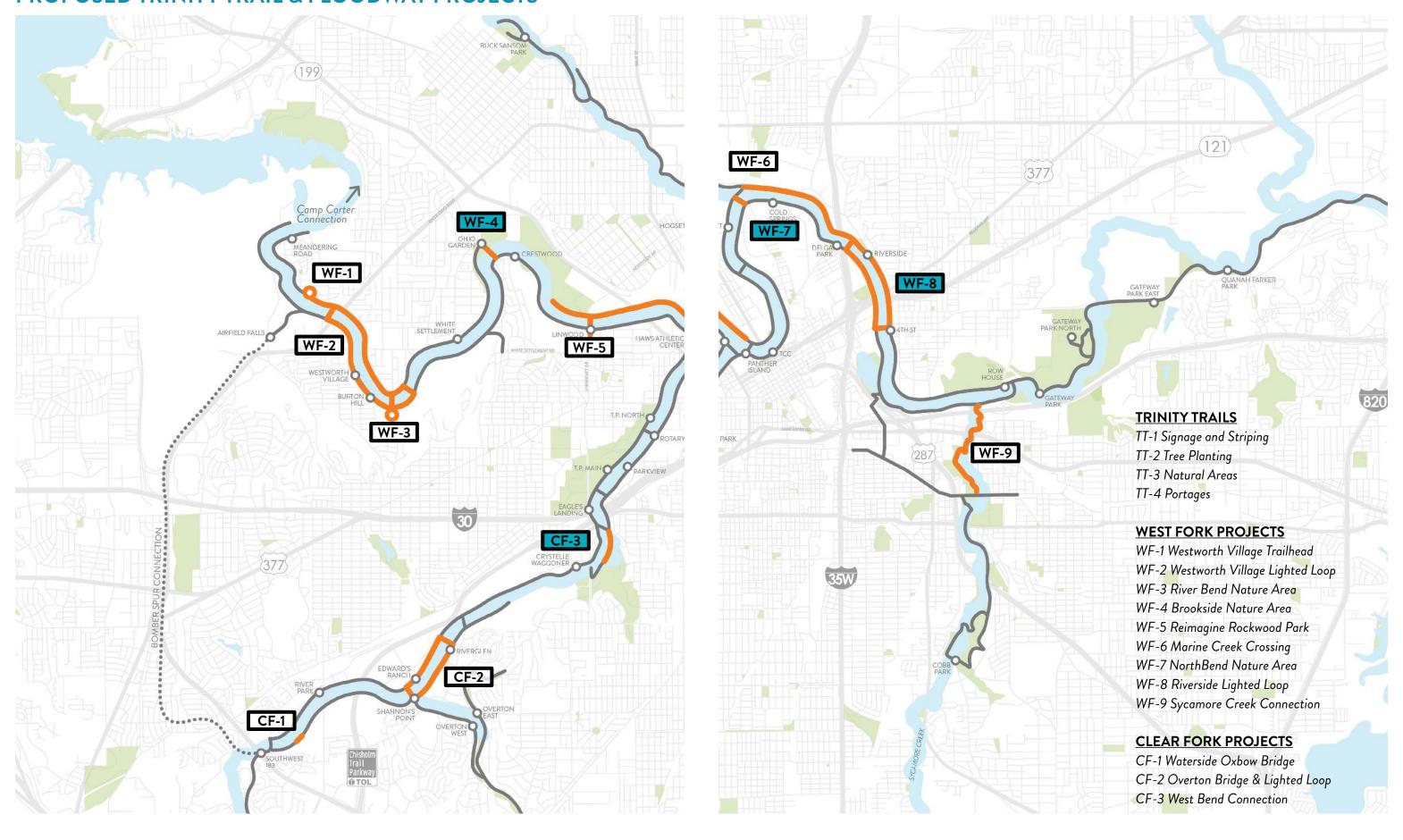
# **Nature Trails**

Nature trails are typically compacted earth pathways with no defined edge or width. They provide users the opportunity for a more challenging walking/hiking experience and follow existing terrain and topography. Trail markers and interpretive signage help users navigate these areas and provide educational opportunities. Construction and improvements along these trails shall be minimized to respect and preserve the natural areas in which they are located.

# **Paddling Trails**

Paddling trails are designated navigable routes on district waterways for non-motorized watercraft that allow recreational users direct access to the water. Supporting infrastructure along these routes include parking lots, access pathways, launches, portages, and landings zones. These improvements should be constructed to accommodate kayaks, canoes and paddle boards.

# PROPOSED TRINITY TRAIL & FLOODWAY PROJECTS





TRINITY TRAILS - 1 | SIGNAGE AND STRIPING



Signage and pavement markings in accordance with AASHTO standards should be incorporated throughout the trail system to improve user safety. Center lane stripes, textural surface changes along with signs indicating hazards, rules and etiquette will provide consistent messaging and uniform experience along the trails. This will be implemented in three phases:

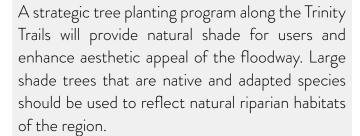
TT-1.1 Upper West Fork

TT-1.2 Lower West Fork

TT-1.3 Clear Fork

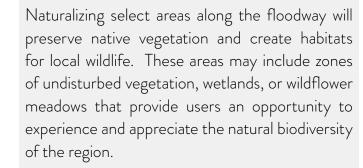


TRINITY TRAILS - 2 | TREE PLANTING 5





TRINITY TRAILS - 3 | NATURAL AREAS 5





TRINITY TRAILS - 4 | PORTAGES





Implement portage improvements at all existing dams. TRWD controls 19 dams, each dam has unique site conditions including materials, embankments, and access. Portage improvements shall include paddle craft landing sites upstream of the dam; steps, ramps, rails, pathways on-shore; and stable launch surface. Launches, landings, and pathways shall be constructed using cast in place concrete, natural rock and stone, or other engineered solutions to assist on/off boarding.

# STRATEGIC INTIATIVES



2 Continue Trail Developments and Key Connections

3 Support Water Recreation

4 Environmental Education, Programming, and Events

5 Expand Natural Land Management Processes

6 Facilitate Strategic Partnerships



WEST FORK - 1 | WESTWORTH VILLAGE TRAILHEAD 12

The Westworth Village Trailhead, proposed at St Johns Lane and Nannette Street, aims to enhance connectivity, safety, and community engagement along the Trinity Trails in Watworth Village. By integrating parking, signage, covered seating, and public art, this trailhead will serve as a vibrant hub for trail users and families in the neighborhood.

Clear and informative signage should include trail maps, safety guidelines, and points of interest along the Trinity Trails network. Shaded seating areas with benches and picnic tables will allow for visitors to rest, relax, and enjoy the surroundings.



WEST FORK - 2 | WESTWORTH VILLAGE LIGHTED LOOP





Introduce an enhanced illuminated concrete trail loop spanning 3.2 miles between the low water crossing located near River Oaks Boulevard continuing west on the northside of the river to the start of the trail loop at the proposed bridge at the River Bend nature area. In addition to its lighting infrastructure, the trail loop and proposed bridge should include security enhancements, 911 markers, wayfinding signage, and picturesque river views.

# STRATEGIC INTIATIVES

- 1 Safety & Security Enhancements
- 2 Continue Trail Developments and Key Connections
- 3 Support Water Recreation

- 4 Environmental Education, Programming, and Events
- 5 Expand Natural Land Management Processes
- 6 Facilitate Strategic Partnerships

### WEST FORK - 3 // RIVER BEND NATURE AREA









Nestled behind the protective levee on the picturesque southern side of the West Fork, the River Bend Nature Area extends across an expansive canvas, marking the border between Westworth Village and Fort Worth. The area is currently accessible through neighborhood roads or a Trinity Trail connection at Oak Forest Trailhead and Westworth Village City Hall. The proposed improvement for the River Bend Nature Area is interpretive signage to educate visitors and create a narrative contributing to the overall positive experience. Additional improvements include the expansion of soft-surface trails and bench seating.





# **KEY PROJECT:** WEST FORK - 4 | BROOKSIDE NATURE AREA 2 4 5

The flat grassy expanse between the Rockwood Park Golf Course and White Settlement Road, enclosed by the levees, currently suffers from limited accessibility and utilizes rutted service drives and dirt paths. Transforming this area into a thriving natural habitat presents an exciting opportunity. By nurturing native wildflowers and strategically planting trees, a more diverse riverside environment can be cultivated that can be enjoyed by both nature lovers and the local wildlife.

Currently, a trip along the trail between the Ohio Garden trailhead and Crestwood Park spans 3 miles, with limited access and challenging terrain. However, introducing a concrete trail segment and a well-placed river-crossing bridge in this location significantly shortens the same trip to less than a



quarter mile. This improvement streamlines the experience for trail users and improves pedestrian connectivity of the area, encouraging more people to explore and connect with the natural beauty along the river.

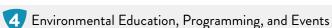


# STRATEGIC INTIATIVES

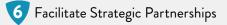




3 Support Water Recreation









WEST FORK - 5 | REIMAGINED ROCKWOOD PARK









This envisioned bridge connection at Rockwood Park to the south side of the river represents a significant step toward enhancing the overall accessibility and connectivity of the area. Originally contemplated in the Confluence Plan, this presents a valuable opportunity for creating shoreline access points for various activities. These access points connect individuals with the river's natural beauty while providing a secure means to enjoy the water for multiple activities such as fishing, kayaking, or simply wading. The elements in this project are to be coordinated with the City of Fort Worth.



WEST FORK - 6 | MARINE CREEK CONNECTION





A proposed bridge crossing over the Trinity River near Samuels Avenue will enhance connectivity and provide a safe passage for pedestrians, cyclists, and other trail users. It will serve as a key link in the Trinity Trail System, including an additional proposed trail connection along the north side of the river to connect to Riverside Park. These additional trail connections aid in facilitating recreational activities, promoting active transportation, and contributing to the overall livability and connectivity of the community. The elements in this project are to be coordinated with the City of Fort Worth, TxDOT, and property owners along the proposed trail route.

# **KEY PROJECT:**WEST FORK - 7 | NORTHBEND NATURE AREA 2 3 4 5 6

The North Bend Area includes a trailhead and recreational open space that is influenced by multiple roadway and railroad bridges. A transformative initiative is underway to convert the grass-lined ponds adjacent to the Cold Springs Trailhead into a floodable open space, enriching the region with more diverse riparian habitat.

Additionally, the enhancement plans include the construction of an elevated boardwalk, at-grade trails, fishing piers, observation decks, and a kayak launch. These additions offer various interactive experiences, allowing individuals to engage with and appreciate the dynamic river environment from various vantage points.



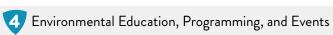
# Restroom Boardwalk Pavilion Riverside Wetlands & Pond Low Water Crossing Trail Floodable Riparian Habitat

# STRATEGIC INTIATIVES





3 Support Water Recreation



5 Expand Natural Land Management Processes

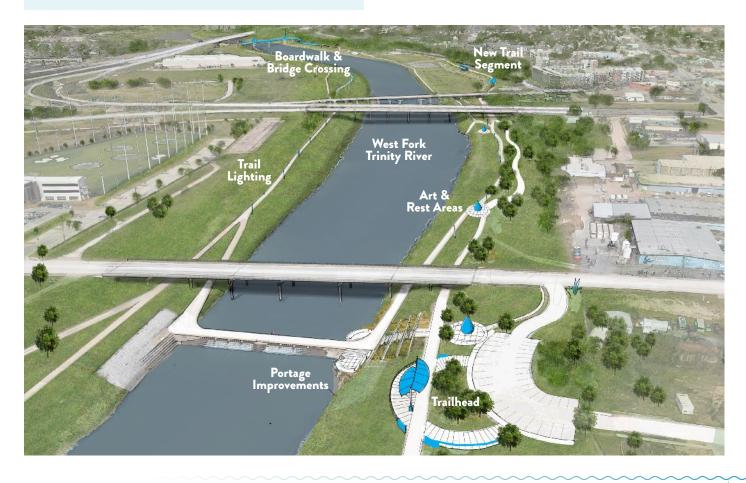


# **KEY PROJECT:**WEST FORK - 8 | RIVERSIDE LIGHTED LOOP



Introduces an enhanced lighted concrete trail loop spanning 2.3 miles, commencing at a Trailhead located on 4th Street and featuring a newly constructed bridge crossing over the Trinity River. This loop extends northward to a new pedestrian crossing over the Trinity River near Delga Park, leading to Riverside Park. Continuing from Riverside Park, the trail loop seamlessly proceeds southward until reaching the enhanced 4th Street Trailhead. In addition to its lighting infrastructure, the trail loop can include security enhancements, 911 markers, wayfinding signage, and picturesque river views. The elements in this project are to be coordinated with the City of Fort Worth, Tarrant County, and TxDOT.





# WEST FORK - 9 | SYCAMORE CREEK CONNECTION

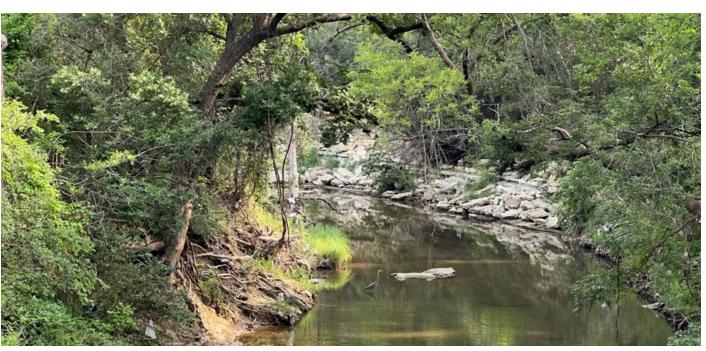






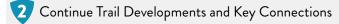
This connection of trail will link the existing trails along the south side of the of the Trinity River, between Gateway Park and Harmon Park, to Sycamore Park along the creek. This will allow southern trail users to access the northern parks and amenities while users north of I-30 can access Sycamore Park, Texas Wesleyan ballfields, and Sycamore Water Park. This connection allows users to use the established amenities in these parks including soccer fields, baseball/softball fields, water parks, dog park, hike/bike trails, open spaces, playgrounds, disc golf, kayak launches, etc. The elements in this project are to be coordinated with the City of Fort Worth, Tarrant County, and TxDOT.





### STRATEGIC INTIATIVES



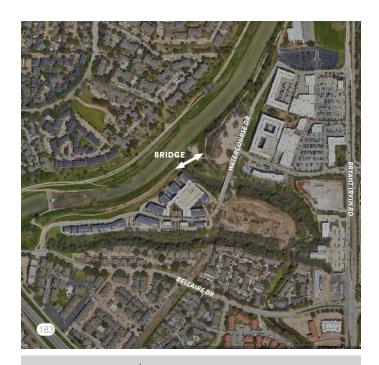


3 Support Water Recreation



5 Expand Natural Land Management Processes





CLEAR FORK - 1 | WATERSIDE OXBOW CROSSING





This bridge connection will link the southern Trinity Trails along the backside of Atlas Waterside apartment homes to the existing Trinity Trail over a creek crossing along Watercourse Drive. This will enhance connectivity and provide a safe passage for pedestrians, cyclists, and other trail users to traverse the river safely and efficiently.



CLEAR FORK - 2 | OVERTON LIGHTED LOOP





New lighting for the concrete trail loop spanning 1.5 miles, from Clearfork Main Street around the river crossing a newly constructed bridge over the Trinity River and the Overton Diversion Channel. This infrastructure project is aimed at establishing a vital trail link which allows pedestrians, cyclists, and other trail users to traverse the river with safety and efficiency.

# **KEY PROJECT:** CLEAR FORK - 3 | WESTBEND CONNECTION 1236

These enhancements to the west side of the Trinity River would include a terraced trail that would offer stunning views and enhanced accessibility to the river. This project will also establish a new connection on the east side, extending from Colonial Pkwy to Rogers Rd, facilitating seamless exploration of the city's natural and cultural gems. Elements of this proposed project on the east side of the of the Trinity River are to be coordinated with the City of Fort Worth.



# STRATEGIC INTIATIVES



1 Safety & Security Enhancements



2 Continue Trail Developments and Key Connections



3 Support Water Recreation



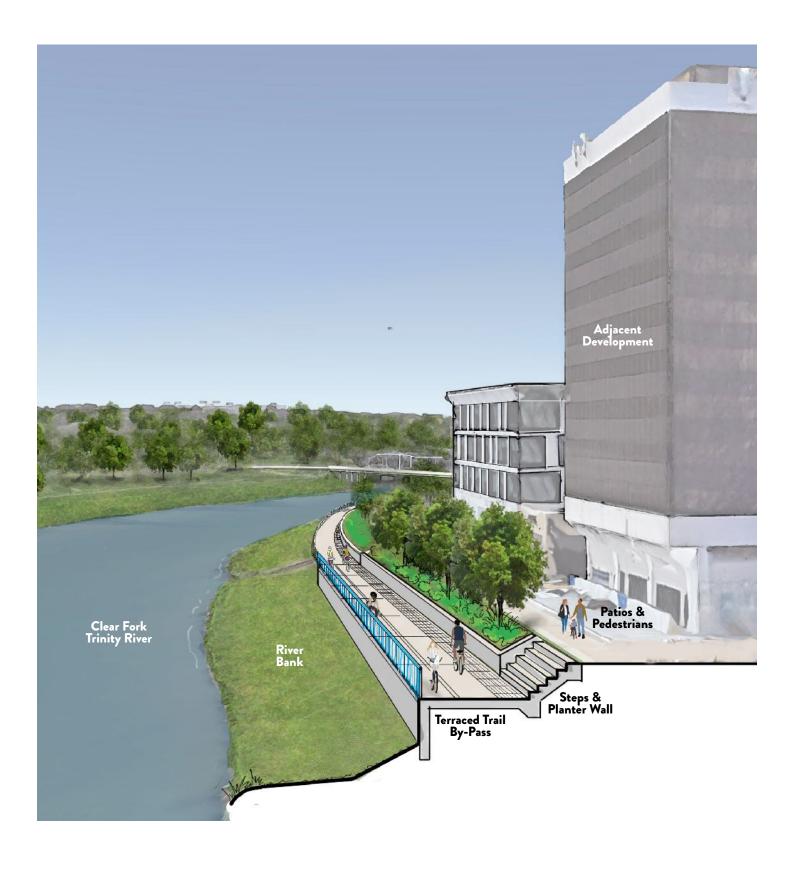
4 Environmental Education, Programming, and Events



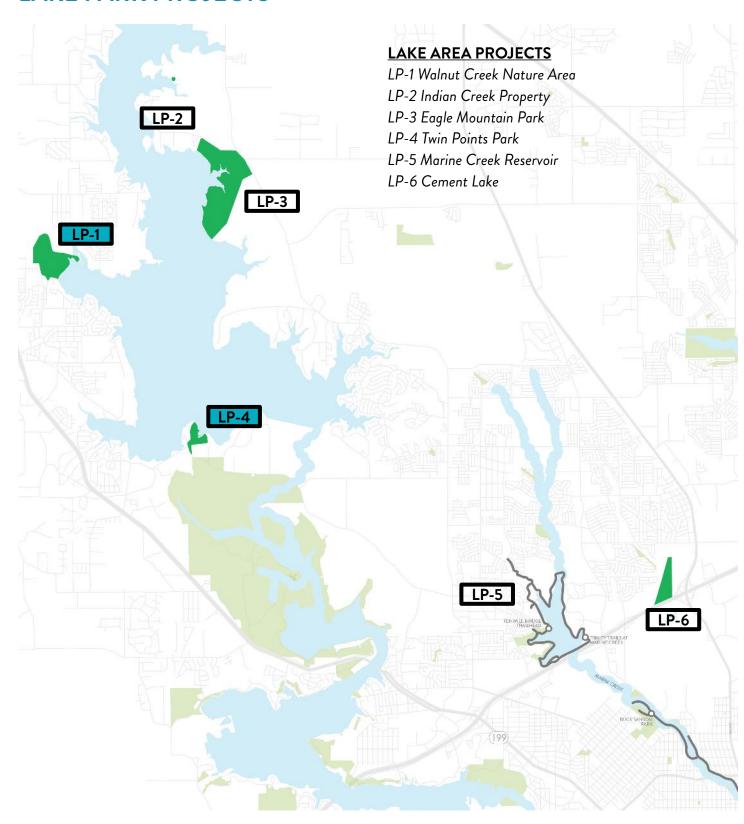
5 Expand Natural Land Management Processes



6 Facilitate Strategic Partnerships



# LAKE PARK PROJECTS



# **KEY PROJECT:** LAKE PROJECT - 1 | WALNUT CREEK NATURE AREA 2 3 4 5 6

Located on the west side of Eagle Mountain Lake the Walnut Creek Nature Area has ample shoreline access and space for public gathering. The addition of a pavilion and designation of gathering areas would offer spaces for relaxation and socializing amid the natural surroundings, while also providing the opportunity to further activate the area with programming. Nature trails and boardwalks within this area would provide greater shoreline and water access on the west side of the lake, and the opportunity to create trail connections to local destinations such as Shady Grove Park and local schools.





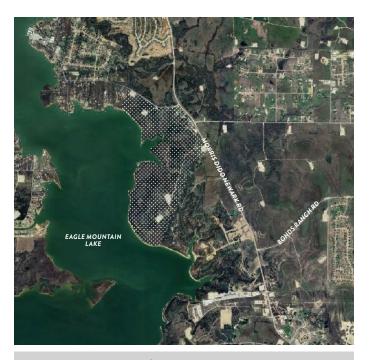




LAKE PARK - 2 | INDIAN CREEK PROPERTY



This project could transform the Indian Creek Property into a serene recreational haven. It would offer a multifaceted outdoor destination, featuring a dedicated fishing area, kayak launch, and small boat access will allow enthusiasts to explore the tranquil waters at their leisure. Additionally, establishing picnic spots with a restroom enclosure would be perfect for families and friends to gather and enjoy the natural beauty surrounding them.



LAKE PARK - 3 | EAGLE MOUNTAIN PARK







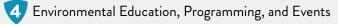
Located on the northeast shore of Eagle Mountain Lake, the park spans 400 acres and boasts over 5 miles of scenic trails. It's trail network features six distinct paths, notably the "Overlook Trail," treating hikers to breathtaking views of the lake. The park's habitat preservation plays a critical role in the development of the park with a focus on enhanced maintenance solutions and potential projects. Natural maintenance practices will include wildflower and native plant areas, invasive plant management, and prescribed fires. Projects include nature trail expansion and enhancements, improved interpretive and safety signage, wildlife viewing spots and a scenic overlook, allowing guests to experience the region's diverse wildlife and landscape.

# STRATEGIC INTIATIVES





3 Support Water Recreation



5 Expand Natural Land Management Processes

6 Facilitate Strategic Partnerships

# **KEY PROJECT:** LAKE PARK - 4 | TWIN POINTS PARK



Twin Points Park, situated on the southern end of Eagle Mountain Lake, hosts one of the finest beaches and swimming areas in the region. The swimming area lies within a cove, and is shielded from the wind and waves generated by boat traffic on the lake. Twin Points Park underwent significant restoration efforts in 2016, revitalizing Eagle Mountain Lake's cherished lakeside shore. Existing aquatic amenities include a boat ramp and swim dock positioned at the center of the cove. Proposed improvements for the park include beach enhancements, new dock with wave attenuator, and the possible installation of shaded pavilions and trees throughout the property.





### STRATEGIC INTIATIVES





3 Support Water Recreation



5 Expand Natural Land Management Processes

6 Facilitate Strategic Partnerships



LAKE PARK - 5 | MARINE CREEK RESERVOIR





Marine Creek Lake is a 250 acre lake in northwest Fort Worth, is a prime urban fishing spot and should be designate a no-wake lake. This area also includes a dedicated dock for canoes and kayaks, ample parking for boat trailers, convenient restroom facilities, a trailhead, and a 6 mile loop trail. Proposed improvements include lighting to 2 miles of trail, remove ski boats from the lake, and designating specific use ares for swimming, fishing and rowing.



LAKE PARK - 6 | CEMENT LAKE



This area is situated alongside Interstate 820 (Jim Wright Fwy), with the railroad running along its western edge. This location hosts several recreational organizations, including the North Texas High School Rodeo Association, EMSISD Agricultural Barn, Pioneer Youth Baseball & Softball Associations, and the Saginaw Youth Association.

The District will evaluate the use and management of the existing facilities to maximize available resources. The primary objective of the planned improvements is to reorganize the park, providing dedicated spaces for various recreational organizations efficiently meet the needs of the community. Financial involvement of these partnering organizations will dictate the level of improvements for each area.



Families enjoying the Trinity Trails

# RECOMMENDATIONS

This Recreation Master Plan provides direction and guidance for the District to build on the success of the Trinity Trails System and Lake Area Parks to strategically enhance and expand recreational opportunities across Tarrant County. District leaders should use the recommendations outlined on the following pages to formulate implementation strategies that align with the TRWD's mission and goals. These recommendations are flexible enough to take advantage of timely opportunities that arise and can achieve cost savings, shared resources, and partnership initiatives.

Project timeframes have been classified into three categories:

### Short-Term

Immediate priority projects that can be implemented within 1-5 years, providing strategic connections that address a direct mobility or safety need.

# Mid-Term

Priority projects that address a current need but may require additional time for design, coordination, and execution. Typically, these will occur within 5 and 10 years.

# Long-Term

Projects that have longer time horizons requiring 10 or more years for implementation. These projects will depend on a range of variables related to overall development of the region including community growth, redevelopment patterns, and availability of unforeseen funding sources such as grants, partnerships, donations, etc.

# TRINITY TRAILS PROJECTS

|   | Project #          | Project Name             | Project Description   | Timeframe  | Cost          | Strategic Initiatives 7 7 7 7  | Partnerships 🥑                             |
|---|--------------------|--------------------------|---|------------|---------------|--|--|
|   | Trinity Trails - 1 | Signage and Striping     | <ul><li>AASHTO Pavement Markings &amp; Signage</li><li>Hazard Rules &amp; Etiquette Signage</li></ul> | Short-Term |               | Safety & Security Enhancements Continue Trail Developments and Key Connections |  |
|   | TT-1.1 Clear Fork  |                          |   | Short-Term | \$1,220,00    |  |  |
|   | 4                  | TT-1.2 Lower West Fork   |   | Short-Term | \$1,103,300   |  |  |
| 4 |                    | TT-1.3 Upper West Fork   |   | Short-Term | \$872,200     |  |  |
|   | Trinity Trails - 2 | Tree Planting            | Native & Adaptive Tree Planting   | Mid-Term   | \$25,000 / yr | Expand Natural Land Management Processes                                       | BRIT<br>Streams & Valleys                  |
|   | Trinity Trails - 3 | Natural Areas            | Preserve Existing and Establish New Natural Areas   | Long-Term  | \$25,000 / yr | Expand Natural Land Management Processes                                       | BRIT<br>Ladybird Johnson Wildlfower Center |
|   | Trinity Trails - 4 | Portages around the Dams | Portage improvements at all existing dams   | Mid-Term   | \$1,320,000   | Safety & Security Enhancements Support Water Recreation                        |  |



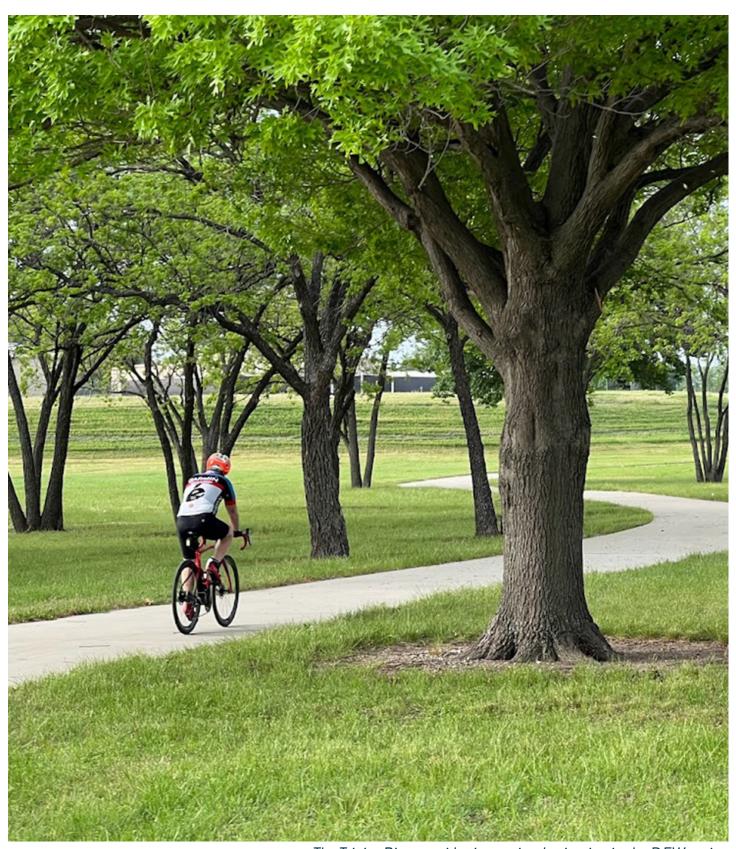
# FLOODWAY PROJECTS

| Project #      | Project Name                                 | Project Description  | Timeframe  | Cost         | Strategic Initiatives 7 7 7 7 7   | Partnerships 👩   |
|----------------|--|--|------------|--------------|---|--|
| West Fork - 1  | Westworth Village Trailhead                  | <ul> <li>River Oaks Trailhead at Nannette St and St Johns Ln</li> <li>Seating, Play Area, Parking Facilities and Signage, &amp; Public Art</li> </ul>  | Mid-Term   | \$500,000    | Safety & Security Enhancements Continue Trail Developments and Key Connections  | City of Fort Worth City of Westworth Village TxDOT Streams & Valleys |
| West Fork - 2  | Westworth Village Crossing<br>& Lighted Loop | <ul> <li>Trail Incorporated into HWY 183 Bridge</li> <li>Signage &amp; Lighting</li> <li>Pedestrian Bridge at River Bend</li> </ul>  | Mid-Term   | \$7,644,000  | Safety & Security Enhancements Continue Trail Developments and Key Connections  | Streams & Valleys  |
| West Fork - 3  | River Bend Nature Area                       | Interpretive Signage     Soft Surface Trails   | Long-Term  | \$2,541,000  | Safety & Security Enhancements Continue Trail Developments and Key Connection Environmental Education, Programming, and Events Expand Natural Land Management Processes Facilitate Strategic Partnerships | City of Fort Worth<br>Streams & Valleys                              |
| West Fork - 4  | Brookside Nature Area                        | <ul> <li>Nature Trails &amp; Prairie Habitat</li> <li>Bridge Connection at Crestwood</li> <li>Naturalize River Bank</li> </ul>   | Mid-Term   | \$2,541,000  | Continue Trail Developments and Key Connection Environmental Education, Programming, and Events Expand Natural Land Management Processes  | City of Fort Worth USACE Streams & Valleys                           |
| West Fork - 5  | Reimagined Rockwood Park                     | <ul> <li>Concrete Trail Connection</li> <li>Rockwood Park Connection</li> <li>Bridge Crossing at University Drive</li> <li>Shoreline Access (Fishing, Kayaking, etc.)</li> </ul>   | Long-Term  | \$14,300,000 | Safety & Security Enhancements Continue Trail Developments and Key Connection Support Water Recreation Expand Natural Land Management Processes   | City of Fort Worth<br>Streams & Valleys                              |
| West Fork - 6  | Marine Creek Connection                      | Bridge Connection near Samuels Rd     Trail Connection along north side of the river   | Long-Term  | \$3,740,000  | Safety & Security Enhancements  Continue Trail Developments and Key Connection  | City of Fort Worth TxDOT Private Developments Streams & Valleys      |
| West Fork - 7  | North Bend Nature Area                       | <ul> <li>Floodable Open Space &amp; Riparian Habitat</li> <li>Environmental Education Signage</li> <li>Elevated Boardwalk w/ Fishing Piers</li> <li>Observation Deck</li> <li>Kayak Launch</li> </ul>                                    | Mid-Term   | \$11,550,000 | Continue Trail Developments and Key Connection Support Water Recreation Environmental Education, Programming, and Events Expand Natural Land Management Processes Facilitate Strategic Partnerships       | City of Fort Worth Forestry<br>BRIT<br>Streams & Valleys             |
| West Fork - 8  | Riverside Crossing<br>& Lighted Loop         | <ul> <li>Illuminated Concrete Trail Loop with Public Art and Rest Areas</li> <li>4th Street Trailhead with Parking and Play Area with Pavilion</li> <li>Bridge Crossing at I-35</li> <li>Trail Adjacent to Oakhurst Scenic Dr</li> </ul> | Short-Term | \$6,358,750  | Safety & Security Enhancements  Continue Trail Developments and Key Connection  | City of Fort Worth<br>Streams & Valleys                              |
| West Fork - 9  | Sycamore Creek Connection                    | <ul> <li>Concrete Trail Connection</li> <li>Sycamore Creek Bridge Crossing</li> <li>Sycamore Park Connection</li> </ul>  | Short-Term | \$2,046,000  | Safety & Security Enhancements<br>Continue Trail Developments and Key Connection<br>Facilitate Strategic Partnerships   | City of Fort Worth Tarrant County TxDOT Streams & Valleys            |
| Clear Fork - 1 | Waterside Oxbow Bridge                       | Bridge Connection  | Short-Term | \$550,000    | Safety & Security Enhancements Continue Trail Developments and Key Connection   | City of Fort Worth<br>Streams & Valleys                              |
| Clear Fork - 2 | Overton Lighted Loop                         | Illuminated Concrete Lighted Loop with Safety Signage  | Short-Term | \$1,995,500  | Safety & Security Enhancements Continue Trail Developments and Key Connection   | City of Fort Worth<br>Streams & Valleys                              |
| Clear Fork - 3 | Westbend Connection                          | Terraced By-Pass Trail at Commercial Development Trail Connection (Colonial to Rogers, on South Bank)  Trail Connection (Colonial to Rogers)   | Mid-Term   | \$2,277,000  | Safety & Security Enhancements Continue Trail Developments and Key Connection Support Water Recreation Facilitate Strategic Partnerships  | City of Fort Worth<br>Streams & Valleys                              |

# LAKE PARK PROJECTS

| roject #   | Project Name             | Project Description   | Timeframe  | Cost         | Strategic Initiatives 7 9 9 9  | Partnerships 6   |
|------------|--------------------------|---|------------|--------------|--|--|
| e Park - 1 | Walnut Creek Nature Area | <ul> <li>Nature Education Pavilion &amp; Signage</li> <li>Boardwalks / Shoreline / Water Access / Fishing Docks</li> <li>Nature Trail with Wildlife Viewing</li> </ul>                              | Long-Term  | \$9,757,000  | Continue Trail Developments and Key Connections Support Water Recreation Environmental Education, Programming, and Events Expand Natural Land Management Processes Facilitate Strategic Partnerships | City of Azle<br>Azle ISD   |
| e Park - 2 | Indian Creek Property    | <ul> <li>Fishing</li> <li>Kayak Launch / Small Boat Access</li> <li>Picnicking</li> </ul>   | Mid-Term   | \$3,685,000  | Support Water Recreation   | Tarrant County   |
| e Park - 3 | Eagle Mountain Park      | <ul> <li>Habitat Restoration</li> <li>Nature Trail Development</li> <li>Wildlife Viewing</li> <li>Environmentally Sustainable Maintenance Program</li> </ul>  | Short-Term | \$55,000     | Safety & Security Enhancements Environmental Education, Programming, and Events Expand Natural Land Management Processes   | Tarrant County   |
| e Park - 4 | Twin Points Park         | <ul> <li>Additional Shade Pavilions</li> <li>Additional Trees for Future Shade</li> <li>Boat Day-Use Dock / Parking</li> </ul>  | Mid-Term   | \$1,650,000  | Support Water Recreation   |  |
| e Park - 5 | Marine Creek Reservoir   | <ul> <li>Improve Shoreline Access</li> <li>Kayak Launch</li> <li>Trail Lighting</li> </ul>  | Mid-Term   | \$2,065,800  | Safety & Security Enhancements Support Water Recreation  | City of Fort Worth EMSISD TCC Tarrant County   |
| e Park - 6 | Cement Lake              | <ul> <li>Reorganization and Upgrade Athletic Facilities at Windy Ryon Property</li> <li>Bathroom / Concession Building</li> <li>Parking Upgrades</li> <li>Directional Signage / Branding</li> </ul> | Long-Term  | \$22,000,000 | Facilitate Strategic Partnerships  | City of Fort Worth Tarrant County EMSISD PYBSA Saginaw Youth Association Rodeo Association |





The Trinity River corridor is a major destination in the DFW region

# **APPENDIX**

106 MAINTENANCE STANDARDS

109 MARKET ANALYSIS

111 FINANCIAL ANALYSIS & PLAN

119 TRINITY TRAILS PROJECTS SCHEDULE

121 FLOODWAY PROJECTS SCHEDULE

123 LAKE PARKS PROJECTS



# **APPENDIX: MAINTENANCE STANDARDS**

Recommended maintenance standards help guide practices around trails, parks, and open spaces. Example landscape maintenance activities include mowing, edging, trash removal, pruning, aeration, fertilizing and herbicide applications as required. Additionally, infrastructure including facilities, lighting, buildings, equipment, and structures should be inspected periodically to identify elements in need of repair or replacement.

The following pages define and outline proposed maintenance standards for these elements.

### Maintenance Standards and Definitions

# Turf Maintenance – high profile areas (small areas, entire area visible to foot traffic)

- Mowing will occur approximately every 10 days
- Mowing heights (4" standard)
- Edging of all turf perimeters
- Aerate 1 time/year in February (additionally if needed)
- Fertilize annually in May
- Herbicide provided twice per year (spring & fall)

### Litter Control

- Pick up litter and empty containers twice per week or as needed
- · Graffiti removed as needed

# Site Amenity Maintenance

 Inspect benches, trash containers, picnic tables and grills, bicycle racks, flag poles, drinking fountains, and other site amenities as needed. Complete repairs as quickly as possible based on safety.

# Trail/General Floodway Maintenance

- · Inspect hard and soft surface trails as needed
- Remove dirt, sand, and organic debris from hard surfaces as needed
- Remove organic debris from soft surfaces as needed
- · Graffiti removed as needed
- Remove overhanging branches annually
- Chemically control weeds (herbicide) along soft surface trail and upright structures twice annually
- Inspect signs, benches, and other site amenities at least once monthly
- Inspect signs, benches, and other site amenities as needed. Complete repairs as quickly as possible based on safety.
- Inspect and make necessary repairs to lighting systems as needed
- Low water dams will be cleaned (once water subsides) within 10 days

### Fence and Gate Maintenance

- Inspect fences, gates and bollards as needed. Complete safety-related repairs immediately. Complete other repairs within as quickly as possible.
- · Free fence of debris as needed

# Sign Maintenance

- Inspect sign lettering, surfaces, and posts as needed
- Repair / replace signs to maintain design and safety standards as quickly as possible
- · Clean signs as needed

# Vandalism and Graffiti Removal

· Initiate repairs immediately upon discovery.

### Picnic Shelters

- Reserved units cleaned and litter removed prior to and after each reservation
- Minor repairs are made immediately upon discovery
- · Non-reserved units are cleaned weekly

# Lighting Security/Area

- Inspect routinely
- Repairs/bulb replacement will be completed as quickly as possible

# **Broken Equipment Standard**

- Broken equipment shall be repaired, as staff is capable and parts are available when noticed or reported
- If staff is not able to repair, the broken equipment will be signed and roped off with emergency tape indicating that the amenity is broken, not to be used and if and when it will be repaired

# Lifecycle Replacement

 The Department should develop a lifecycle replacement program that must be built into the Capital Improvement Program based on contractor and product specifications

### Restrooms

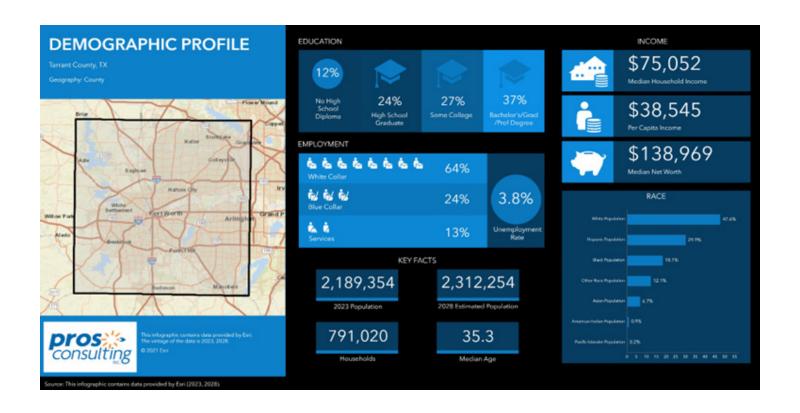
- Restrooms cleaned daily (Twin Points to be cleaned twice per day during open season)
- Leaks dealt with immediately and repaired within 24 hours of discovery
- Portable restrooms are serviced three times a week

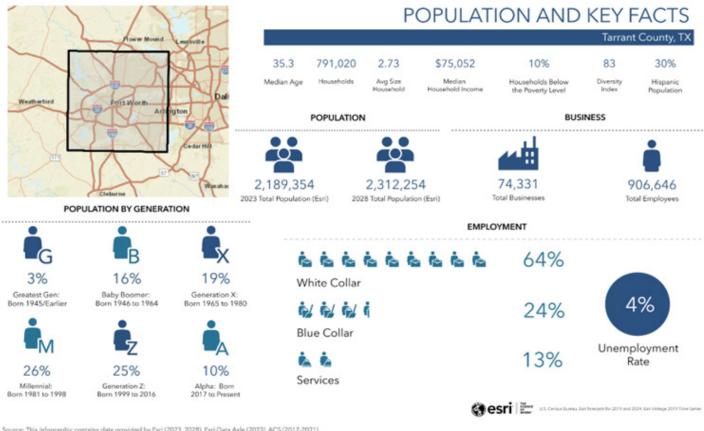
# Open Space Standard

- Maintain natural appearance to open space areas
- Remove trees and branches that pose a hazard to the users of the area
- Post and maintain appropriate signage for each individual area
- Implement strategies to assist in reducing the stand of non-native invasive plants by 5% annually
- No large branches or debris will be allowed in parks and along perimeters

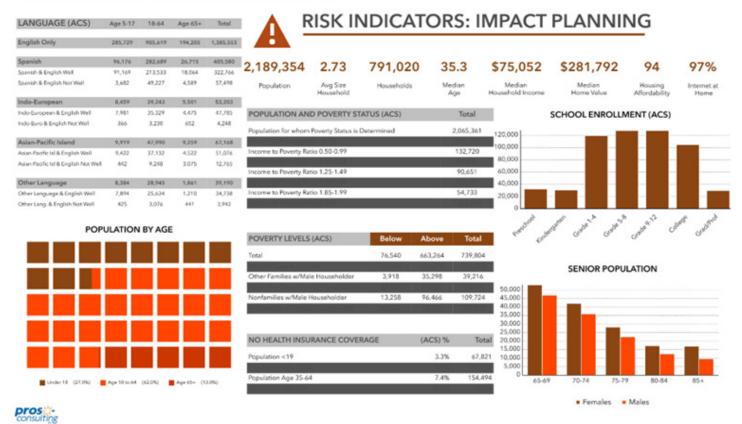
# **APPENDIX: MARKET ANALYSIS**

A key component of the TRWD Recreation Master Plan is a market analysis that evaluates demographics and recreation trends in the region. The purpose of this analysis is to provide TRWD insight into the makeup of the population they serve and identify market trends in recreation. The report also helps to quantify the market in and around Tarrant County and assists in providing a better understanding of the types of parks, facilities, and services used to satisfy the needs of residents. A more robust reporting of this analysis is provided in the appendices of this master plan, and featured here are highlights of these findings.





ce; This infographic contains data provided by Esri (2023, 2028), Esri-Data Axle (2023), ACS (2017-2021).



Source: This infographic contains data provided by Esri (2023, 2028), Esri-MRI-Simmons (2023), Esri-Data Axie (2023), ACS (2017-2021)

# APPENDIX: FINANCIAL ANALYSIS AND PLAN

The final component of the Recreation Master Plan is an analysis of the annual operating costs and revenues associated with management of TRWD's recreational assets and using that information to inform potential financial impacts related to the proposed projects in the Master Plan. As noted previously in the Master Plan, TRWD is not a direct recreation program or service provider, but rather manage parks, trailheads, and other sites in which visitors enjoy self-guided experiences, and some selected partners provide programming. Subsequently, all expenses associated with this analysis are just maintenance expenses. Revenues are those collected from admission fees, concession fees, permit fees, and other transactions support park and facility usage.

# Total Operating Expenses: FY 2022 - FY 2025

Total operating expenses were evaluated across eight cost centers that also align with those in which revenues are collected. These cost centers are detailed below.

- Twin Points Park
- · Panther Island Facilities
- Eagle Mountain Park
- · Coyote Drive-in Theater
- · Woodshed Restaurant
- Trailhead Maintenance (expenses only)
- Trinity Trail Permits (revenues only)
- Other Leases and Permits (revenues only)

The tables on the following page detail these annual operational costs in each cost center, as well as the proportion each cost center represents of the total annual budget for each year. These expenses do not include general administration and overhead costs and are purely direct operational expenses. Expenses in all cost centers remained mostly consistent from FY 2020 to FY 2024, except for smaller expenditures in FY 2024 for Panther Island Facilities and the Woodshed Restaurant. It is clear the three highest cost centers from year to year are Trailhead Maintenance, Twin Points Park, and Panther Island Facilities.

| EXPEN                           | ISES RECREATION | ONAL INFRAST    | RUCTURE         |                 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| Recreation Infrastructure       | FY 2022 Actuals | FY 2023 Actuals | FY 2024 Actuals | FY 2025 Actuals |
| Town Points Park                | 172,072         | 172,320         | 172,320         | 188,000         |
| Trailhead Maintenance           | 160,279         | 198,726         | 256,958         | 278,700         |
| Panther Island Facilities       | 151,572         | 129,967         | 114,386         | 121,600         |
| Eagle Mountain Park             | 46,157          | 57,854          | 68,180          | 69,750          |
| Coyote Drive-In Theater         | 53,592          | 11,523          | 5,312           | 32,500          |
| Woodshed Restaurant             | 5,515           | 2,269           | 225             | 6,500           |
| Trinity Trail Permits           | -               | -               | -               | -               |
| Other Leases and Permits        | -               | -               | -               | -               |
| Total Recreation Infrastructure | \$589,189       | \$572,659       | \$617,381       | \$697,050       |

| E                         | EXPENSES AS A PERCENT OF TOTAL |                 |                 |                 |  |  |  |  |  |  |
|---------------------------|--------------------------------|-----------------|-----------------|-----------------|--|--|--|--|--|--|
| Recreation Infrastructure | FY 2022 Actuals                | FY 2023 Actuals | FY 2024 Actuals | FY 2025 Actuals |  |  |  |  |  |  |
| Twin Points Park          | 29%                            | 30%             | 28%             | 27%             |  |  |  |  |  |  |
| Trailhead Maintenance     | 27%                            | 35%             | 42%             | 40%             |  |  |  |  |  |  |
| Panther Island Facilities | 26%                            | 23%             | 19%             | 17%             |  |  |  |  |  |  |
| Eagle Mountain Park       | 8%                             | 10%             | 11%             | 10%             |  |  |  |  |  |  |
| Coyote Drive-In Theater   | 9%                             | 2%              | 1%              | 5%              |  |  |  |  |  |  |
| Woodshed Restaurant       | 1%                             | 0%              | 0%              | 1%              |  |  |  |  |  |  |
| Trinity Trail Permits     | 0%                             | 0%              | 0%              | 0%              |  |  |  |  |  |  |
| Other Leases and Permits  | 0%                             | 0%              | 0%              | 0%              |  |  |  |  |  |  |

The graph below illustrates these expenses in each cost center as well as graphs the total annual operational expenditures from FY 2022 actuals to the FY 2025 budget.



# Total Operational Revenues: FY 2022 - FY 2025

The tables below detail the annual operational revenues in each cost center, as well as the proportion each cost center represents of the total annual revenues for each year. Revenues in all cost centers have fluctuated nominally from FY 2020 to FY 2024, with patterns emerging that revenues from Twin Point Park, Panther Island Facilities, and Other Leases and Permits being most consistently the top three areas of revenue generation.

| REVEN                           | IUES RECREATI   | ONAL INFRAS     | TRUCTURE        |                 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| Recreation Infrastructure       | FY 2022 Actuals | FY 2023 Actuals | FY 2024 Actuals | FY 2025 Actuals |
| Town Points Park                | 551,086         | 575,682         | 606,064         | 550,000         |
| Trailhead Maintenance           | -               | -               | -               | -               |
| Eagle Mountain Park             | -               | -               | -               | -               |
| Panther Island Facilities       | 134,666         | 212,961         | 273,916         | 270,968         |
| Coyote Drive-In Theater         | 206,473         | 177,656         | 177,656         | 175,000         |
| Woodshed Restaurant             | 204,383         | 192,617         | 185,118         | 175,000         |
| Trinity Trail Permits           | 19,800          | 17,700          | 17,850          | 21,500          |
| Other Leases and Permits        | 194,977         | 215,804         | 262,170         | 301,362         |
| Total Recreation Infrastructure | \$1,311,386     | \$1,392,420     | \$1,522,774     | \$1,493,730     |

| R                         | EVENUES AS A    | PERCENT OF      | TOTAL           |                 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|
| Recreation Infrastructure | FY 2022 Actuals | FY 2023 Actuals | FY 2024 Actuals | FY 2025 Actuals |
| Town Points Park          | 42%             | 44%             | 46%             | 42%             |
| Trailhead Maintenance     | 0%              | 0%              | 0%              | 0%              |
| Panther Island Facilities | 0%              | 0%              | 0%              | 0%              |
| Eagle Mountain Park       | 10%             | 16%             | 21%             | 21%             |
| Coyote Drive-In Theater   | 16%             | 14%             | 14%             | 13%             |
| Woodshed Restaurant       | 16%             | 15%             | 14%             | 13%             |
| Trinity Trail Permits     | 2%              | 1%              | 1%              | 2%              |
| Other Leases and Permits  | 15%             | 16%             | 20%             | 23%             |

The graph below illustrates these expenses in each cost center as well as graphs the total annual operational expenditures from FY 2022 actuals to the FY 2025 budget.

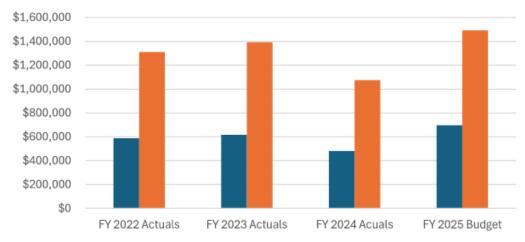


# Total Expenses and Revenues

The table and graph below detail how expenses and revenues compare from FY 2022 – FY 2024 actuals, as well as the FY 2025 budget. As noted previously, these expenses do not include general administration and overhead costs and are purely direct operational expenses

| Recreation Infrastructure | <b>Total Expenditures</b> | <b>Total Revenues</b> |
|---------------------------|---------------------------|-----------------------|
| FY 2022 Actuals           | \$589,189                 | \$1,311,386           |
| FY 2023 Actuals           | \$617,451                 | \$1,392,420           |
| FY 2024 Acuals            | \$480,642                 | \$1,075,751           |
| FY 2025 Budget            | \$697,050                 | \$1,493,730           |

# **Total Expenses and Revenues**



# Calculating Annual Unit Maintenance Costs

In order to best understand the potential operational cost impacts derived from projects that are proposed in the Master Plan, current annual costs were calculated at an incremental or unit level. Specifically, this analysis determined the annual park maintenance cost per acre based on total acres-maintained at two different levels -Level 1 referring to the more intense maintenance required at Twin Points, and Level II reflecting the far less intense maintenance requirements of Eagle Mountain Park. Similarly, this was calculated for annual trailhead maintenance based on the total number of current trailheads. The table and graph below detail this information, including the average annual unit costs for each for FY 2022 to FY 2025.

This analysis details that annual Level I park maintenance cost per acre varied from \$4,416 (FY 2023) to \$5,222 (FY 2025), averaging \$5,207 over that time period. Similarly, Level Il park maintenance cost per acre varied from \$118 (FY 2023) to \$178 (FY 2025), averaging \$146. Annual trailhead maintenance cost per trailhead varied from \$3,562 (FY 2022) to a budgeted \$6,193 in FY 2025, averaging \$4,548 over that four-year period. This data can be incredibly helpful not just in determining potential fiscal impacts to additional lands that would be managed more in park-like manner or if trailheads are added, but also can serve as an analytical tool for calculating operational needs based on the breath of responsibilities or size of the system. For example, if determined in the future that in order to better meet operational and maintenance needs additional staffing or other resources are needed, that can be calculated based on this approach. For example, if the total additional funding resources needed for annual trailhead maintenance is \$45,000 that would equate to an increase of an average \$1,000 per trailhead.

|                     |          | FY 2022 Unit     | FY 2023 Unit     | FY 2024 Unit     | FY 2025 Unit     | Average Unit     |
|---------------------|----------|------------------|------------------|------------------|------------------|------------------|
|                     | Quantity | Maintenance Cost |
| Level I Park Acres  | 36       | \$4,780          | \$4,787          | \$7,675          | \$5,222          | \$5,616          |
| Level II Park Acres | 392      | \$118            | \$148            | \$174            | \$178            | \$154            |
| Trailboade          | 4E       | do Eco           | ¢4.416           | ¢E 710           | ¢6 102           | ¢4.070           |

Annual and Average Park and Traihead Unit Maintenance Cost (per acre/per trailhead)



# Financial Plan

Based on the budget data provided and evaluated, as well as discussions with TRWD staff regarding areas of potential additional investment in order to meet community needs and maintain a high-quality recreation system, this financial plan was developed as a recommended guideline for future budget planning. Due to the nature of the projects detailed in the Master Plan, only limited projects are expected to produce an increase in regular and routine maintenance expense albeit there are a few that will. This plan attempts to make that as clear as possible in its recommendations.

# Financial Impacts on Operations & Maintenance

While there will be capital expenses associated with each of the projects identified in the Master Plan, not all of them will have a noticeable impact on annual operational costs. The projects identified that are expected to potentially impact operational / maintenance costs are detailed in the table below, as well as their recommended timeline for completion and anticipated annual operational budget impacts.

| Project                     | Timeline               | Anticipated Annual<br>Budget Impact |
|-----------------------------|------------------------|-------------------------------------|
| Riverside Trailhead         | Short-term (1-5 years) | \$4,500 - \$5,500                   |
| Northbend Nature Area       | Mid-term (6-10 years)  | \$1,000 - \$2,000                   |
| Indian Creek Property       | Mid-term (6-10 years)  | \$1,000 - \$2,000                   |
| Twin Points Park            | Mid-term (6-10 years)  | \$4,000 - \$5,000                   |
| Marine Creek Reservoir      | Mid-term (6-10 years)  | \$1,000 - \$2,000                   |
| Westworth Village Trailhead | Mid-term (6-10 years)  | \$4,500 - \$5,500                   |
| Walnut Creek Nature Area    | Mid-term (6-10 years)  | \$4,000 - \$5,000                   |

# Five Year Budget Projections

Taking these findings and the assumptions that current operational costs could be expected to increase approximately 3% annually due to normal inflationary and cost-of-doing-business expense elevations, a five-year budget projection was developed as detailed in the pro forma below. For the sake of this projection, it was also assumed revenues would increase annually by 3% with the exception of those linked to termed lease agreements and fixed payments.

| Recreation Infrastructure   |    | FY 2026                                 | FY 2027   | FY 2028   | FY 2029   | FY 2030                                 |
|---|----|---|---|---|---|---|
| Administration and Overhead   |    | 1,250,000                               | 1,287,500   | 1,326,125   | 1,365,909   | 1,406,886                               |
| Twin Points Park  |    | 193,640                                 | 199,449   | 205,433   | 211,596   | 217,944                                 |
| Trailhead Maintenance   |    | 292,211                                 | 300,977   | 310,007   | 319,307   | 328,886                                 |
| Panther Island Facilities   |    | 125,248                                 | 129,005   | 132,876   | 136,862   | 140,968                                 |
| Eagle Mountain Park   |    | 71,843                                  | 73,998  | 76,218  | 78,504  | 80,859                                  |
| Coyote Drive-In Theater   |    | 32,500                                  | 33,475  | 34,479  | 35,514  | 36,579                                  |
| Woodshed Restaurant   |    | 6,695                                   | 6,896   | 7,103   | 7,316   | 7,535                                   |
| Trinity Trail Permits   |    | -                                       | -   | -   | -   | -                                       |
| Other Leases and Permits  |    | -                                       | -   | -   | -   | -                                       |
| Total Recreation Infrastructure   | \$ | 1,972,137 \$                            | 2,031,301   | \$ 2,092,240  | 2,155,007 \$  | 2,219,657                               |
| Recreation Infrastructure   |    |   |   |   |   |   |
| REVENUES Recreation Infrastructure  |    |   |   |   |   |   |
| Twin Points Park  |    | 624,180                                 | 642,905   | 662,193   | 682,058   |   |
| T   |    |   | ,   | 002,133   | 002,000   | 702,520                                 |
| Trailhead Maintenance   |    | -                                       | -   | -   | - 602,050   | 702,520<br>-                            |
| Panther Island Facilities   |    | 282,133                                 | 290,597   | 299,315   | 308,295   | 702,520<br>-<br>317,544                 |
|   |    | -<br>282,133<br>-                       |   | -   |   |   |
| Panther Island Facilities<br>Eagle Mountain Park  |    | 282,133<br>-<br>175,000                 |   | -   |   |   |
| Panther Island Facilities<br>Eagle Mountain Park<br>Coyote Drive-In Theater   |    |   | 290,597<br>-  | 299,315   | 308,295   | 317,544<br>-                            |
| Panther Island Facilities   |    | 175,000                                 | 290,597<br>-<br>175,000                                 | 299,315<br>-<br>175,000                                 | 308,295<br>-<br>175,000                                 | 317,544<br>-<br>175,000                 |
| Panther Island Facilities<br>Eagle Mountain Park<br>Coyote Drive-In Theater<br>Woodshed Restaurant  |    | 175,000<br>180,250                      | 290,597<br>-<br>175,000<br>185,658                      | 299,315<br>-<br>175,000<br>191,227                      | 308,295<br>-<br>175,000<br>196,964                      | 317,544<br>-<br>175,000<br>202,873      |
| Panther Island Facilities<br>Eagle Mountain Park<br>Coyote Drive-In Theater<br>Woodshed Restaurant<br>Trinity Trail Permits                             | \$ | 175,000<br>180,250<br>22,145            | 290,597<br>-<br>175,000<br>185,658<br>22,809<br>307,317 | 299,315<br>-<br>175,000<br>191,227<br>23,494            | 308,295<br>-<br>175,000<br>196,964<br>24,198<br>313,494 | 175,000<br>202,873<br>24,924<br>316,629 |
| Panther Island Facilities<br>Eagle Mountain Park<br>Coyote Drive-In Theater<br>Woodshed Restaurant<br>Trinity Trail Permits<br>Other Leases and Permits | *  | 175,000<br>180,250<br>22,145<br>304,275 | 290,597<br>-<br>175,000<br>185,658<br>22,809<br>307,317 | 299,315<br>-<br>175,000<br>191,227<br>23,494<br>310,391 | 308,295<br>-<br>175,000<br>196,964<br>24,198<br>313,494 | 175,000<br>202,873<br>24,924<br>316,629 |

# TRINITY TRAILS PROJECTS SCHEDULE

|       |         |   |                |           |             | Short-Term  |                |             |               |           |           | Mid-Term      |              |           | Long-Term                            |  |
|-------|---------|---|----------------|-----------|-------------|-------------|----------------|-------------|---------------|-----------|-----------|---------------|--------------|-----------|--------------------------------------|--|
| Proje | ect #   | Project Name  | Estimated Cost | 2025      | 2026        | 2027        | 2028           | 2029        |               | 2030      | 2031      | 2032          | 2033         | 2034      | 2035+                                |  |
| TT .  | -1      | Signage and Striping  |                |           |             |             |                |             |               |           |           |               |              |           |                                      |  |
|       |         | TT-1.1 Clear Fork   | \$1,220,000    | \$51,000  | \$1,169,000 |             |                |             |               |           |           |               |              |           |                                      | •  |
|       |         | TT-1.2 Lower West Fork  | \$1,103,300    | \$100,300 |             | \$1,003,000 |                |             |               |           |           |               |              |           |                                      | Treesens   |
|       |         | TT-1.3 Upper West Fork  | \$872,200      | \$79,200  |             |             | \$793,000      |             |               |           |           |               |              |           |                                      |  |
| П.    | - 2     | Tree Planting   | \$25,000 / yr  | \$25,000  | \$25,000    | \$25,000    | \$25,000       | \$25,000    | or X of       | \$25,000  | \$25,000  | \$25,000      | \$25,000     | \$25,000  | \$25,000                             | and the second   |
| П-    | - 3     | Natural Areas   | \$25,000 / yr  | \$25,000  | \$25,000    | \$25,000    | \$25,000       | \$25,000    |               | \$25,000  | \$25,000  | \$25,000      | \$25,000     | \$25,000  | \$25,000                             |  |
| TT-   | -4      | Portages around the Dams  | \$1,320,000    | \$60,000  |             | \$600,000   |                |             |               | \$60,000  | \$600,000 |               |              |           |                                      |  |
|       |         |   | Yearly Total   | \$340,500 | \$1,219,000 | \$1,653,000 | \$843,000      | \$50,000    |               | \$110,000 | \$650,000 | \$50,000      | \$50,000     | \$50,000  |                                      |  |
|       |         |   |                |           |             | Short -1    | Term Total: \$ | \$4,105,500 |               |           |           | Mid           | -Term Total: | \$910,000 | Long -Term Total: \$50,000           | The same and   |
|       |         |   |                |           |             |             |                |             |               |           |           |               |              | Trinity   | y Trails Projects Total: \$5,065,500 |  |
|       |         | ALCONOMIC MARKET  |                | 7 3       |             |             |                | 6020        | AND THE PARTY | at wife   |           | and No Harman |              |           |                                      |  |
|       |         | NAME OF THE PARTY |                |           |             |             |                |             |               |           |           |               |              |           |                                      |  |
|       |         |   |                |           |             |             |                | 加以          |               | y yes     | 1         |               |              |           |                                      |  |
|       |         |   |                | Walan     |             |             |                | 看別          |               |           |           | K/A/          |              |           |                                      |  |
|       |         |   |                |           |             |             | 1914           |             |               |           |           |               |              |           | AND HE HE                            | The same of the sa |
| DE    | ESIGN   |   |                |           | P III       |             |                |             |               |           |           |               |              |           |                                      | 外传统和   |
| cc    | ONSTRUC | TION  | A KAY          |           |             |             |                |             |               |           |           |               |              |           |                                      |  |
|       |         |   |                |           |             |             |                |             |               |           |           |               |              |           | RECREATION                           | MASIER PLAN T120   |
|       |         |   | W. W. K.       |           |             |             |                |             |               |           |           |               |              |           | RECREATION                           | MASTER PLAN  |

# FLOODWAY PROJECTS SCHEDULE

|           |                                   |                | Short-Term                     |             |               |             |             | Mid-Term                              |             |             |             | Long-Term      |                                      |       |
|-----------|-----------------------------------|----------------|--------------------------------|-------------|---------------|-------------|-------------|---------------------------------------|-------------|-------------|-------------|----------------|--------------------------------------|-------|
| Project # | Project Name                      | Estimated Cost | 2025                           | 2026        | 2027          | 2028        | 2029        | 2030                                  | 2031        | 2032        | 2033        | 2034           | 2035+                                |       |
| WF - 1    | Westworth Village Trailhead       | \$500,000      |                                |             |               |             | \$50,000    | \$450,000                             |             |             |             |                |                                      |       |
| WF - 2.1  | Westworth Village<br>Lighted Loop | \$6,644,000    |                                |             |               |             | \$764,000   | \$2,940,000                           | \$2,940,000 |             |             |                |                                      |       |
| WF - 2.2  | Westworth Village Crossing        | \$1,000,000    |                                |             |               |             |             |                                       |             |             |             | \$1,000,000    |                                      |       |
| WF-3      | River Bend Nature Area            | \$2,541,000    |                                |             |               |             |             |                                       |             |             |             |                | \$2,541,000                          |       |
| WF - 4    | Brookside Nature Area             | \$2,541,000    |                                |             |               |             |             |                                       | \$231,000   | \$2,310,000 |             |                |                                      |       |
| WF - 5    | Reimagined Rockwood Park          | \$14,300,000   |                                |             |               |             |             |                                       |             |             |             |                | \$14,300,000                         |       |
| WF - 6    | Marine Creek Connection           | \$3,740,000    |                                |             | ditio         |             |             |                                       |             |             |             |                | \$3,740,000                          |       |
| WF - 7    | North Bend Nature Area            | \$11,550,000   | - 1                            |             |               |             |             |                                       | \$980,500   | \$5,319,500 | \$5,250,000 | and the second |                                      | Y     |
| WF - 8.1  | Riverside Lighted Loop            | \$4,458,750    |                                | \$578,750   | \$1,940,000   | \$1,940,000 |             |                                       | CONT.       |             |             |                |                                      | A.73  |
| WF - 8.2  | Riverside Crossing                | \$1,900,000    |                                |             |               |             |             |                                       |             |             | \$1,900,000 |                |                                      | ja ja |
| WF - 9    | Sycamore Creek Connection         | \$2,046,000    | 1                              |             |               |             |             |                                       | \$186,000   | \$1,860,000 |             |                |                                      | 35    |
| CF - 1    | Waterside Oxbow Bridge            | \$550,000      |                                |             |               |             | Carrie Ca   | and the second                        |             |             |             |                | \$550,000                            |       |
| CF - 2.1  | Overton Lighted Loop              | \$1,345,500    | \$231,500                      | \$1,115,000 |               |             |             |                                       |             |             |             |                |                                      | hora  |
| CF - 2.2  | Overton Crossing                  | \$650,000      |                                |             |               |             | TO ALL      | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |             |             |             |                | \$650,000                            |       |
| CF - 3    | Westbend Connection               | \$2,277,000    | May !                          |             |               | \$207,000   | \$2,070,000 |                                       |             |             |             |                |                                      |       |
| 3         |                                   | Yearly Total   | \$231,500                      | \$1,693,750 | \$1,940,000   | \$2,147,000 | \$2,884,000 | \$3,390,000                           | \$4,337,000 | \$9,489,500 | \$7,150,000 | \$1,000,000    |                                      |       |
| DESIGN    | <b>第43</b> 分别有些                   |                | Short -Term Total: \$8,896,250 |             |               |             |             | Mid -Term Total: \$25,366,500         |             |             |             |                |                                      | 的     |
| CONSTRU   | спои                              | <b>着人们</b>     |                                |             | XVIV VIOLES X |             |             |                                       |             |             |             | FI             | loodway Projects Total: \$56,043,750 |       |

## LAKE PARK PROJECTS SCHEDULE Short-Term Long-Term Mid-Term Project # Project Name **Estimated Cost** 2035+ 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 Walnut Creek Nature Area \$9,757,000 \$4,430,000 \$4,450,000 \$438,500 \$438,500 Indian Creek Property \$3,685,000 LP - 2 \$3,345,000 \$340,000 Eagle Mountain Park \$55,000 / yr LP - 3 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$55,000 \$1,650,000 Twin Points Park LP - 4 \$155,000 \$1,495,000 \$2,065,800 \$1,873,000 Marine Creek Reservoir \$192,800 \$22,000,000 LP - 6 Cement Lake \$22,000,000 Yearly Total \$493,500 \$4,640,000 \$6,192,800 \$2,268,000 \$3,400,000 \$55,000 \$55,000 \$55,000 \$55,000 \$493,500 Long -Term Total: \$22,055,000 Short -Term Total: \$713,500 Mid -Term Total: \$16,931,3000 Lake Park Projects Total: \$39,669,800

