

# Trinity River National Water Trail Master Plan

SEPTEMBER 2024



North Central Texas  
Council of Governments



TRINITY  
COALITION



# Acknowledgements

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- City of Arlington
- City of Carrollton
- City of Coppell
- City of Dallas
- City of Farmers Branch
- City of Fort Worth
- City of Grand Prairie
- City of Irving
- City of Lewisville
- County of Dallas
- North Central Texas Council of Governments
- Trinity Coalition
- U.S. Army Corps of Engineers

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# Executive Summary

The upper corridor of the Trinity River, a hidden ribbon of natural wonder, runs almost unnoticed through one of the busiest and fastest-growing metropolitan areas in the United States. As it traverses through the Dallas-Fort Worth Metroplex, the river is flanked along much of its length by paved hike/bike trails and is adjacent to five learning centers and over fifty parks and nature preserves. There are also connections to the region's vibrant past, including the site where thousands of 49ers crossed the river on the way to the California gold rush.

With 21 existing canoe/kayak launch sites, Trinity Coalition, a local nonprofit organization, recognized the value and recreational significance integrating these sites could bring to the North Central Texas region. In 2018, Trinity Coalition, in partnership with the North Central Texas Council of Governments (NCTCOG), met with representatives from nine cities (Arlington, Carrollton, Coppell, Dallas, Grand Prairie, Farmers Branch, Fort Worth, Irving, Lewisville) and Dallas County, with a proposal to integrate all 21 existing canoe launch sites, plus three future launch sites, into a single paddling trail. Trinity Coalition received letters of support from all ten local governments and others and applied to the National Park Service for National Recreation Trail status. The designation of National Water Trail by the Secretary of the Interior was awarded in 2020, creating a national paddling destination.

The Trinity River National Water Trail ("Water Trail") as it stands today covers 130 river miles, providing access to three major river tributaries, the Clear Fork, West Fork, and Elm Fork, as well as 40 miles of the Main Stem. The Upper Trinity River Corridor is one of only 56 water trails in the United States to hold that designation, and the first of its kind in Texas. To maintain the National Water Trail status, Trinity Coalition must work with local communities, who own the launch sites, to ensure continued compliance with NPS standards. Developed by NCTCOG, in coordination with Trinity Coalition and the Trinity River National Water Trail Task Force, the purpose of this Master Plan is to identify long-range actions that advance tourism, recreation, and economic development, and provide resources to help Trinity Coalition and communities maintain and develop the Water Trail.





# 01 Introduction



A person is seen from behind, paddling a kayak on a wide river. The scene is captured at sunset or sunrise, with a warm, golden glow on the horizon and the water's surface. The kayak's deck and the person's gear are visible in the foreground, leading the eye towards the open water and the distant shore.

# VISION

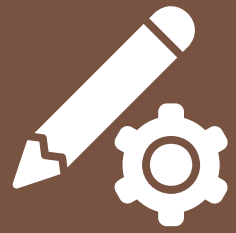
The Trinity River National Water Trail seeks to elevate the value of the Trinity River through **community** access to the river.

# MISSION

This will be achieved by ensuring access is safe and equitable, protecting natural resources, promoting economic and cultural assets, and integrating land trail connections and trail expansion. This Trinity River National Water Trail Master Plan will identify long-range actions to advance these ideas, and to help communities develop the Water Trail and identify resources.



# GOALS



## DEVELOPMENT

Develop new entry sites and expand the footprint of the existing water trail.



## PROMOTION

Promote the use of the Water Trail and educate all users.



## ACCESS

Make the Water Trail more accessible to all.



## MAINTENANCE

Maintain condition and safety of the Water Trail's existing and future launch sites.



## PROTECTION

Promote stewardship along the Trinity River.



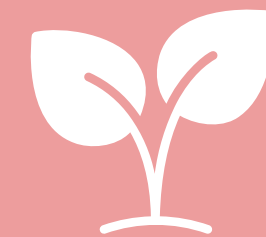
## INTEGRATION

Connect the Water Trail to existing land trails.



## PROSPERITY

Promote the economic benefits of the Water Trail.



## LEGACY

Highlight the cultural and historical context of the Water Trail.





02

## Goals and Strategies





# DEVELOPMENT

Develop new entry sites and expand the footprint of the existing Water Trail.

## GOAL

**Strategically identify, plan, and integrate new areas and launch sites to reduce distances between sites and to extend the Water Trail's reach.**

## OUTCOME

Broadening the geographical scope of the Water Trail will provide more communities and residents with access to the unique recreational, cultural, and natural experiences offered by the waterway. The development of new entry sites will help improve the overall user experience and enhance the overall functionality of the entire Water Trail. Successful implementation will require careful planning, collaboration with stakeholders, and consideration of user needs and safety standards. As the Water Trail expands, the economic and social benefits will follow, as well as draw more attention to the Water Trail increasing activity and investments made along the Trinity River.







# DEVELOPMENT

## Identify Locations



Collaborate with local communities to identify areas where new entry sites can be established. Consider factors such as existing Water Trail segments, user accessibility, and natural features.

## Plan and Design Future Launch Points



Collaborate with local communities to plan and design new launch sites. Ensure that these sites strategically reduce distances between existing Water Trail segments.

## STRATEGIES

## Coordinate Strategic Trail Planning



Conduct a thorough assessment of the existing Water Trail network. Collaborate with local stakeholders, landowners, and agencies to secure necessary permissions and rights-of-way.

## Collaborate with Stakeholders



Engage local communities and raise awareness about the Water Trail and opportunities for enhancement. Host public meetings, workshops, and educational events to involve residents in the planning process.





# DEVELOPMENT

## RECOMMENDATIONS

### ACTION ITEM 1

## Complete Priority Gaps Along the Water Trail

While the National Park Service does not require a maximum distance between launch sites, a comfortable distance for recreational paddlers is approximately seven miles or less. As identified in Figure 1.1 and Table 1.1, the majority of launch sites are within seven miles or less, except:

- Arrow Park South (L4) to White Settlement Road (L5)
- Handley Ederville Road (L10) to River Legacy Park (L11)
- River Legacy Park (L11) to Trammel Crow Park (L19)
- Frasier Dam Recreation Area (L18) to Trammel Crow Park (L19)

Cities that have jurisdiction along these gaps in launchsites may consider evaluating the potential and resources for developing new entry sites to improve user experience and functionality of the Water Trail.

Table 1.1: Information about the Water Trail's current launch sites, including the distance in miles to the closest downstream site.

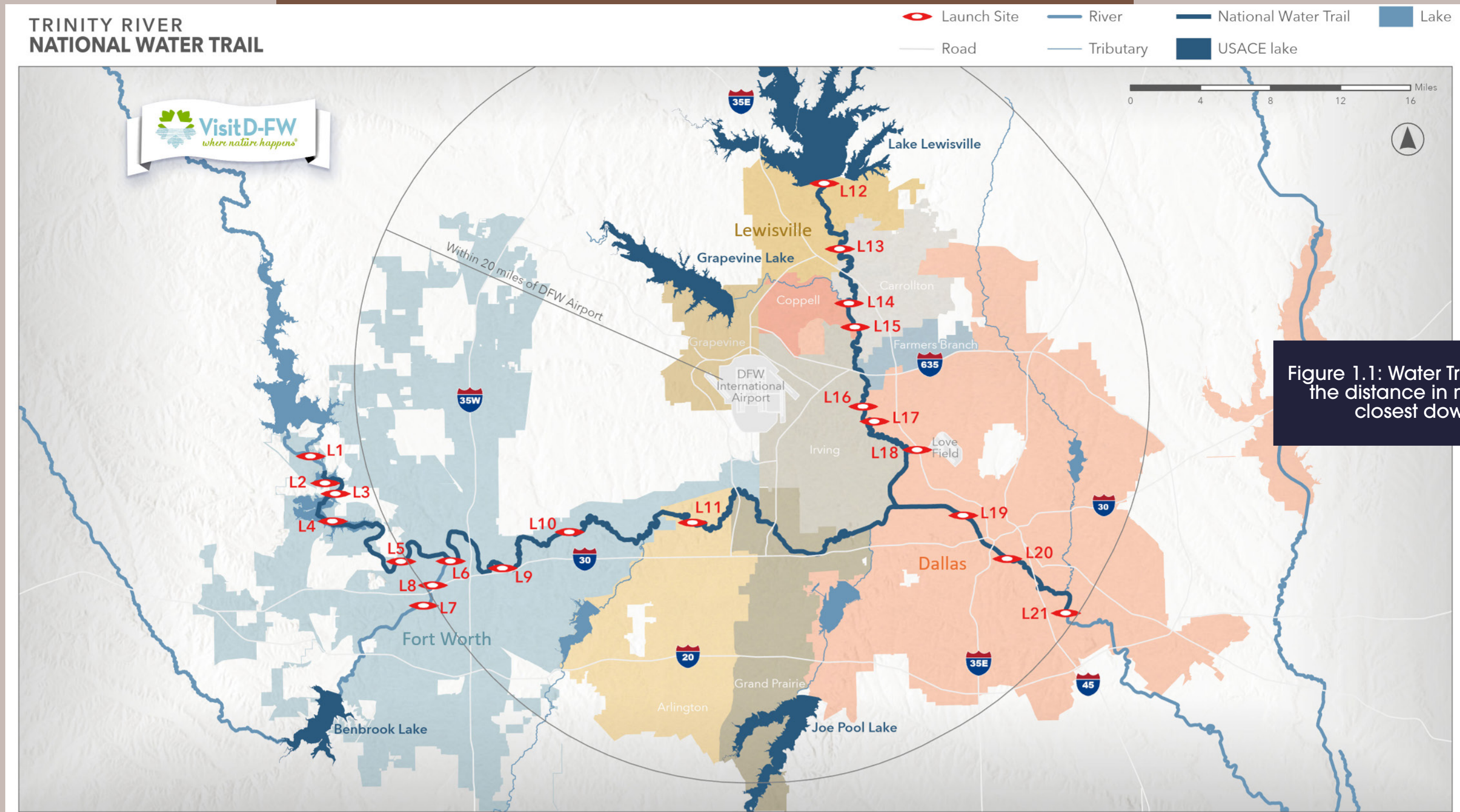
Number	Launch Site	Location	Launch Type	Length (miles)
L1	Fort Worth Nature Center	Fort Worth	Floating Dock	2.7 to L2
L2	Fort Worth Nature Center	Fort Worth	Gravel Bar	1.7 to L3
L3	Casino Beach	Fort Worth	Boat Ramp	3.5 to L4
L4	Arrow Park South	Fort Worth	Boat Ramp	8 to L5
L5	White Settlement Road	Fort Worth	Rock Steps	4.5 to L6
L6	Panther Island	Fort Worth	Sand Beach	7 to L9
L7	Rogers Road	Fort Worth	Grassy Bank	1.5 to L8
L8	Trinity Park	Fort Worth	Sloping Sidewalk	1.8 to L6
L9	Beach Street	Fort Worth	Sloping Sidewalk	6.7 to L10
L10	Handley Ederville Road	Fort Worth	Rock Steps	14 to L11
L11	River Legacy Park	Arlington	Concrete Platform	24 to L19
L12	LLELA Nature Preserve	Lewisville	Grassy/Pebble Slope	6 to L13
L13	Lewisville Kayak Launch at Hebron Parkway	Lewisville	ADA Platform	5 to L14
L14	McInnish Park	Carrollton	Concrete Platform	1.6 to L15
L15	Dimension Tract	Carrollton	Stone Steps	6.4 to L16
L16	Bird's Fort Park	Irving	Concrete Ramp	2 to L17
L17	California Crossing	Dallas	Concrete Ramp	5.5 to L18
L18	Frasier Dam Rec. Area	Dallas	Gravel Bank	8.3 to L19
L19	Trammel Crow Park	Dallas	Boat Ramp	3.7 to L20
L20	Trinity Launch at Santa Fe Trail	Dallas	Sloping Concrete Ramp	6 to L21
L21	Loop 12	Dallas	Boat Ramp	End





# DEVELOPMENT

## ACTION ITEM 1







# DEVELOPMENT

## RECOMMENDATIONS

### ACTION ITEM 2

### Identify Common Projects to Leverage Joint Investments and Development Opportunities

Developing new launch sites to bridge the gaps in launch sites or to enhance the Water Trail may prove difficult due to a lack of resources and/or the inability to bring in heavy equipment. Cities may consider identifying future roadway/bridge improvements in proximity to the Water Trail to collaborate on the timing and use of heavy equipment. The Texas Department of Transportation (TxDOT) maintains a Project Tracker interactive map that provides public information on a project's construction status. NCTCOG also maintains an interactive map, Revenue and Project Tracking System (RAPTS), to find active transportation project details. See Figure 1.2 and Figure 1.3 for screenshots on what information may be obtained from these resources.

Figure 1.2: Screenshot of TxDOT's Project Tracker mapping application.<sup>1</sup>

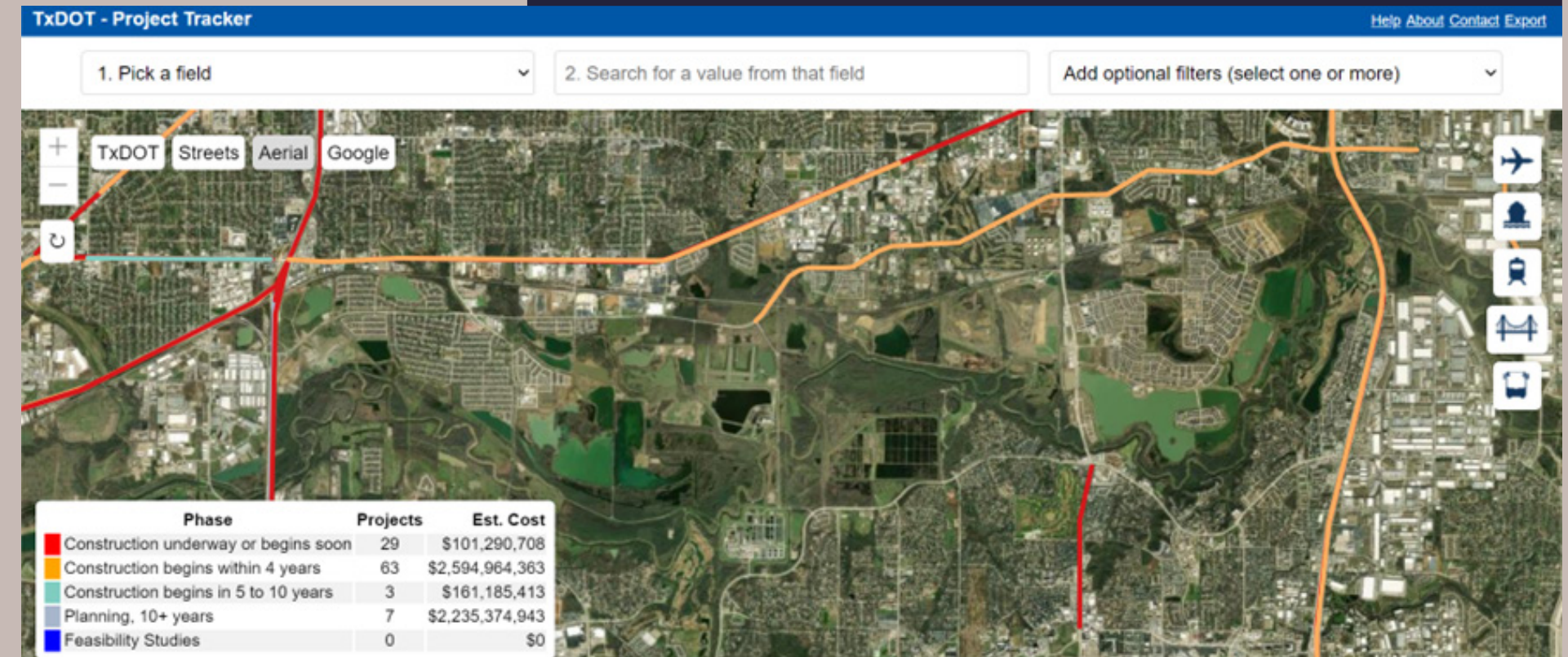
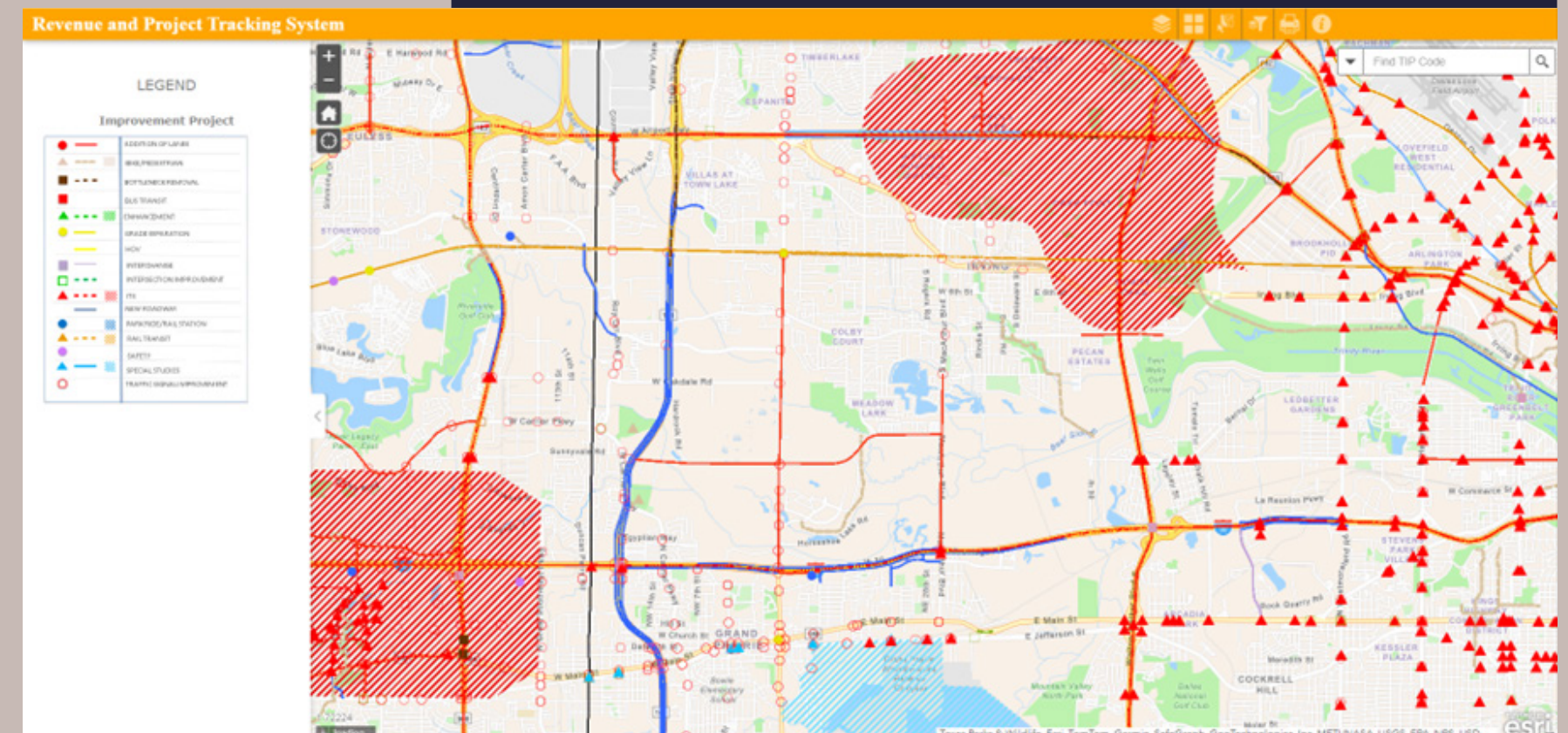


Figure 1.3: Screenshot of NCTCOG's RAPTS search engine.<sup>2</sup>







# DEVELOPMENT

## RECOMMENDATIONS

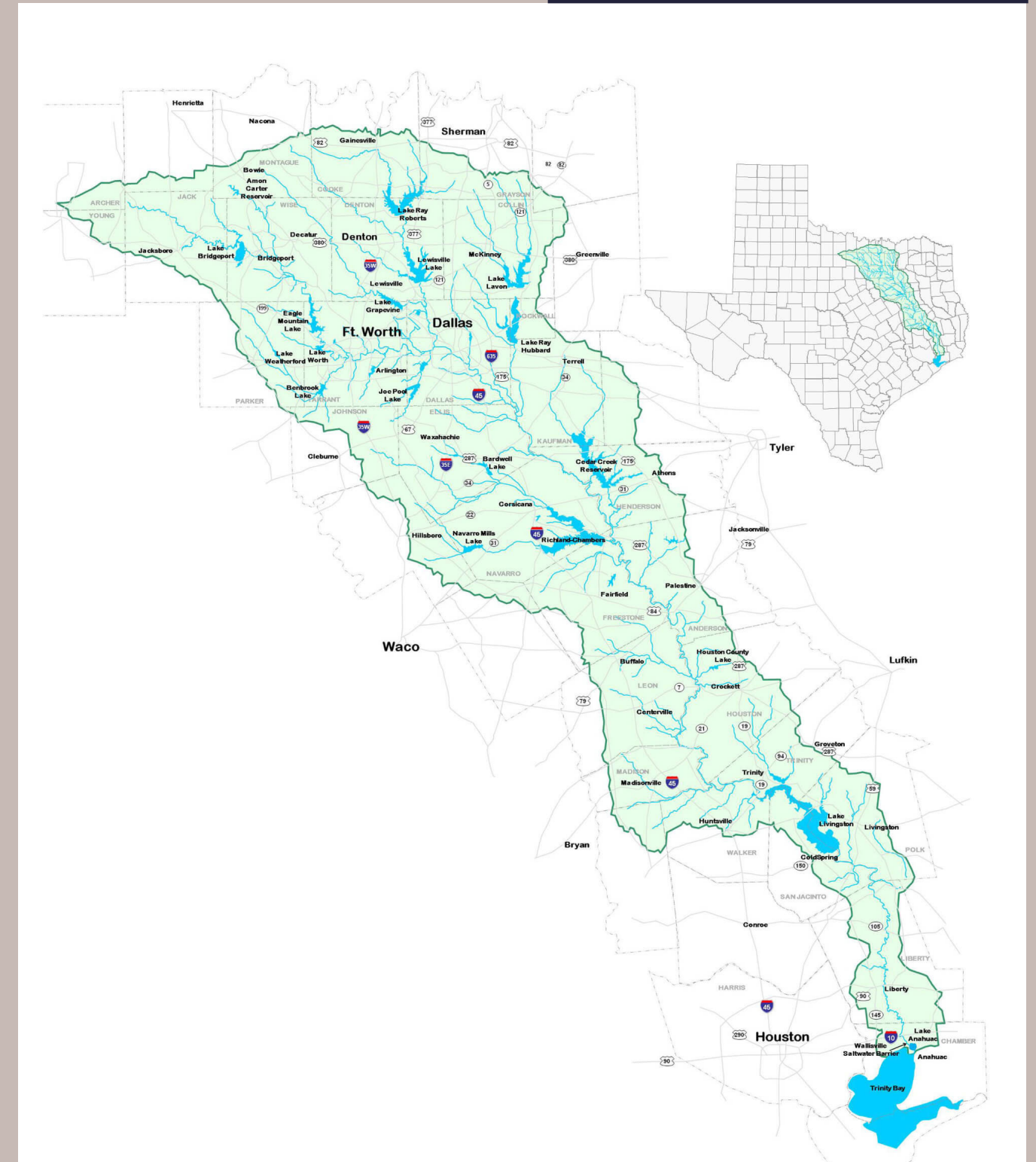
### Collaborate with Other Communities or Organizations to Expand the Water Trail

The nationally designated-Water Trail covers 130 river miles; however, Trinity Coalition has a desire to include additional river and/or lake miles in the Dallas-Fort Worth Metroplex, as well as expanding to the Gulf Coast. Figure 1.4 displays the Trinity River Basin, where it originates in far north Texas and empties in the Trinity Bay in the Gulf of Mexico. Trinity Coalition, as a nonprofit organization, does not have any authority to develop or maintain launch sites, requiring coordination and partnerships with local cities and counties who do. These partnerships would help Trinity Coalition understand applicable local, state, and federal requirements. As a starting point, Trinity Coalition may consider connecting with other Councils of Governments that the Trinity River passes through on its way to the Gulf Coast, including:

- East Texas Council of Governments
- Heart of Texas Council of Governments
- Brazos Valley Council of Governments
- Deep East Texas Council of Governments
- South East Texas Regional Planning Commission
- Houston-Galveston Area Council

Trinity Coalition may also consider coordinating with communities that have established paddling trails in local lakes in partnership with the Texas Parks and Wildlife Department to identify potential connections to the Water Trail.

Figure 1.4: Trinity River Basin map.<sup>3</sup>







# DEVELOPMENT

## CASE STUDY

### New Launch Site at Trinity View Park

The City of Irving Parks and Recreation Department partnered with Trinity Coalition to locate a new canoe launch site at Trinity View Park (Figure 1.5) that will provide better accessibility to the river after the original launch located at Mountain Creek Preserve was severely damaged by the record floods of 2015 to 2016. This new launch site will help shorten the distance between the Frasier Dam Recreation Launch Site (L18) and the nearest downstream launch site 8.3 miles away at Trammel Crow Park (L19).

A resolution to award a contractor to install the launch site was approved at the May 2, 2024 Irving City Council meeting and supports the city's "Future in Focus: Sense of Community - Provide exceptional recreational, cultural, and educational opportunities" initiative. According to the Irving City Council Agenda, "the project will provide for egress and ingress of canoes and kayaks by installing a 10-foot-wide concrete walk to the Trinity River's normal water elevation. Concrete walls, rip-rap, and gabions will be installed to protect the river bank and prevent erosion."<sup>4</sup>

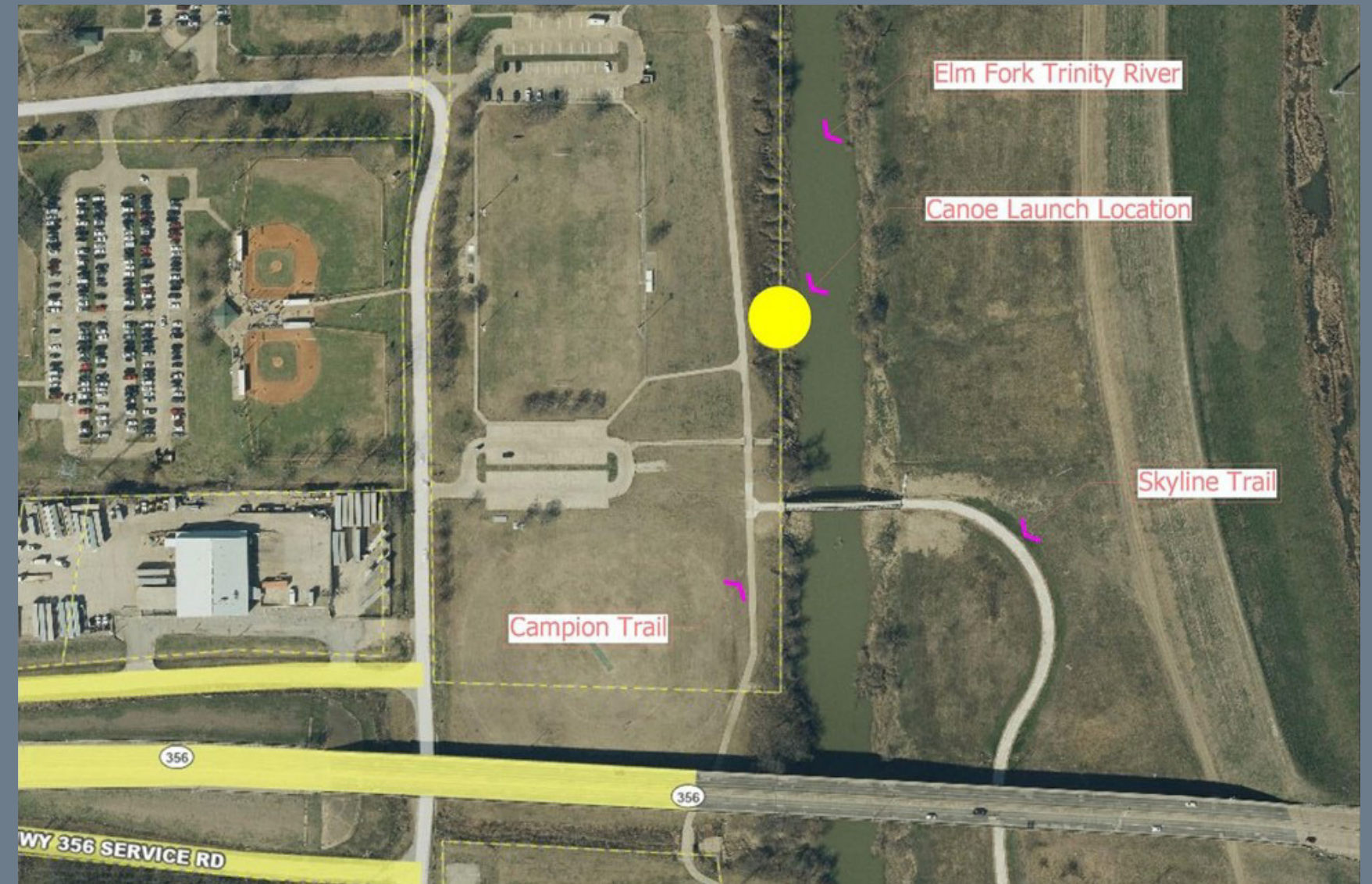


Figure 1.5: Future launch site location at Trinity View Park in Irving.





# PROMOTION

Promote the use of the Water Trail and educate all users.

## GOAL

**Increase awareness, utilization, and understanding of the Water Trail. National water trails represent scenic and recreational waterways with cultural, historical, and natural significance to its area.**

## OUTCOME

Promoting the Water Trail encourages individuals and communities to actively engage with the Trinity River while ensuring they possess the knowledge necessary for responsible and enjoyable use. By leveraging different media platforms this plan will help communities understand how to promote the trail and attract a diverse range of users. Additionally, educating communities on the use of the Water Trail will equip users with essential information on safety, environmental stewardship, and the cultural or historical significance.







# PROMOTION

## STRATEGIES

### Conduct Community Outreach and Events



Organize community events, workshops, and guided tours to introduce people to the Water Trail.

Collaborate with local schools, outdoor clubs, and environmental organizations to raise awareness about the benefits of water trails.

### Create Online and Social Media Campaigns



Leverage social media platforms and websites to share Water Trail stories, photos, and user experiences. Create engaging content that highlights the beauty of water trails, safety tips, and responsible use.





# PROMOTION

## RECOMMENDATIONS

### Establish Regularly Scheduled Trail Focus Meetings for Additional Stakeholder Input

Trinity Coalition established a Board of Directors in 2015 to carry forth its mission “to transform the Trinity River corridor into a nationally-recognized conservation and recreations area.” In 2018, NCTCOG supported Trinity Coalition during the process of applying to the National Park Service for National Trail status, awarded in 2020, and hosted regular Task Force meetings from Fiscal Year 2021 to 2024. This helped establish a means for local government coordination and stakeholder involvement. Trinity Coalition will continue to meet with Task Force members and with the Board of Directors to involve additional stakeholders, such as private business representatives, naturalists, community activists, and governmental representatives, in achieving their mission,

ACTION ITEM 1







# PROMOTION

## RECOMMENDATIONS

### Increase Sharing of Information to Improve Communication with Stakeholders

Trinity Coalition regularly shares information online about the Water Trail via its website, Facebook page, Trinity River Paddling Association Facebook Group page, and Meetup page.<sup>5</sup> Trinity Coalition also attends community events, fairs, expos, and conferences to further publicize the Water Trail (see Figure 2.1). As a way to increase publicity of the Water Trail, cities along the trail may consider providing information and regular updates to their staff, residents, and businesses via online and mailed newsletters and at community events. Opportunities exist for cities to partner with Trinity Coalition at community events and River cleanup events.

#### ACTION ITEM 2

Figure 2.1: Trinity Coalition's booth setup to publicize the Water Trail at the REI fair.







# PROMOTION

## CASE STUDY

### Website Highlighting Nature-based Offerings

Trinity Coalition has developed a new website, [www.visitd-fw.com](http://www.visitd-fw.com), to highlight the nature-based tourism opportunities in the Dallas-Fort Worth Metroplex (Figure 2.2). Hike and bike trails, mountain biking trails, nature centers, golf courses, and lakes are featured on this website, where potential visitors can explore these experiences in close proximity to the Water Trail. Trinity Coalition hopes to expand this resource even further by providing sample itineraries and partnering with local tourism/visitors' bureaus and recreation groups to make planning a visit easy. The centrally-located DFW Airport is "the second-busiest airport in the world", operating approximately 1,800 flights per day.<sup>6</sup> Visitd-fw.com will be a great resource for visitors seeking nature-filled adventures in the DFW Metroplex.



Figure 2.2: Screenshot of the homepage of Trinity Coalition's VisitD-FW website.





# ACCESS

Make the Water Trail more accessible to all.

## GOAL

Ensure that the Water Trail becomes inclusive and welcoming to individuals of diverse abilities and backgrounds.

## OUTCOME

Removing and addressing barriers that may limit accessibility will create a Water Trail that everyone can fully enjoy and participate in the trail experience. Strategic plans and improvements can be implemented to remove or mitigate barriers and enhance accessibility. Achieving this goal will foster a culture of inclusivity where people of all abilities and backgrounds can experience the benefits of the Water Trail in a meaningful and equitable way.







# ACCESS

## Evaluate Existing Barriers



Identify any physical, language, or financial barriers. Consider factors such as trail surfaces, signage, access points, and amenities.

## Implement Universal Design Principles



Apply universal design principles to create an inclusive experience for all users.

## STRATEGIES

## Propose Signage and Information



Install clear and well-designed signage at trailheads, access points, and key locations. Include information in multiple formats to accommodate different needs.

## Collaborate with Stakeholders



Engage with local communities of all genders, ethnicities, cultures, ages, income, and abilities to gather insights on existing challenges.





# ACCESS

## RECOMMENDATIONS

### Identify ADA Accessible Launch Sites on the Water Trail

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The following launch sites are ADA compliant:

- Lewisville Kayak Launch at Hebron Parkway (L13)
- Bird's Fort Park (L16)
- Trinity Launch at Santa Fe Trail (L20)

The following launch sites have the potential to be ADA compliant due to their gentle slopes, but would need to be measured:

- Arrow Park South (L4)
- California Crossing (L17)
- Casino Beach (L3)
- Trammell Crow Park (L19)
- White Settlement Road (L5)

**ACTION ITEM 1**

### Ensure Best Practice Design Standards Meet Accessibility Standards

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Trinity Coalition, in coordination with local communities, should consider the quality of ADA accommodations over the number of access points. Many launch sites may be considered ADA accessible but are not for paddlers with moderate to severe disabilities who need additional adaptive features -- "Accessible features will get you to the water, and adaptive features will get you into the water."<sup>7</sup>

**ACTION ITEM 2**





# ACCESS

## RECOMMENDATIONS

### **Involve Advocacy Groups in the Planning and Design Process to Help Improve Accessibility**

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Launch sites are often designed by individuals with limited knowledge and understanding of what adaptive paddlers may require. It is important for Trinity Coalition and local communities to involve local advocacy groups with knowledge of adaptive paddling to ensure ADA launch sites have the necessary features to get into the water.

#### **ACTION ITEM 3**

### **Conduct outreach and Educational Programs to Raise Awareness**

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The Recommendations and Action Items outlined in Goal 2 to promote the Water Trail and educate all users would apply to this Recommendation as well. For example, Trinity Coalition may promote ADA launch sites through its social media outlets and identify a section of the Water Trail as ADA compliant. Trinity Coalition already conducts paddling tours and may consider targeting users with disabilities.

#### **ACTION ITEM 4**





# ACCESS

## CASE STUDY

### ADA Features at Lewisville Kayak Launch at Hebron Parkway

The Lewisville Kayak Launch at Hebron Parkway (L13) in Lewisville is an ADA-compliant platform allowing for paddlers of all ages and abilities safe and easy access to the Water Trail. The platform consists of a floating “roll-on/roll-off” dock with gangways to bridge the gap between the dock and land. The launch site sits just off the Elm Fork to protect the platform from fast-moving flood waters. Occasionally the rising water will disconnect the floating section and is reconnected by city staff once flooding subsides. See Figures 3.1, 3.2, and 3.3 for details of this launch site.

Figure 3.1: “Roll-on/roll-off” floating dock with ADA seat and slide seat support.



Figure 3.3: Gangway and concrete bulkhead become submerged around 3,000 to 4,000 cubic feet per second.



Figure 3.2: “Bird’s eye view” of Trinity Fork Park.





# MAINTENANCE

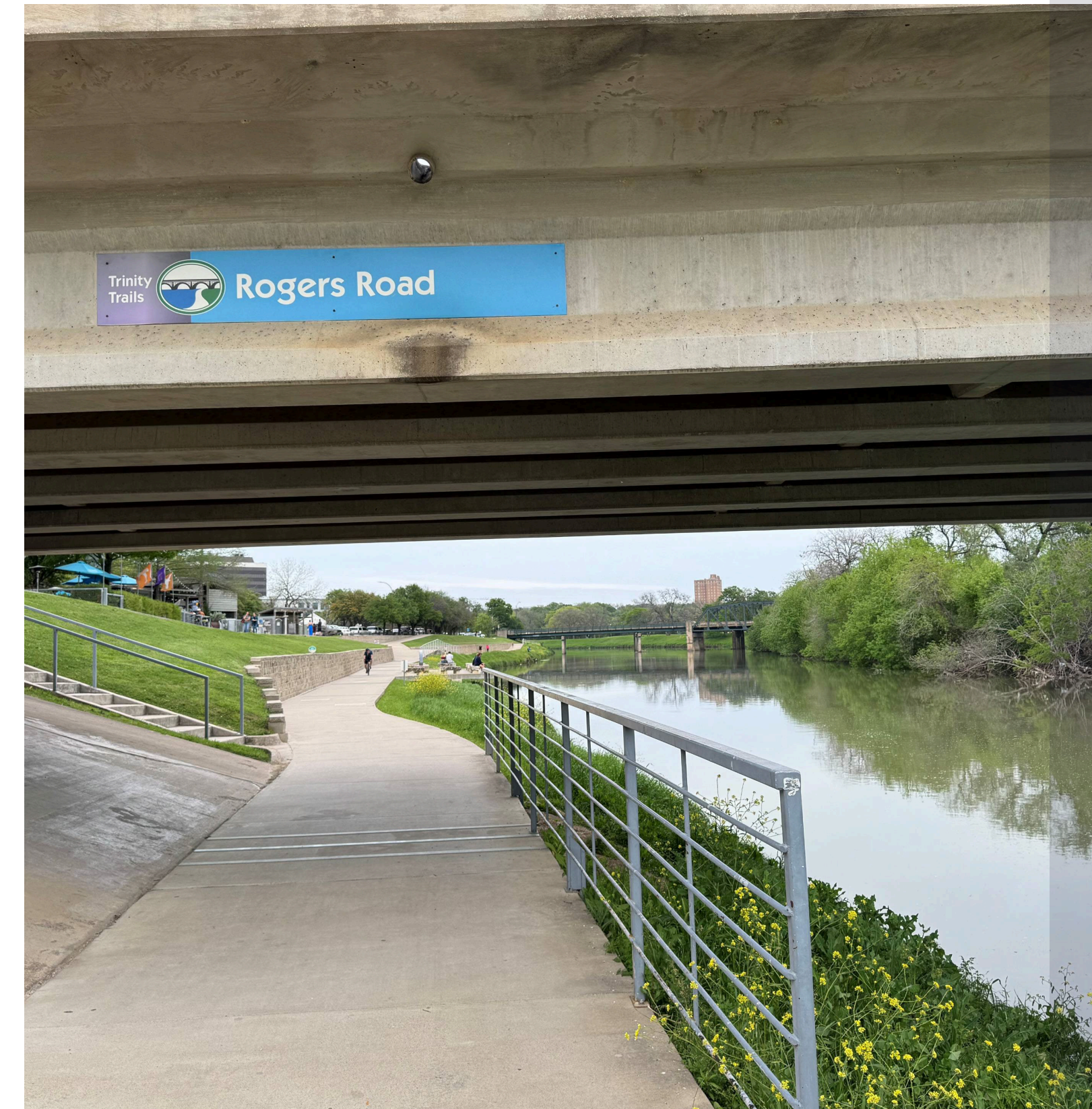
Maintain condition and safety of the Water Trail's existing and future launch sites.

## GOAL

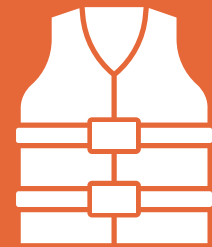
**Ensure an overall well maintained and safe network of launch sites by providing recommendations that preserve future and existing infrastructure, keep users safe, and minimize environmental impact.**

## OUTCOME

Strategies for maintaining existing launch sites and best practices for the design of future entry sites make for a safer and user-friendly experience. The upkeep of the launch sites increases their longevity and contributes to a consistent and sustainable experience for users engaging in water-based activities.







# MAINTENANCE

## STRATEGIES

### Conduct Regular Inspections and Maintenance



Establish a routine inspection schedule for all launch sites.

Inspect docks, ramps, and access points for signs of wear, damage, or hazards.

### Educate Users on Guidelines



Develop clear guidelines for users regarding safe practices at launch sites. Educate boaters, kayakers, and paddlers on proper launching techniques. Promote responsible behavior, such as cleaning up after use and respecting other users.





# MAINTENANCE

## RECOMMENDATIONS

### ACTION ITEM 1

#### Identify and Document Best Management Practices for Launch Site Construction and Maintenance

The National Park Service in coordination with the River Management Society developed guidelines for assessing, designing, and building access sites for carry-in watercraft, known as Prepare To Launch! Launches are typically designed as ramps, stairs, or elevated using materials such as native natural materials (e.g., soil, sand, gravel, rocks, vegetation), concrete, geotextile/concrete mats, timber, and wood-alternative materials (Figure 4.1).<sup>8</sup>

The City of Lewisville is developing a launch site design plan ideal for the Trinity River that could be shared with other organizations upon approval.



Figure 4.1: River Management Society's Prepare to Launch! resource provides details of launch design options.





# MAINTENANCE

## RECOMMENDATIONS

### ACTION ITEM 2

#### Enhance Tools to Electronically Collect and Report Trail Conditions on Trinity's Coalition's Website

When issues arise on the Water Trail making launch sites difficult to access or passage hazardous (Figure 4.2), being able to collect and distribute that information easily, quickly, and to the appropriate people is important. Trinity Coalition may consider creating and hosting an online form where paddlers can report trail conditions, notifying Trinity Coalition and the city where the issue is reported. Coordination between Trinity Coalition and cities/counties along the Water Trail is necessary.



Figure 4.2: Tree blocking a section of the Water Trail at Owl Point, making it impassible during very low water levels.





# MAINTENANCE

## RECOMMENDATIONS

### Maintain Cohesive Signage Throughout the Trail and Clearly Mark Hazard Areas

Trinity Coalition's online "Launch Sites Map" and sites descriptions clearly identifies the existing hazards that paddlers need to be aware of before paddling the Water Trail. For example, see Figure 4.3 for the hazards at the Arrow Park South Launch Site (L4).

Paddlers may not consult the online map beforehand; therefore, signage identifying hazards along the Water Trail posted at the launch sites may be necessary. Trinity Coalition has worked with several cities to develop signage that includes this type of information. Figure 4.4 shows a picture of signage that has been installed at the Lewisville Lake Environmental Learning Area. In addition, Trinity Coalition serves as an outfitter, known as TC Paddlesports, at Panther Island and when staff are present, hazards are verbally communicated (Figure 4.5).

Trinity Coalition may also consider coordinating with cities and appropriate agencies to clearly mark bridges with street names to ensure paddlers always know their general location. The paved trails that make up Trinity Trails of Fort Worth have signage that could be replicated. See Figure 4.6 for an example of the signage along the Trinity Trails.

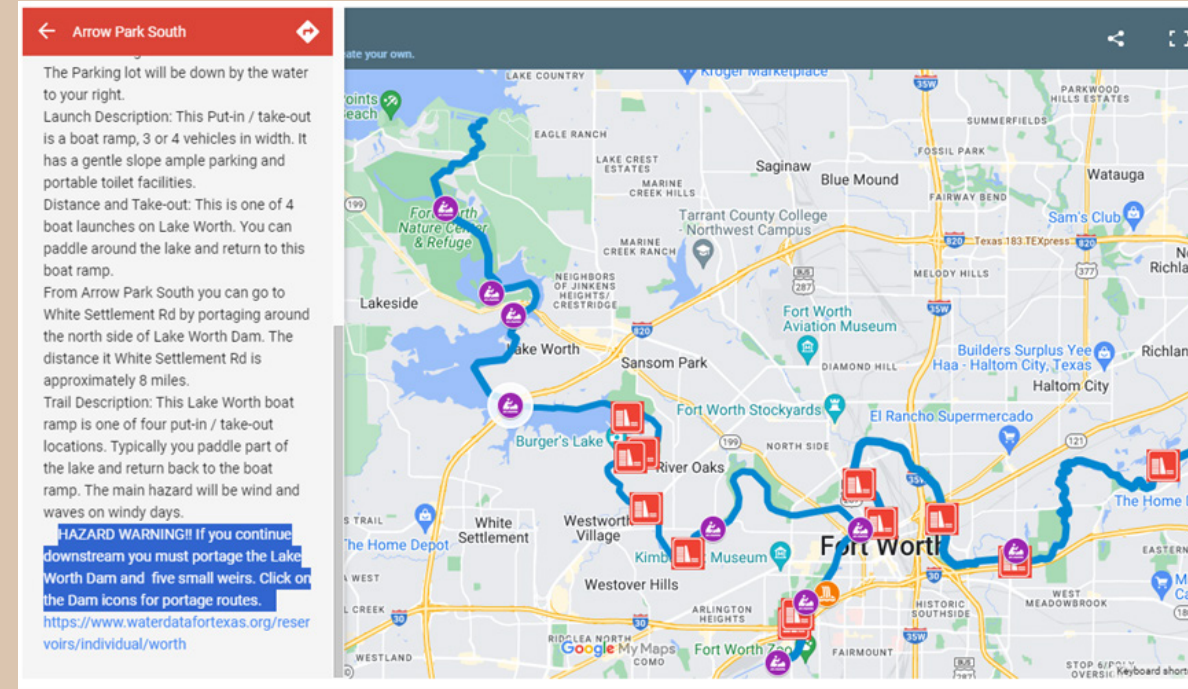


Figure 4.3: Hazards identified at Arrow Park South Launch Site (L4).

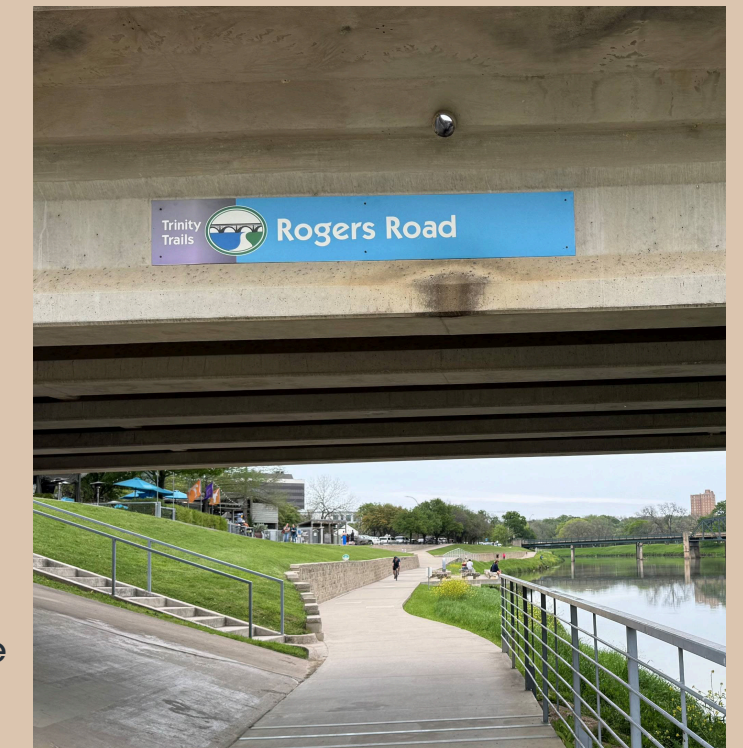


Figure 4.5: TC Paddlesports' Teresa Patterson preparing paddlers for the Water Trail.

Figure 4.4: Signage installed at the Lewisville Lake Environmental Learning Area Launch Site (L12) to identify information like hazards along the Water Trail.



Figure 4.6: Signage displayed along the Trinity Trails of Fort Worth that clearly identify street names.







# MAINTENANCE

## CASE STUDY

### Prepare To Launch! Design Success

This case study will give examples of launch designs outlined in Prepare To Launch! that have been successful.<sup>8</sup>

Figure 4.7: The launch site at Lewisville Kayak Launch at Hebron Parkway (L13) provides a great example of the use of concrete stairs with dual handrails to help with sliding kayaks up and down.

Figure 4.8: The launch site at Lewisville Lake Environmental Learning Area (L12) provides an example of the use of natural surfaces.



Figure 4.7: The launch site at Lewisville Kayak Launch at Hebron Parkway.



Figure 4.8: The launch site at Lewisville Lake Environment Learning Area.





# MAINTENANCE

## CASE STUDY

### Prepare To Launch! Design Success

Figure 4.9: The launch site at Trammel Crow Park (L19) provides an example of the use of natural surfaces.

Figure 4.10: The launch site at Dimension Tract (L15) provides an example of the use of stairs for access.



Figure 4.9: The launch site at Trammel Crow Park.



Figure 4.10: The launch site at Dimension Tract.





# MAINTENANCE

## CASE STUDY

### Prepare To Launch! Design Success

Figure 4.11: The launch site at Lewisville Kayak Launch at Hebron Parkway (L13) provides an example of a floating dock and cantilever system.

Figure 4.12: The launch site at Trinity Launch at Santa Fe Trail (L20) provides an example of a concrete sidewalk.



Figure 4.11: The launch site at Lewisville Kayak Launch at Hebron Parkway.



Figure 4.12: The launch site at Trinity Launch at Santa Fe Trail.





# PROTECTION

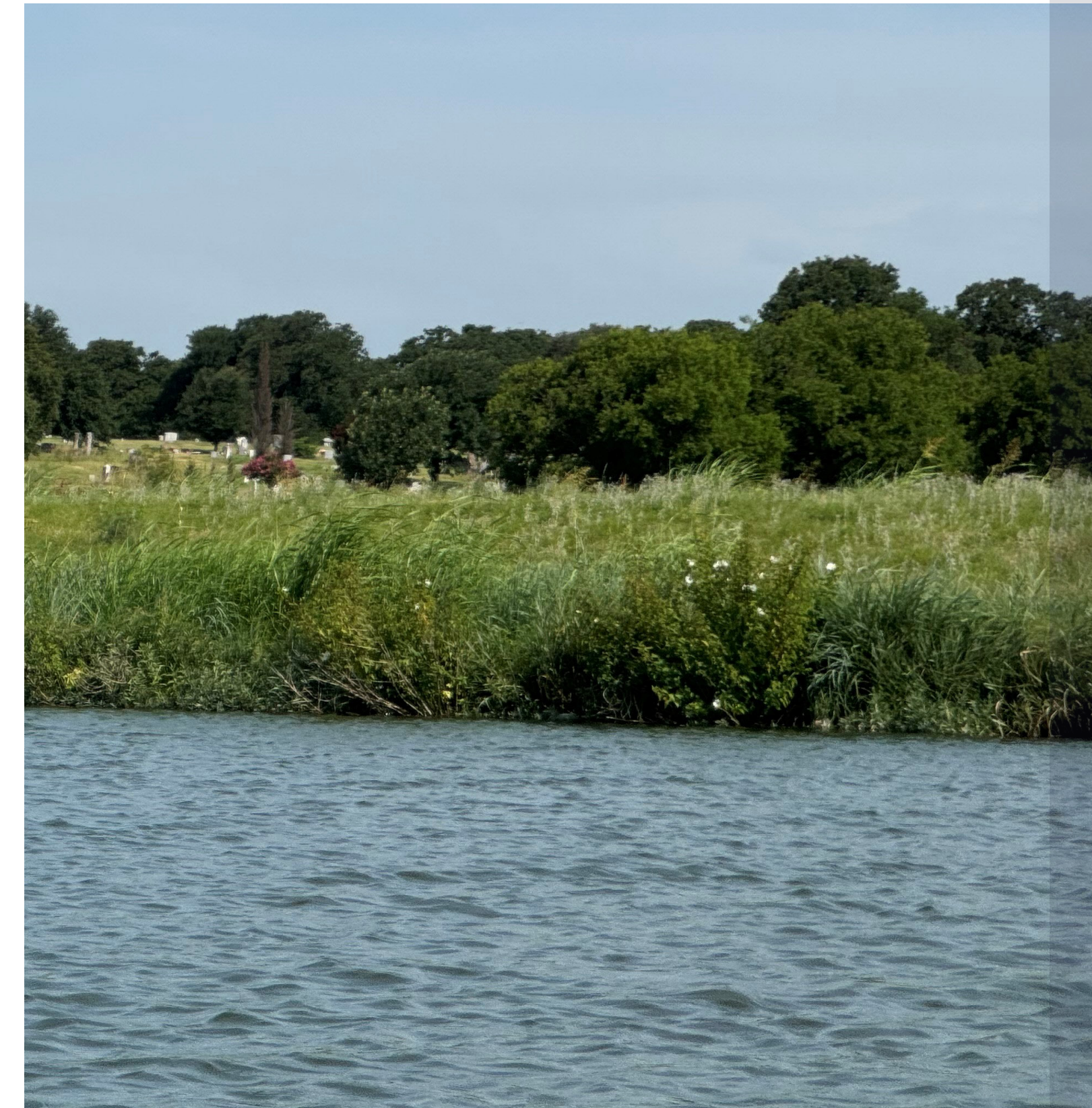
Promote stewardship along the Trinity River.

## GOAL

**Cultivate a sense of responsibility, care, and active engagement among communities and individuals towards the environmental health and overall quality of the Trinity River.**

## OUTCOME

Prioritizing environmental awareness, sustainable practices, and community involvement to preserving the Trinity River will contribute to enhancing the quality of the Water Trail. These efforts aim to instill a sense of stewardship by fostering a deeper understanding of the river's role in supporting both natural habitats and human communities and to address preconceived notions associated with the water quality of the Trinity River. By fostering a sense of shared responsibility, the objective is to ensure the continued health and vitality of the Trinity River for current and future generations.







# PROTECTION

## STRATEGIES

### Collaborate with Stakeholders



Work with local organizations, schools, businesses, and government bodies to collectively promote stewardship.

### Educate and Involve Users on Stewardship



Develop educational opportunities and implement volunteer programs to increase volunteer engagement in water trails.





# PROTECTION

## RECOMMENDATIONS

### Distribute Information that Educates Visitors About the Ecosystem, Conservation Practices, and Proper Trail Use

The Water Trail plays a crucial role in fostering environmental awareness. Communities can generate signage and brochures that provide information about the diverse wildlife that thrive along the river, emphasizing their ecological significance and the conservation efforts being done to preserve them. For example, Trinity Coalition assisted with a Trinity River Turtle Survey (Figure 5.1). Community conservation and stewardship guidelines will highlight best practices for preserving the natural environment, minimizing waste, and supporting sustainable recreational activities. By promoting stewardship, communities can use the Water Trail to encourage visitors to actively participate in the preservation of the river and ensure it will be sustained for future generations.

## ACTION ITEM 1

### Mobilize Volunteers and Community Groups to Participate in Regular River Cleanup Drives

Communities that want to mobilize volunteers for river cleanups can establish or leverage volunteer programs (Figure 5.2). Communities can partner with community organizations, schools, environmental groups, and businesses to grow their network of potential volunteers for environmental stewardship. Programs like Adopt-a-trail can be expanded to train and provide volunteers with the appropriate materials and knowledge for safe cleanups, including proper waste handling, safety protocols, and environmental conservation practices. Communities can utilize American Rivers' "National River Cleanup Organizer's Handbook" for developing a robust river cleanup program. Organizations like Tarrant Regional Water District and Trinity Coalition have well-established cleanup programs that leverage relationships with corporate and community groups.

## ACTION ITEM 2



Figure 5.1: Trinity Coalition assisted a local high school teacher tag turtles as part of the Trinity River Turtle Survey.



Figure 5.2: Community volunteer collecting trash during the Cowtown Great American Cleanup.





# PROTECTION

## RECOMMENDATIONS

### Partner with Nonprofits and Neighboring Communities to Regularly Test Water Samples

To encourage more usage of the Water Trail, it is important to track the quality of the Trinity River and complete water testing for pollutants, nutrient levels, and other indicators of river health. Volunteer water quality testing can be as accurate as that done at the regulatory level.

ACTION ITEM 3







# PROTECTION

## CASE STUDY

### Texas Stream Team as a Way to Monitor Water Quality

Texas Stream Team is a volunteer, citizen science program focusing on monitoring water quality throughout Texas. Volunteers collect water quality data at designated sites each month that follows a Quality Assurance Project Plan approved by the Texas Commission on Environmental Quality ensuring consistent methods are used. The data collected helps identify water quality trends, potential pollution sources, and water management strategies. The data collected by the Texas Stream Team is invaluable, especially for monitoring areas that may not be assessed frequently.

The Texas Stream Team coordinates a network of organizations and over 11,000 volunteer community scientists. These volunteers test many pollutants including orthophosphates as well as bacteria like E. Coli and Enterococci. Texas Stream Teams also provides its volunteers with manuals to ensure the methodology and collection of data is consistent throughout each collection site. This information is important for city staff, decision makers, residents, and Water Trail users to know what the quality of its community's waterways are at any given time. Currently, six of the nine communities that participate in the Water Trail Task Force have Texas Stream Team volunteers (Figure 5.3). Communities can leverage their partnership with Texas Stream Team to educate organizations, schools, and environmental groups about the quality and safety of the river.<sup>10</sup>



Figure 5.3: Texas Stream Team volunteers in Fort Worth testing water quality.





# INTEGRATION

Connect the Water Trail to existing land trails.

## GOAL

**Creating a seamless and integrated recreational network that enhances accessibility and promotes a holistic outdoor experience.**

## OUTCOME

This objective aims to establish physical and functional links between the water-based activities along the Water Trail and the surrounding land trails, fostering a cohesive recreational environment. By connecting the Water Trail to existing land trails, the goal is to offer a diverse range of recreational opportunities that cater to a broad spectrum of outdoor enthusiasts. This integration not only enhances the overall user experience but also promotes a deeper appreciation for the interconnected ecosystems and landscapes along the Trinity River corridor.





# INTEGRATION

## STRATEGIES

### **Integrate the Water Trail with Existing Land-based Trails**



Identify points where the Water Trail can intersect with established hiking, biking, or equestrian trails. Create seamless transitions between water and land routes to enhance user experience.

### **Highlight Areas of Interest**



Showcase community points of interest that elevate the recreational experience of the Water Trail.





# INTEGRATION

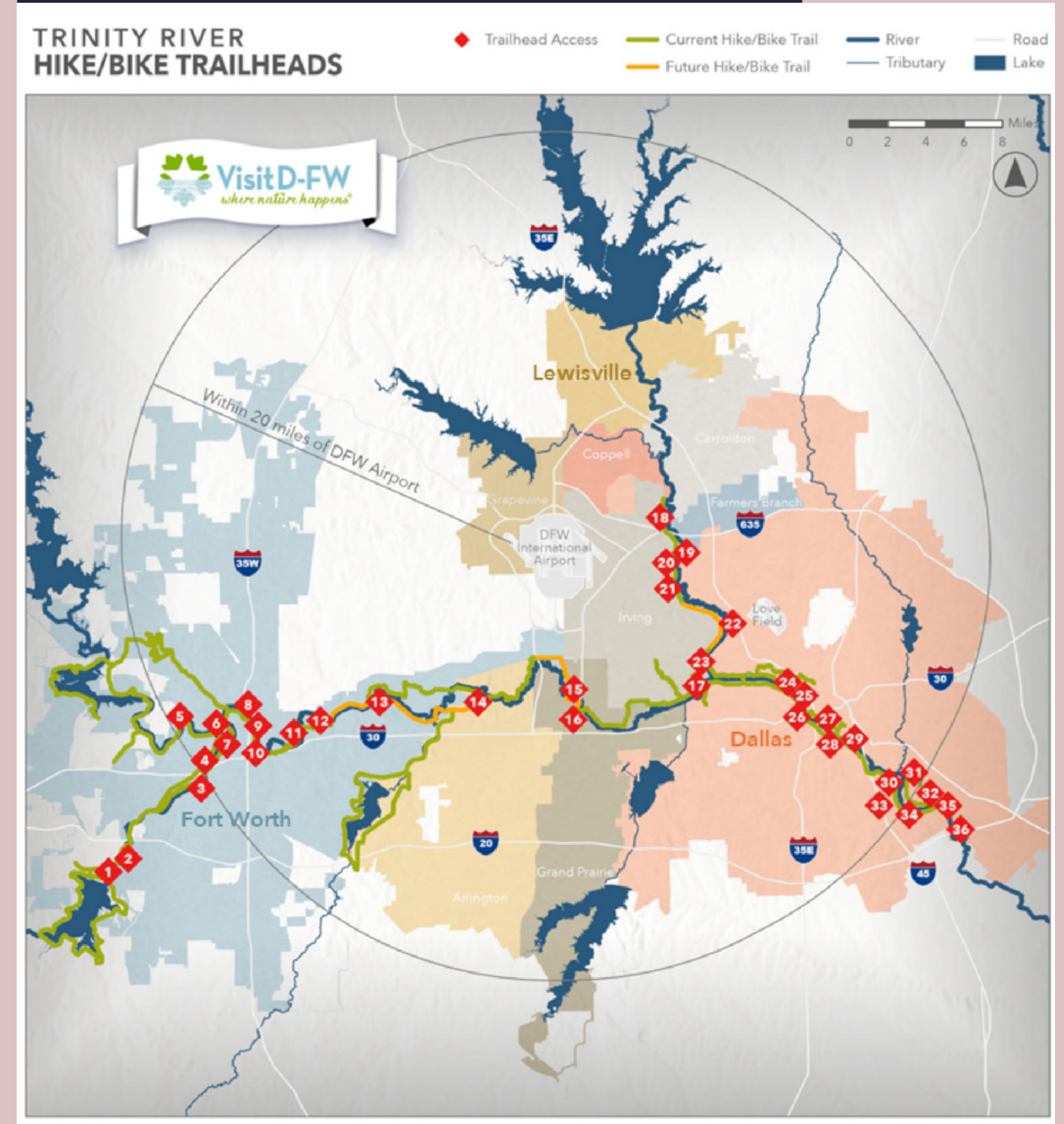
## RECOMMENDATIONS

### ACTION ITEM 1

## Create a Recreational Map that Includes the Water Trail, Land Trails, Bike Paths, and Points of Interest

Trinity Coalition, through its VisitD-FW efforts, have created individual maps that include hike/bike trails (Figure 6.1), mountain biking trails, and other points of interest (e.g., nature centers) in relation to the Water Trail. In addition, NCTCOG's Transportation Department has been coordinating with five Water Trail communities, Arlington, Dallas, Fort Worth, Grand Prairie, and Fort Worth, on the DFW Discovery Trail to implement a continuous regional trail from Downtown Fort Worth to Downtown Dallas. Trinity Coalition may consider combining these inventories of recreational offerings into one master map for the public to access. This will enhance the experience of exploring local trails and points of interest, fostering greater appreciation, and use of the region's recreational opportunities.

Figure 6.1: Hike and bike trailheads along the Water Trail.







# INTEGRATION

## RECOMMENDATIONS

### ACTION ITEM 2

## Create Guidelines for Signage That Show the Relation of the Water Trail to Existing Land Trails

Trinity Coalition offers personalized Water Trail signage with branding for communities to use at their respective launch sites. Signage can also utilize QR codes so that users can access more information as necessary. For example, Trinity Coalition signage includes a QR code that shows if the flow of the Trinity River is too dangerous to navigate.

Utilizing digital content will make signage for the Water Trail more robust and can give users access to information about the connections between the water and land trails, providing maps, directional arrows, distance markers, and relevant information about trail features and amenities. Signage should also consider accessibility as a priority to ensure it is readable and understandable to all trail users. Currently, there is no formal design guideline for consistency in the appearance and messaging of the signs. Because of the Water Trail's proximity to the DFW Discovery Trail, communities may refer to the DFW Discovery Trail Branding and Wayfinding Final Report and Recommendations and Best Practices for guidelines on trail signage (Figure 6.2).<sup>11</sup> These guidelines include standards for materials, colors, fonts, symbols, and layout. By developing clear and informative signage guidelines, communities will enhance the user experience on the Water Trail.

Figure 6.2: Approved signage on the DFW Discovery Trail.







# INTEGRATION

## CASE STUDY

### Farmers Branch John F. Burke Nature Preserve

The John F. Burke Nature Preserve is a new, flagship 104-acre nature preserve located in Farmers Branch. The preserve features a network of well-maintained trails that wind through woodlands, wetlands, and open meadows along the Elm Fork of the Trinity River. The City of Farmers Branch's goal is to integrate the John F. Burke Nature Preserve seamlessly into its existing recreational network by designing interconnected pathways, hike and bike trails, and possibly the Water Trail. The paddling trail presents new opportunities to integrate the Trinity River into the preserve and their larger park system. There are a lot of potential access points to the Trinity River from the nature preserve. Launch sites could be included in future phases of the preserve. With its proximity to newer, residential areas, Farmers Branch residents and visitors will be able to take advantage of a land and water system of trails for recreation.



Figure 6.3: The John F. Burke Nature Preserve in Farmers Branch.





# PROSPERITY

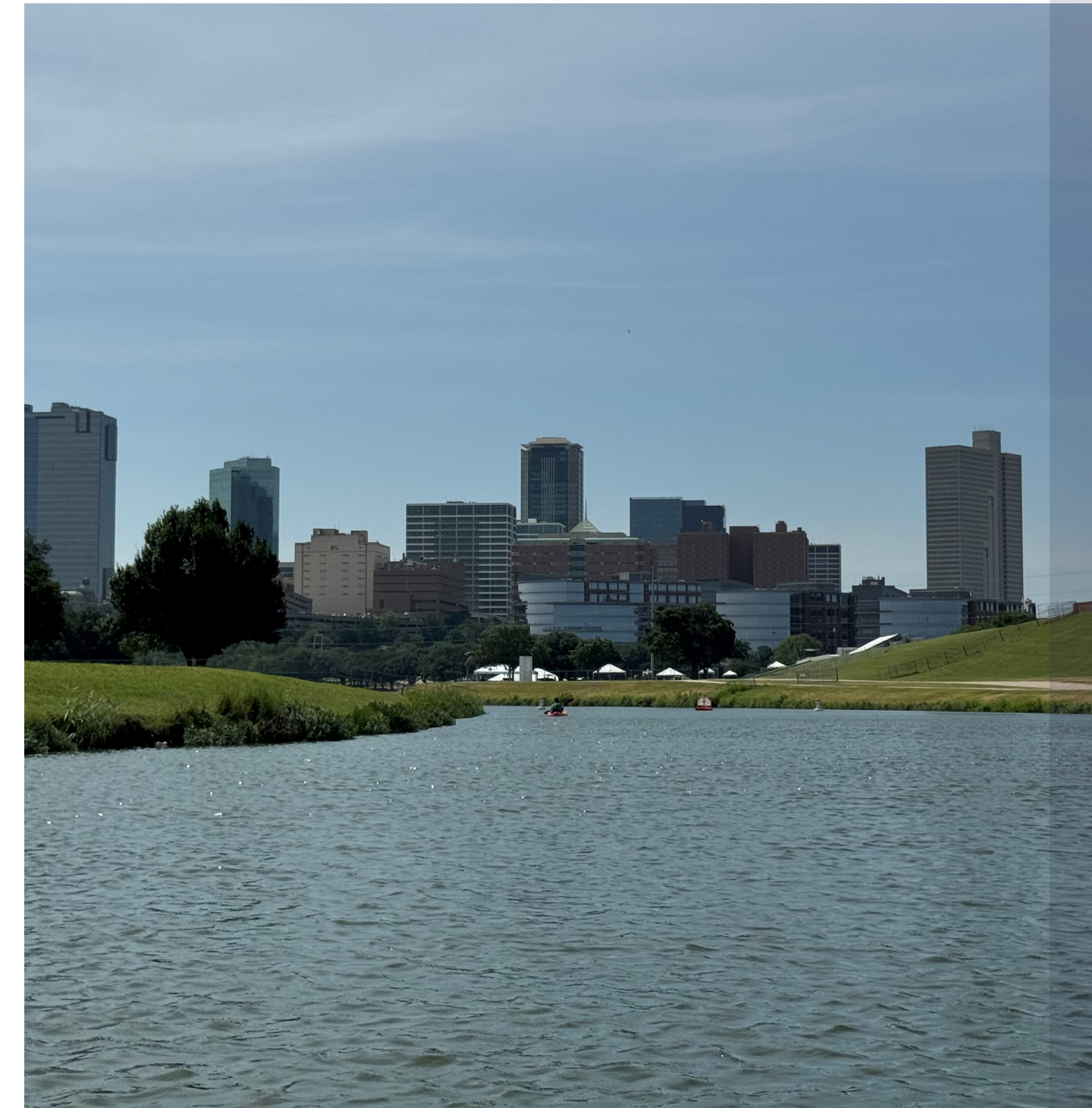
Promote the economic benefits of the Water Trail.

## GOAL

Showcase the positive economic impacts that the Water Trail system can bring to local communities, businesses, and the broader region.

## OUTCOME

Recognizing the Water Trail as more than just a recreational asset will allow communities to leverage the Water Trail to drive economic growth, tourism, and community development in the region. By actively promoting the economic benefits of the trail, the goal is to generate increased support and enthusiasm from stakeholders, local governments, and the community. This, in turn, can lead to sustained economic growth, job creation, and enhanced quality of life for residents in the areas surrounding the Water Trail.







# PROSPERITY

## STRATEGIES

### Encourage Eco-Tourism



Develop targeted marketing campaigns that highlight the Water Trail's unique features. Collaborate with visitor bureaus to promote the Water Trail as a must-visit destination.

### Highlight the Economic Impact



Conduct studies to quantify the economic impact of the Water Trail. Assess spending by trail users to use as data to advocate for investments in trail development.

### Promote Trailside Businesses and Services



Showcase nearby businesses and services that enhance user experience.





# PROSPERITY

## RECOMMENDATIONS

### Complete Additional Studies on the Economic Impact and Value of the Water Trail

For more resources to be made available for the Water Trail, it will be important to capture the economic impact of water trails on the economy, local businesses, and tourism. Communities and non-profits like Trinity Coalition can conduct surveys, interviews, and economic modeling to identify key metrics such as tourism revenue, job creation, and environmental benefits to highlight to community and regional leadership. The findings can be compiled into a comprehensive report including recommendations, which can be reviewed for feedback and refinement. The River Management Society released “An Economic Argument for Water Trails” that reviewed data captured by communities on the benefits they experienced from investing in river trails.<sup>12</sup> Communities can leverage the information within this report to show the possible economic impact of the Trinity River as a water trail. Communities may consider pooling funding together to conduct a regional economic study.

## ACTION ITEM 1

### Collaborate with Tourism Bureaus to Promote Ecotourism and Recreational Activities

Communities may consider collaborating with their tourism and visitors' bureaus to promote ecotourism and recreational activities along the Trinity River including the Water Trail. While working with these bureaus, communities may develop comprehensive promotional strategies that highlight the unique ecotourism opportunities and recreational activities available within their respective cities.

Local visitors' bureaus: Visit Dallas, Visit Fort Worth, Arlington Convention and Visitors' Bureau, Visit Grand Prairie, City of Carrollton, Discover Farmers Branch, Visit Irving, and Visit Lewisville.

## ACTION ITEM 2







# PROSPERITY

## RECOMMENDATIONS

### Promote Local Businesses and Services that Cater to Recreational Activities

Communities can promote local businesses and services that cater to recreational activities by establishing a directory of businesses involved in outdoor and recreational services, including equipment rentals (Figure 7.1), guided tours, local restaurants, accommodations, and retail shops. This directory can be created in collaboration with local business associations and chambers of commerce. Communities can highlight these businesses while promoting the Water Trail and other recreational offerings.

#### ACTION ITEM 1

Figure 7.1: Kayaks available for rent at Panther Island.







# PROSPERITY

## CASE STUDY

### Promoting Nature-Based Experiences Through Tourism Bureaus

Tourism bureaus play a crucial role in promoting local attractions, guiding visitors, and driving economic growth within a region. By curating and presenting information about various recreational activities, local bureaus can enhance visitors' experiences and highlight the unique natural and cultural assets of North Texas. Tourism websites can promote ecotourism, including water trails that offer recreational opportunities like kayaking, canoeing, paddleboarding, and fishing. Incorporating water trails and other outdoor recreation activities on tourism websites attracts eco-conscious travelers, supports local the economy and businesses, encourages stewardship of the natural regional amenities, and fosters a deeper connection to DFW's natural landscape.

Visit Dallas and VisitD-FW both highlight the wide collection of urban nature-based activities, recreational activities, and sustainable travel experiences - including the Water Trail - in North Texas. Other tourism bureaus can also promote ecotourism to attract eco-conscious tourists who are likely to spend more time and money, participating in local nature-based activities. Visitors seeking destinations that offer outdoor recreation opportunities will benefit from having a one-stop shop of the local natural amenities.

Visit Dallas highlights sustainable travel experiences, including the Water Trail.<sup>13</sup> Outdoor recreation, especially water-based activities, can drive substantial revenue through equipment rentals, guided tours, and other hospitality services. Local businesses, such as restaurants, lodging, and related businesses benefit from the increased visitation generated by tourists seeking to explore the Water Trail. This can lead to the development of new businesses that cater specifically to outdoor enthusiasts, making the area's offerings more robust.







# LEGACY

Highlight the cultural and historical context of the Water Trail.

## GOAL

Enrich the Water Trail experience by bringing attention to the rich heritage and historical significance embedded along its route.

## OUTCOME

In addition to serving as a recreational asset, the Trinity River should be recognized as a living tapestry of stories, traditions, and historical events that contribute to the unique identity of the region. By identifying key points of interest, landmarks, and narratives that reflect the cultural diversity and evolution of the Water Trail, communities can establish connections to the Water Trail and its residents.







# LEGACY

## STRATEGIES

### **Collaborate with Local Historians and Community Leaders**



Engage historians, scholars, and community leaders. Collect oral histories, photographs, and personal accounts related to the river.

### **Incorporate the Legacy of the River into the Water Trail**



Establish a cohesive theme that ties in the river's history. Tagline: "Embracing the Legacy of the River."





# LEGACY

## RECOMMENDATIONS

### ACTION ITEM 1

## Host Community Events, Workshops, and Storytelling Sessions

The Water Trail is a cultural hub that should be celebrated by sharing its history. Communities can collaborate with schools and libraries to offer a platform for residents and visitors to engage with the river's history, ecology, and the various traditions. Workshops can focus on environmental education, paddling safety, and local folklore to foster a deeper connection to the river. Storytelling sessions can feature local historians and community leaders to bring to life the river's stories that have shaped the lives and cultures of those who live along it. (e.g. Figure 8.1) Through these activities, the Water Trail not only promotes environmental stewardship but also strengthens community bonds and preserves the cultural tapestry of the area.

Figure 8.1: Historical marker near Riverside Dr. and California Crossing Rd. where thousands of 49ers crossed the Trinity River on the way to the California Gold Rush. (credit: Nicolas Henderson via Flickr)<sup>14</sup>







# LEGACY

## RECOMMENDATIONS

### Work with Indigenous Populations to Capture the Cultural Context of the Trail

The history of indigenous people is important to the history of the Trinity River. To capture the cultural context of the Water Trail, communities can leverage collaborative relationships with local indigenous communities, to ensure the cultural knowledge and traditions are accurately represented. This will help with identifying key cultural sites, stories, and practices related to the Water Trail that should be highlighted. Through collaborative efforts, communities can create educational materials, such as signs, brochures, and digital content, that incorporate indigenous knowledge and perspectives.

Native American tribes that lived along the Trinity River include the Caddo, Tawakoni, Waco, Keechi, Comanche, and Atakapa.

### ACTION ITEM 1

### Collaborate with Organizations to Capture the Historic Context of the Trail

There are many partners that can be leveraged to capture the historical context of the Trinity River including local historical societies, museums, libraries, and academic institutions and government entities like the U.S. Army Corps of Engineers that have expertise and resources related to the area's history. These entities have an inventory of existing historical records, maps, photographs, and oral histories related to the Trinity River that can be highlighted by the Water Trail.

### ACTION ITEM 2





# LEGACY

## CASE STUDY

### Native American Stakeholder Engagement

Engaging Native American communities in the development of the Water Trail is important for capturing the cultural and historical significance of the Trinity River. The Trinity River held a profound significance for Native Americans, serving as sources of sustenance, transportation, and cultural identity. Having a forum for the Native American communities will serve as platforms for collaboration, allowing Indigenous voices to shape the narrative of the land and water, ensuring

that the stories, traditions, and knowledge passed down through generations are integrated into the broader understanding of the Trinity River. Their participation ensures that the water trails are not just recreational routes but also living repositories of Indigenous knowledge and heritage.

Trinity Coalition has created a steering committee of Native American communities and leaders to capture this history and culture. The committee also aims to promote a greater understanding and respect for Native American cultures and foster positive relationships between Indigenous and non-Indigenous communities. This committee will help provide a more accurate and holistic understanding of the Water Trail's history that will give residents and visitors a deeper appreciation for the Trinity River and its long-standing importance to the people it has supported.





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