



SALT LAKE CITY TRANSMITTAL

To:
Salt Lake City Council Chair

Submission Date:
12/04/2024

Date Sent to Council:
12/09/2024

From:

Department*
Public Lands

Employee Name:
Millar, Tom

E-mail
tom.millar@slc.gov

Department Director Signature

Kristin Riker

Chief Administrator Officer's Signature

Jill Love

Director Signed Date
12/04/2024

Chief Administrator Officer's Signed Date
12/06/2024

Subject:
Public Lands' Updates on the Emerald Ribbon Action Plan

Additional Staff Contact:
Tyler Murdock; tyler.murdock@slc.gov
Makaylah Maponga; makaylah.maponga@slc.gov

Presenters/Staff Table
Tom Millar; tom.millar@slc.gov
Makaylah Maponga; makaylah.maponga@slc.gov
Allison Rowland; allison.rowland@slc.gov

Document Type
Information Item

Budget Impact?
☐ Yes
☒ No

Recommendation:
None, informational only. Presentation.

Background/Discussion
See first attachment for Background/Discussion

Will the City Council need to hold a public hearing for this item? *
☐ Yes
☒ No

Public Process
N/A

This page has intentionally been left blank

Jill Love, Chief Administrative Officer

Date Received: _____

Date sent to Council: _____

TO: Salt Lake City Council
Victoria Petro, Chair

DATE: December 4, 2024

FROM: Kristin Riker, Director
Department of Public Lands (PL)

SUBJECT: Public Lands' Updates on the Emerald Ribbon Action Plan

STAFF CONTACTS: Tom Millar, PL Planning & Design Division Director
tom.millar@slc.gov

Tyler Murdock, PL Department Deputy Director
tyler.murdock@slc.gov

Makaylah Maponga, PL Planner, Project Manager
makaylah.maponga@slc.gov

DOCUMENT TYPE: Information Item

RECOMMENDATION: None, informational only. Presentation.

Overview

The Emerald Ribbon Action Plan project will guide the future of capital investment and management of the Jordan River corridor. The study area for the plan is the roughly 10 miles of Jordan River and Jordan River Parkway Trail within Salt Lake City, including all adjacent open spaces owned by the City. In all, the corridor totals 760 acres of land managed by the City as park, the Regional Athletic Complex, golf, corridor greenway areas, and natural areas. The final outcomes of the plan will be a community-supported vision for the corridor and the critical policy, design, and structural tools Public Lands will need to bring that vision to life over the next 10-20 years. Please review the June 27, 2024 transmittal and the September 17, 2024, Council work session briefing presentation for additional background information on the project.

See attached for the full draft of the Action Plan and the accompanying Operations and Maintenance Plan. These two documents include policy and planning recommendations, a prioritized and phased list for improvements along the river, and an operational transition plan towards a more naturalized corridor. In early 2025, Public Lands intends to move into design for the first phase of improvements (approx. \$11 - 13 million) recommended by the Action Plan.

The Action Plan has been written to provide a detailed roadmap with specific actions, project estimates of probable cost, and operational and maintenance strategies to help the City fulfill the vision. Due to the highly-detailed and specific nature of these recommendations, Public Lands is not seeking the formal adoption of the Action Plan as part of the Salt Lake City's General Plan. However, the Council will continue to have the power to direct this project. Phase One recommendations (outlined in further detail in later sections of this transmittal) will make up the "Jordan River Corridor" funding requests for future tranches of the Parks GO Bond. Additionally, many of the Action Plan and O&M recommendations may guide future funding requests, which will be presented to and may be funded by the Council.

Action Plan Overview

The Action Plan envisions a future Jordan River corridor that is a ribbon of nature through Salt Lake City, a community crossroads, and the heart of the Westside. The Emerald Ribbon will be a model of care for people, wildlife, and ecosystems. The Action Plan is supported by four values: Nature, Culture, Connectivity, and Care. These arose from conversations with technical experts and community members. Further, five guiding principles were developed to form the skeleton of the plan recommendations. The guiding principles were crafted in collaboration with the Community Advisory Committee and serve as an important checkpoint in evaluating progress and ensuring alignment with the vision. The guiding principles are as follows:

1. Celebrate the rich ecological and cultural diversity of the corridor
2. Connect the corridor to adjacent roads, trails, and waterways.
3. Cultivate collective care of the corridor.
4. Restore and enhance the river ecosystem as a peaceful refuge.
5. Create a safe and vibrant destination.

Each of the guiding principles serves as a chapter of the Action Plan with an associated set of goals, strategies, and actions. The actions tackle a diversity of the corridor needs from capital improvements to new programming to improved management techniques. The strategies have been divided into categories to be completed in the short-term, mid-term, long-term, or as an ongoing action. This will allow Public Lands staff to prioritize staff time and resources in the implementation of the plan.

In addition to the strategic recommendations, the project team used the plan framework and community feedback to create concept designs for five key locations on the corridor. The five locations are the Rose Park Nature Area, Cottonwood Park, Fairpark Urban Core, Modesto Park/Bend in the River, and Glendale Oxbow. These were selected due to their high potential in creating desirable and functional spaces for both nature and community. The Action Plan identifies initial work that can be done on each of these sites and lays out a general timeline for completion within 10 years.

Phase One Priorities

The Action Plan currently identifies approximately \$11 – 13 million in capital improvements for the first phase of work. This funding has been secured through the 2022

Parks General Obligation Bond and additional CIP. Phase One priorities are intended to be completed within the next 3-5 years, and projects will kick off in 2025. When selecting Phase One priorities, it was critical to achieve a geographic distribution of funds between neighborhoods along the river. This will ensure that the community feels and sees investment throughout the river corridor, beyond just the transformational project sites.

Transformational Projects

Within the five transformational projects, three were identified as the highest priorities to receive Phase One funding. These are Cottonwood Park, Modesto Park/Bend in the River, and Glendale Oxbow. These are multi-pronged projects that include improvements to recreation amenities, ecological restoration, and trail connections.

1. Cottonwood Park will see additional nature trails, a new Jordan River trailhead, and improved active recreation amenities. Simplifying existing walkways and adding separate trails for different modes will reduce conflicts on the main trail. The plan includes constructing a new bridge connecting the main park to the dog park further east, enhancing the direct connection between these areas and the river.
2. Modesto Park and Bend in the River will see new active recreation amenities on the south, neighborhood-facing side of the park along Modesto Avenue, and improvements to the existing wetland areas. Due to mixed opinions on the Urban Treehouse in Bend in the River, Public Lands will not be looking to immediately remove this structure. Rather, staff will conduct a focused effort to improve park activation and identify programming partners to determine the long-term viability of this structure.
3. Glendale Oxbow will receive funding for trees and other landscaping on the western bank of the river (in the golf course boundaries) and investments in a new natural area focused on growing wetlands and restoring habitat.

Corridor-Wide Nature Restoration Projects

Eight additional locations have been identified for focused ecological restoration to work towards achieving a thriving nature corridor. These locations are distributed throughout the corridor to have a widespread impact. The locations are Peace Labyrinth Open Space, 9th South River Park, 500 South, Alzheimer's Park, Riverside Park, Cornell Street Lift Station, the Fairpark/North Temple area, and the future Folsom Trail connection. The initial investment and long-term maintenance of these spaces will be overseen by our Trails and Natural Lands staff. The total investment in these projects is estimated at \$1 million and, when completed, these projects will add 8 acres of restored natural lands.

Corridor-Wide Safety Focused Projects

The final category of investment is safety and connectivity focused improvements. This area of work seeks to improve confusing and unsafe aspects of the Jordan River Parkway Trail within the corridor. Funding will be allocated to improving three trail intersections: North Temple, 1700 South, and 900 South. Additionally, funding will be put towards an overall wayfinding and interpretive plan for the corridor.

Operations and Management Plan

Maintenance and care of the corridor was one of the top concerns of stakeholders and community members that participated in the development of the Action Plan. Thus, in addition to making recommendations for new improvements, the project team has developed the Operations and Management (O&M) Plan supplement to the Emerald Ribbon Action Plan to guide Public Lands staff in how we care for the corridor. The overarching goal of the O&M Plan is to create more consistent and standardized practices across the corridor that align with our goals for community and nature.

During the second community engagement period in the spring of 2024, the community and key stakeholders were asked to prioritize different visions for the future. Most participants shared that they wanted to see a focus on nature and restoring a healthy natural environment. In response, the Action Plan sets the ambitious goal of more than doubling the restored and managed natural areas on the corridor from 14% of the corridor to at least 30%, or approximately 228 acres. Work towards this goal will begin with the restoration projects identified in Phase One and will continue over the next 10+ years. While our goal is a minimum of 30%, our Trails & Natural Lands team has identified 282 acres (54 acres more than the minimum goal) as great candidates for restoration, which would equate to approximately 37% of the corridor.

The O&M Plan provides guidance for restoring degraded aspects of the river and establishes standards for recommended plant communities. In collaboration with Public Lands staff, the project team has evaluated the full corridor and designated a target plant community for each acre of the corridor. These designations establish day-to-day and seasonal practices for various spaces, while also setting a long-term target for care. Spaces today that are currently overrun with invasives and regularly mowed will one day convert to riparian, wetland, or upland native plant communities with appropriate care. This plan also takes advantage of underutilized grassy areas within parks adjacent to the river. These areas can be converted into beautiful areas that highlight native species while contributing to the health of the ecosystem.

Currently, Public Land's maintenance districts 5 and 6 care for a majority of space on the corridor; however, their time and resources are divided between their responsibilities on the river and those in other spaces throughout the city. Through maintenance tracking data, the project team estimates that these teams spent approximately 4,300 hours on the corridor in FY23, which is the equivalent of 2.2 FTEs. With 164 acres under their management, this is approximately 74.5 acres per FTE. Through researching best practices in comparable cities, the project team has identified ideal staffing ratio to be closer to 1 FTE per 20 acres. To meet this ratio, Public Lands should aim to add up to 14 FTEs to manage a future 282 acres of natural area on the corridor.

Requests for additional staff would not come all at once. The additional 14 FTEs would allow the City to achieve the full 30% natural area goal, which is anticipated over a 10+ year timeline. Staffing requests will be made via budget insights, according to (1) the health of the general fund, (2) when capital projects within the Jordan River Corridor come online, and (3) other priorities. In addition to new FTEs, more non-personnel maintenance funding (equipment, vehicles, etc.) would be needed to support the specialized care required for native planting areas.

This page has intentionally been left blank



Emerald Ribbon Action Plan



2024



Public Lands



Table of Contents

Introduction

Executive Summary	8
Planning Approach	10
Existing Conditions	14

Making the Action Plan

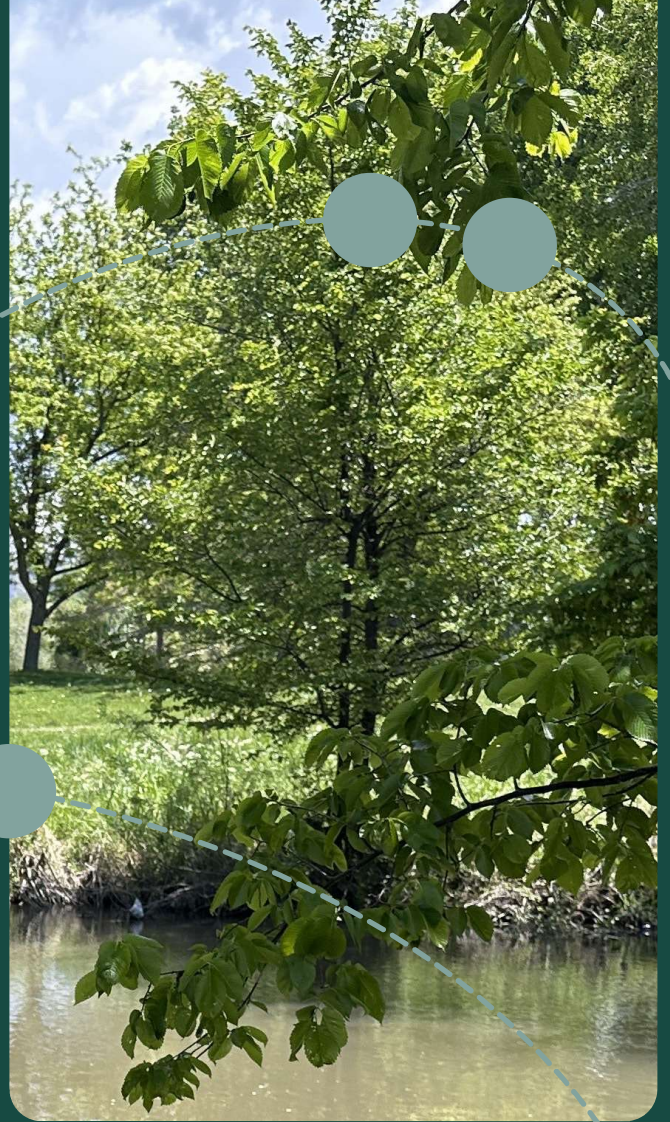
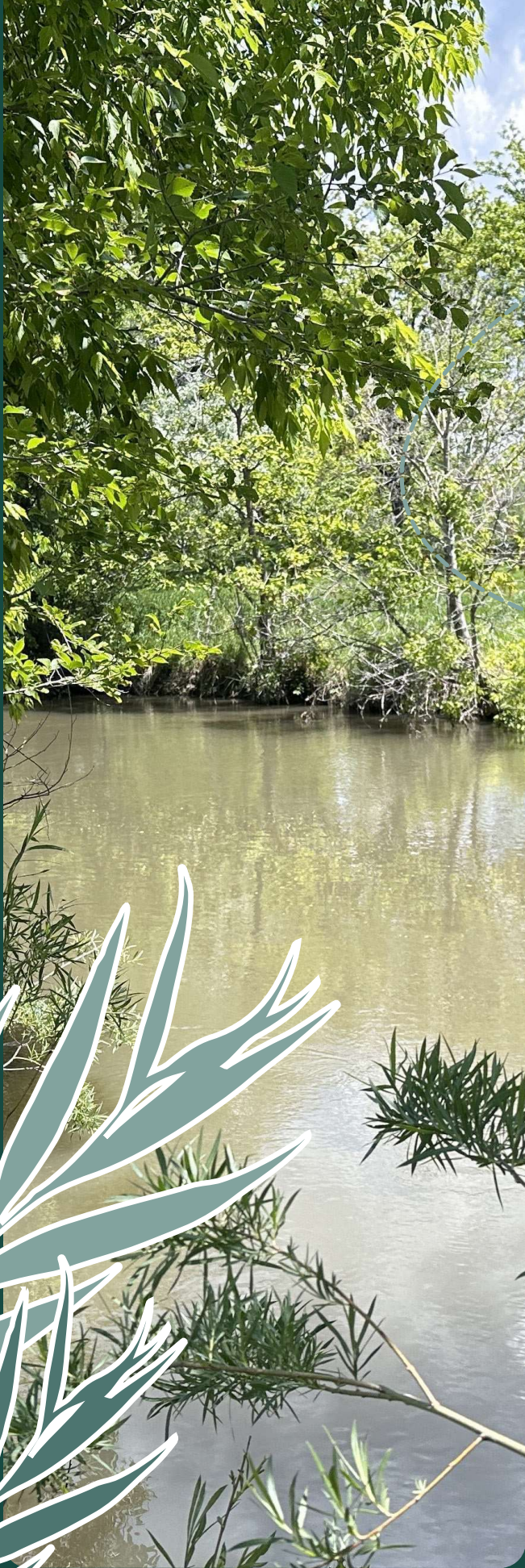
Collaborating with the Community	22
Community Engagement and Insights	30

The Action Plan

Vision Statement & Values	32
Guiding Principles	40
#1: Celebrate	44
#2: Connect	54
#3: Cultivate Care	66
#4: Restore	76
#5: Activate	86

Bringing the Vision to Life

How to Realize the Vision	98
Prioritizing the Action Plan's Goals	108
Transformational Projects	114
#1: Glendale Oxbow	118
#2: Modesto Park and Bend in the River	126
#3: Power District and Fairpark	134
#4: Cottonwood Park	142
#5: Rose Park Golf Course	150
Bond Funding Priorities	158





Introduction



760
Acres of City-
owned Land

10
Miles of River
Corridor

6
Salt Lake City
Neighborhoods



It's time to embrace the Emerald Ribbon.

Embracing the Emerald Ribbon means embracing the Jordan River's future and all its roles in our community: for Salt Lake City residents, the Great Salt Lake, and all the plants and animals that call it home. The Emerald Ribbon is the 10-mile stretch of the Jordan River including surrounding trails and parks, that is the geographic heart of Salt Lake City's Westside.



Executive Summary

The Emerald Ribbon Action Plan is an ambitious vision for the future of the Jordan River, the Jordan River Parkway Trail, and the many city-owned parklands that surround them in Salt Lake City. The ten miles of urban river corridor that cut through the city's Westside neighborhoods are intertwined with the city's history and growth from a natural river (one of four that flow into the Great Salt Lake), to the city's industrial heart, to a vibrant hub of immigration from around the world. The West Side has seen immense transformation in the last one hundred years. The Jordan River has been at the heart of all of it.

The Emerald Ribbon Action Plan builds on the foundational belief that if we care for nature's ecological health, nature will engage and sustain human well being. At the center of this intertwined relationship is a system of care. The Westside community today has watched a once vibrant river corridor struggle under the weight of increased concerns over public safety, under-maintained amenities, and poor water quality. This plan puts forth a proposal deeply rooted in the dreams and aspirations of that community to steward and enliven an Emerald Ribbon that meets its full potential as the heart of the Westside and the vibrant ecological counterpoint to the mountains to the east.

Funded by the voter-approved Parks, Trails, and Open Space GO Bond, this plan puts forth a proposal to advance the community's goals to improve the parks, ecology, and trail system that make up the Emerald Ribbon. The goals and strategies of the plan center around the

needs of Nature (the natural environment), Culture (the human experience), Connectivity (the trail and mobility system), and Care (the stewardship and management of the corridor). The underlying framework of the Action Plan are five guiding principles; within each principle are three to five goals, supported by a series of strategies and actions to advance each goal.

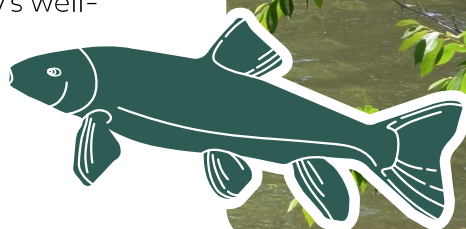
The Westside community, and the Salt Lake City community as a whole, have expressed clear priorities:

1. Center nature and the ecological health of the corridor while also celebrating the rich cultural vibrance of the Westside's people.
2. Improve the trail and pathway system as a true mobility corridor.
3. Cultivate collective ownership and care of the corridor, rethinking the management approach that exists today.
4. Restore and enhance the river's ecological health (and work to make the river swimmable and fishable in the future)!
5. Bring more activity and energy to the river's banks and the corridor's parks, so long as it is supportive of a healthy natural habitat. To do this, a public safety strategy that ensures people feel safe and welcome on the corridor is paramount.

Salt Lake City Public Lands is poised and ready to transform its investment in the Emerald Ribbon in the next ten years. Immense efforts are already underway to increase the department's focus on natural lands management and to better partner with the community to steward the corridor.



This plan proposes two other major shifts: towards a restored river closer to its natural origins as a winding series of wetlands, and towards a significant increase in spending in the programming and activation of the Emerald Ribbon. Across all community conversations, the needs of the natural environment emerged as a top priority. The community agrees: if Salt Lake City Public Lands can steward nature's ecological health on the Emerald Ribbon, creating vibrant and biodiverse ecosystems for plants, animals, and people to enjoy, the Emerald Ribbon ecosystem will sustain the community's well-being for generations to come.



Planning Approach

At the core of the vision for the Emerald Ribbon is the idea that if we sustain nature, nature will sustain us, fostering a system of care that can span generations. This framework evolved from the community's repeated desire to see a more comprehensive approach to care on the Jordan River corridor. Through the planning process, the community's interest in centering the natural environment was clear. The interwoven concepts of Nature, Culture, and Care serve as the underlying approach to the Action Plan.

Nature

**If we steward nature's
ecological health...**





Care

through a process that
centers on care

Culture

...nature will engage
and sustain human
well-being.



This plan builds from a strong planning foundation.

The need for the Emerald Ribbon Action Plan emerged out of a number of important planning efforts. The synthesis of these efforts, shown at right, focuses on three main concerns: how the Corridor is invested in as a place (Making), how it is maintained (Keeping) and how the two-way relationship between Making and Keeping can lead to Caring.

**"Reimagine Nature" Public
Lands Master Plan (2022)**

**Blueprint Jordan River Refresh
(2022)**

**Public Lands Comprehensive
Needs Assessment (2019)**

Westside Master Plan (2014)

**Jordan River Commission
Best Practices for Riverfront
Communities (2013)**

**Salt Lake County Jordan River
Trail Master Plan (2008)**

Blueprint Jordan River (2008)

Making

A process to enhance a place

Improve visibility of park and natural land areas

- Internal Natural Area Guidelines (2021)

Integrate diverse recreational use on golf courses

- Reimagine Nature (2022)

Acquire new land for parks and natural areas

- Reimagine Nature (2022)

Return to historic meandering and biodiverse river corridor with wetlands and improved water quality

- Blueprint Jordan River (2008)

- + Re-establish native flora and fauna
- + Create physical space for community engagement
- + Create cherished places people are proud of
- + Increase accessibility
- + Create an inter-connected trail network
- + Increase gateways & points of connection
- + Improve experience through art and place-making
- + Improve connections to transit and active transportation

Keeping

A process to maintain a place

Grow the urban forest (equitable distribution of tree cover)

- Reimagine Nature (2022)

Create design standards for adjacent corridor development

- Blueprint Jordan River (2008)

Re-imagine the ecological maintenance of golf courses

- Reimagine Nature (2022)

Reduce impervious surfaces near the corridor

- Blueprint Jordan River (2022)

Retrofit stormwater infrastructure to incorporate water quality and quality management

- Jordan River Commission Best Practices for Riverfront Communities (2013)

- + Improve experience through wayfinding, points of interest, education
- + Communicate & encourage care through thoughtful maintenance
- + Manage invasive species
- + Preserve open spaces and natural areas
- + Revive and protect the river's water quality
- + Balance use across park assets
- + Generate consistent programming

Caring

A two-way relationship between process and place

- + Integrate natural and manicured areas
- + Create "cues to care" to nurture stewardship
- + Create quality outdoor spaces and experiences for adjacent communities

- + Balance recreation and development with river protection
- + Expand stewardship through education
- + Facilitate thoughtful naming & culturally relevant amenities
- + Center equity, inclusion, and belonging

Natural Context

The Emerald Ribbon is the spine of a unique and threatened ecosystem.

The Jordan River is the ecological heart of the Salt Lake Valley. Flowing 51 miles from Utah Lake in the south to the Great Salt Lake in the north, the river is a vital waterway in the Salt Lake Valley that has supported robust wetlands and wildlife for millenia. The Great Salt Lake and the Valley are a remnant of the massive Lake Bonneville that was 20 times the size of the Great Salt Lake. As Lake Bonneville subsided, the Jordan River formed a connection between Utah Lake and the Great Salt Lake full of meanders, broad floodplains, marshes, and oxbows. The river that settlers saw in the 1800's has been significantly altered and channelized to fill wetlands, increase areas for development, reduce flooding, and divert water. Despite the changes over more than a century, the river continues to play a crucial role in supporting migrating birds, wetland habitat, other wildlife, and places for people to enjoy nature.

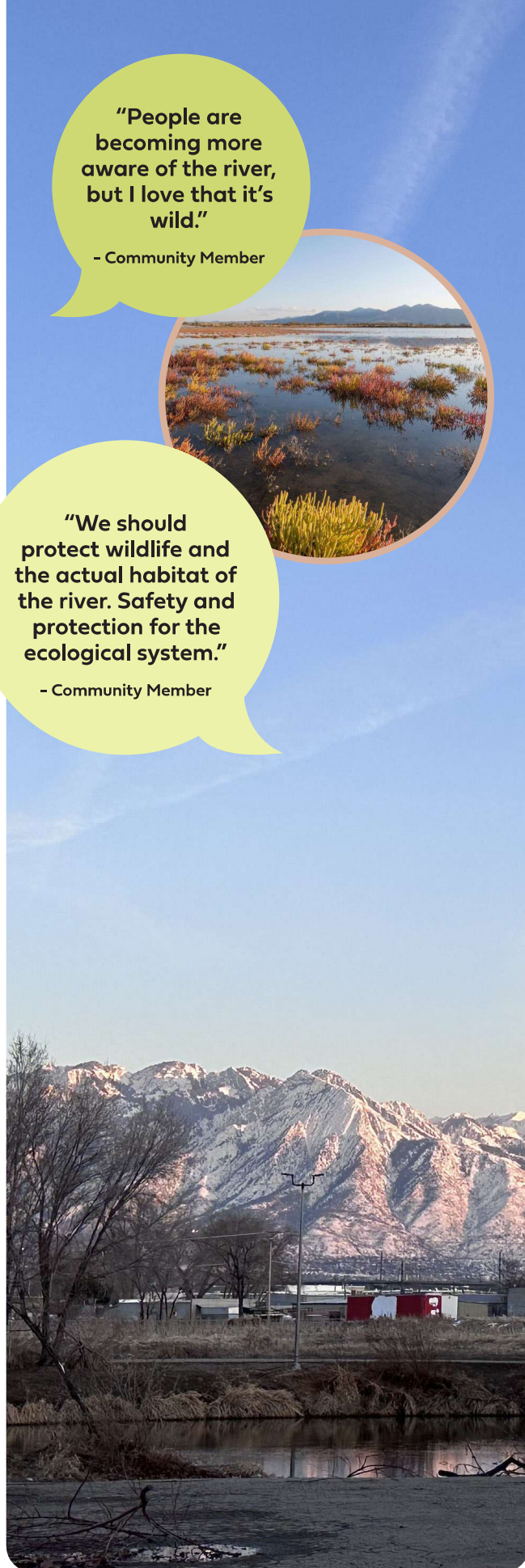
The Emerald Ribbon Action Plan's study area includes 760 acres reaching from the southern to northern ends of the Salt Lake City limits, from 2100 South to the Regional Athletic Complex (RAC). The study area includes all Salt Lake City Public Lands owned parcels adjacent to the river as well as a 150 foot buffer from the river.

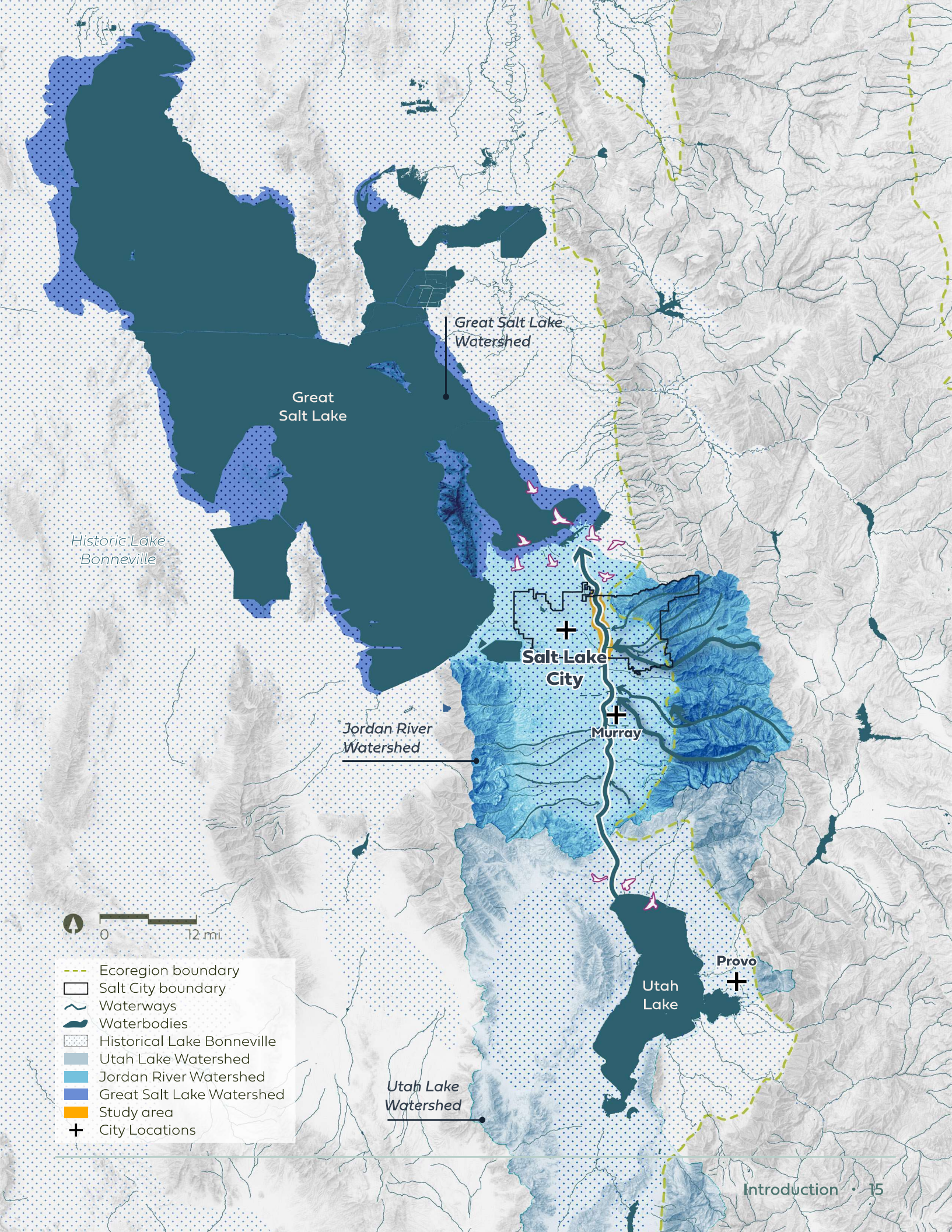
"People are becoming more aware of the river, but I love that it's wild."

- Community Member

"We should protect wildlife and the actual habitat of the river. Safety and protection for the ecological system."

- Community Member





Historic Lake Bonneville

Great Salt Lake

Great Salt Lake Watershed

Jordan River Watershed

Salt Lake City

Murray

Utah Lake

Provo

Utah Lake Watershed

0 12 mi.

- Ecoregion boundary
- Salt City boundary
- ~ Waterways
- Waterbodies
- Historical Lake Bonneville
- Utah Lake Watershed
- Jordan River Watershed
- Great Salt Lake Watershed
- Study area
- + City Locations



"I want healthy places that are accessible in the community. And I want more coffee shops."

- Community Member

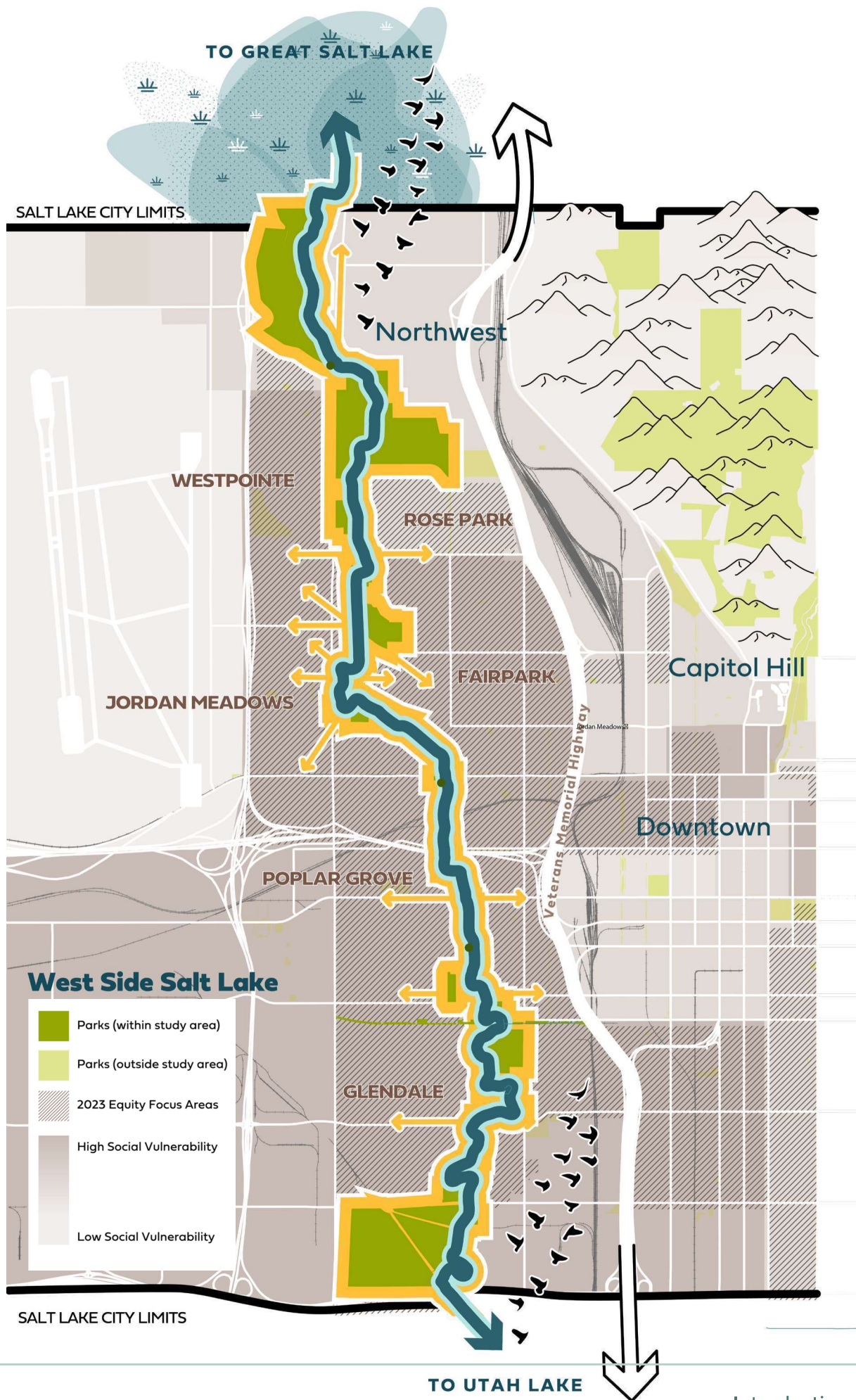


Cultural Context

The Emerald Ribbon is the heart of the Westside, home to some of Salt Lake City's most diverse communities.

People have always had an important relationship with the Jordan River. Indigenous groups, who called the Jordan River Pia Okwai, traded goods and celebrated key events along its banks. Since the late 1800s, the development of the railroad and ensuing industrial activity along the river brought more people to Salt Lake City. The city's rapid population growth corresponds directly with the rapidly shrinking size of the Great Salt Lake.

In the mid 20th century, the I-15 freeway created a physical, cultural, and socioeconomic divide between the east and west sides of the city that remains today. While the east side has access to a variety of downtown parks and mountain landscapes, the Jordan River serves as the primary open space for the Westside. The Westside is made up of neighborhoods diverse and varied in their own right: Poplar Grove, Glendale, Fairpark, Jordan Meadows, Rose Park, and Westpointe. Across all of these neighborhoods, social vulnerability (a measure that includes income, race, lack of vehicle access, and housing instability) is on average higher than Salt Lake City as a whole.



Care Context

Cleanliness and safety issues threaten public perception of the corridor.

Throughout community focus groups, interviews, and workshops, lack of safety and cleanliness were the most common themes people mentioned when describing their perceptions of the corridor. Safety considerations are multifaceted: residents expressed feeling unsafe at night due to poor lighting along the trail, during the day due to the large presence of unsheltered populations in the corridor, and within the river due to steep banks and poor water quality. Perceptions about cleanliness centered on the presence of refuse in the waterway and adjacent parks and under-maintained amenities. Feeling that it is not well cared for by the city, some residents and stakeholders have mentioned taking it upon themselves to clean certain sections of the river.

Within the new and growing department created to care for Salt Lake City's Public Lands, care for the river corridor is a pressing concern. The Park Rangers team, created in 2023, has already become a key component of trail experience, offering aid, orientation, and a sense of safety. The Trails and Natural Lands (TNL) team on the Parks Division is growing substantially, with six additional positions opening in 2023. Four landscape architects, previously in the Public Services department, moved to Public Lands in 2023, further positioning the department to lead the way on the restoration and care of the corridor's natural ecology.



"A healthy river in SLC requires great collaboration with everyone upstream."

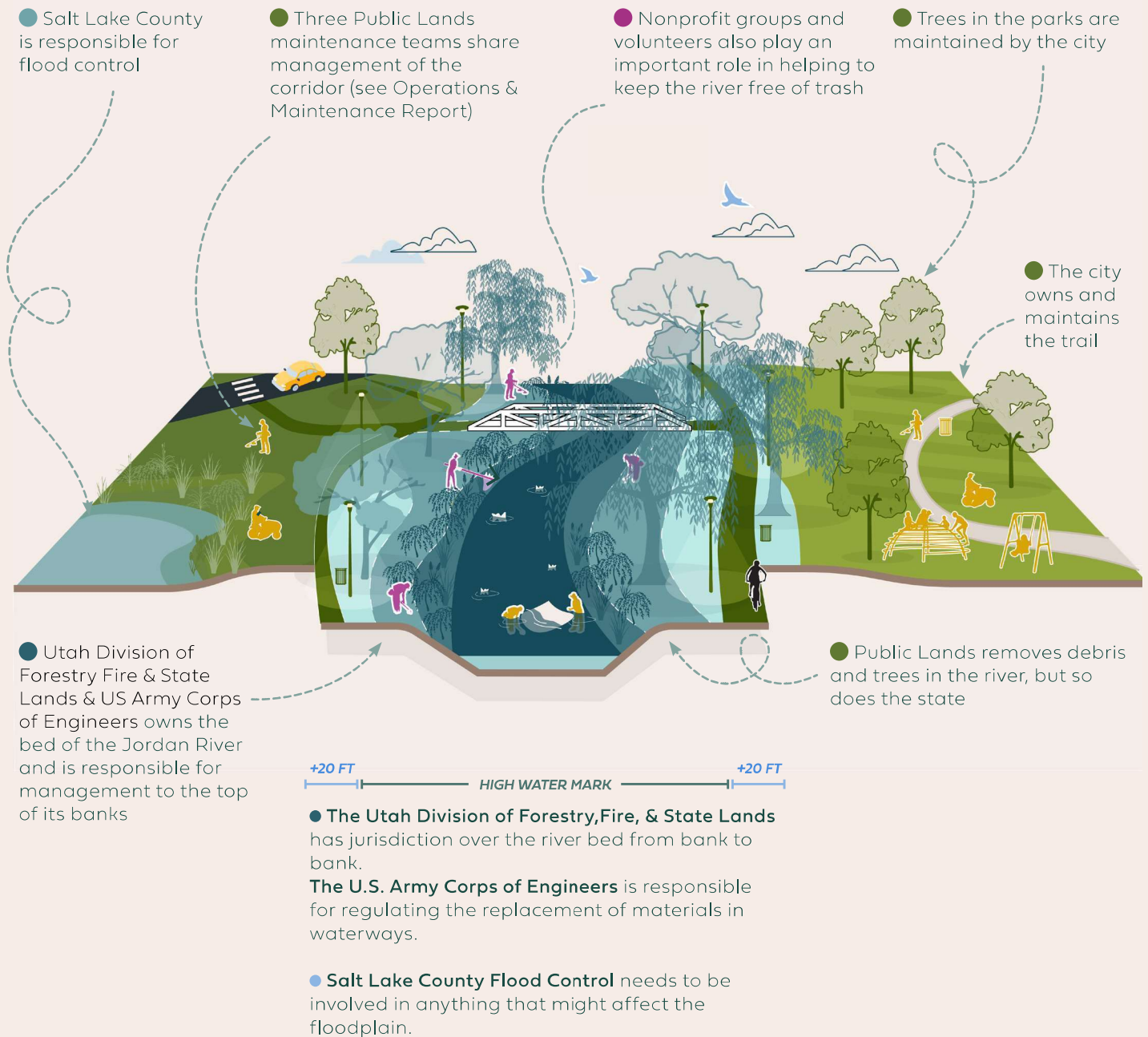
- Community Member

"I know I would like to volunteer time helping clean up the river and parks and learn more about the habitat and what I can do at home to help indigenous species."

- Community Member



Who manages the Jordan River Corridor?





A circular graphic composed of ten dots arranged in a circle. The dots are connected by a dashed line that forms a circle. Two of the dots are white, and the other eight are in various shades of gray. A dashed arrow points clockwise from the top-left dot to the bottom-right dot.

Making the Action Plan

Collaborating with the Community



Phase 1 Begin the Journey

51
stakeholders
in focus
groups

100
people at
Dinner on the
River

2
committee
meetings

50
Westside
residents in
focus groups

140
participants
in public
workshops

Phase 2 Dream Big

30
youth workshop
participants

561
online survey
respondents

209
participants
in public
workshops

2
committee
meetings

Phase 3 Create a Road Map

526
online survey
respondents

128
participants
in public workshops

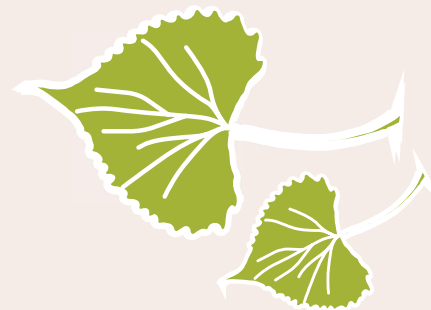
2
committee
meetings

2
elected official
site tours

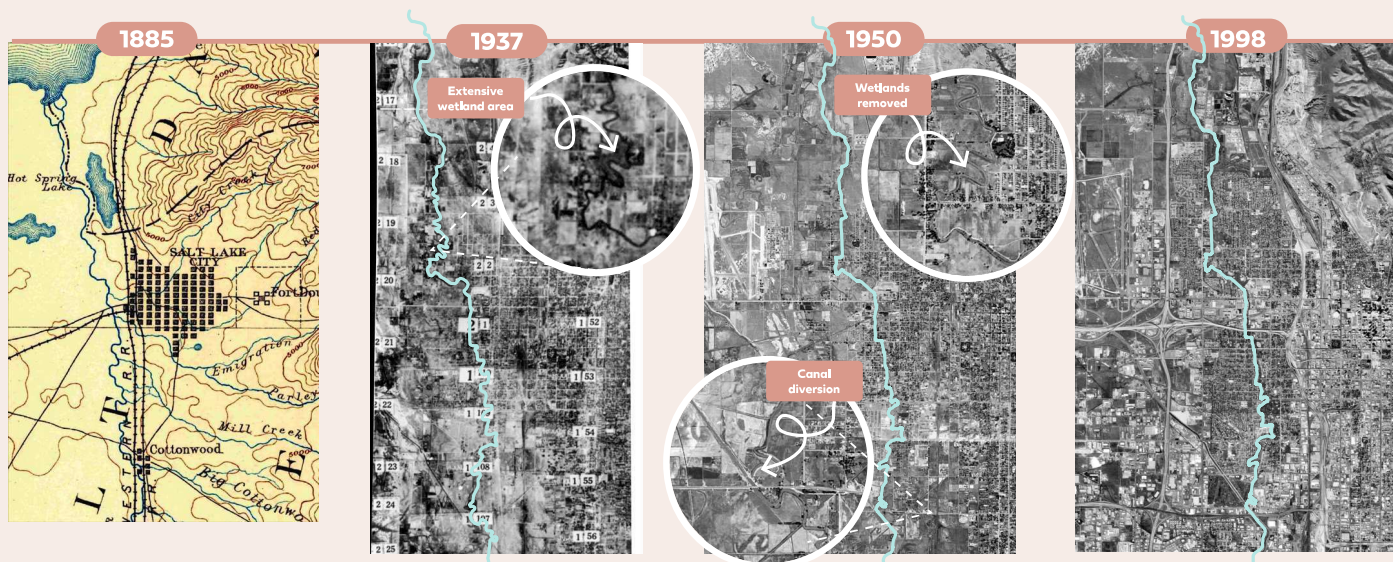
Phase 1

Begin the Journey

The first phase of planning sought to understand and analyze the existing context, current trends, planned projects, and stakeholder priorities along the 10-mile stretch of river corridor. Analysis included the park, trail, and recreation systems and assets along with community history, its environmental and ecological significance, and its broader role in the community. This phase concluded by defining the opportunities and challenges of the system and documenting the work as an Existing Conditions Report.



The History of the Jordan River in Salt Lake City



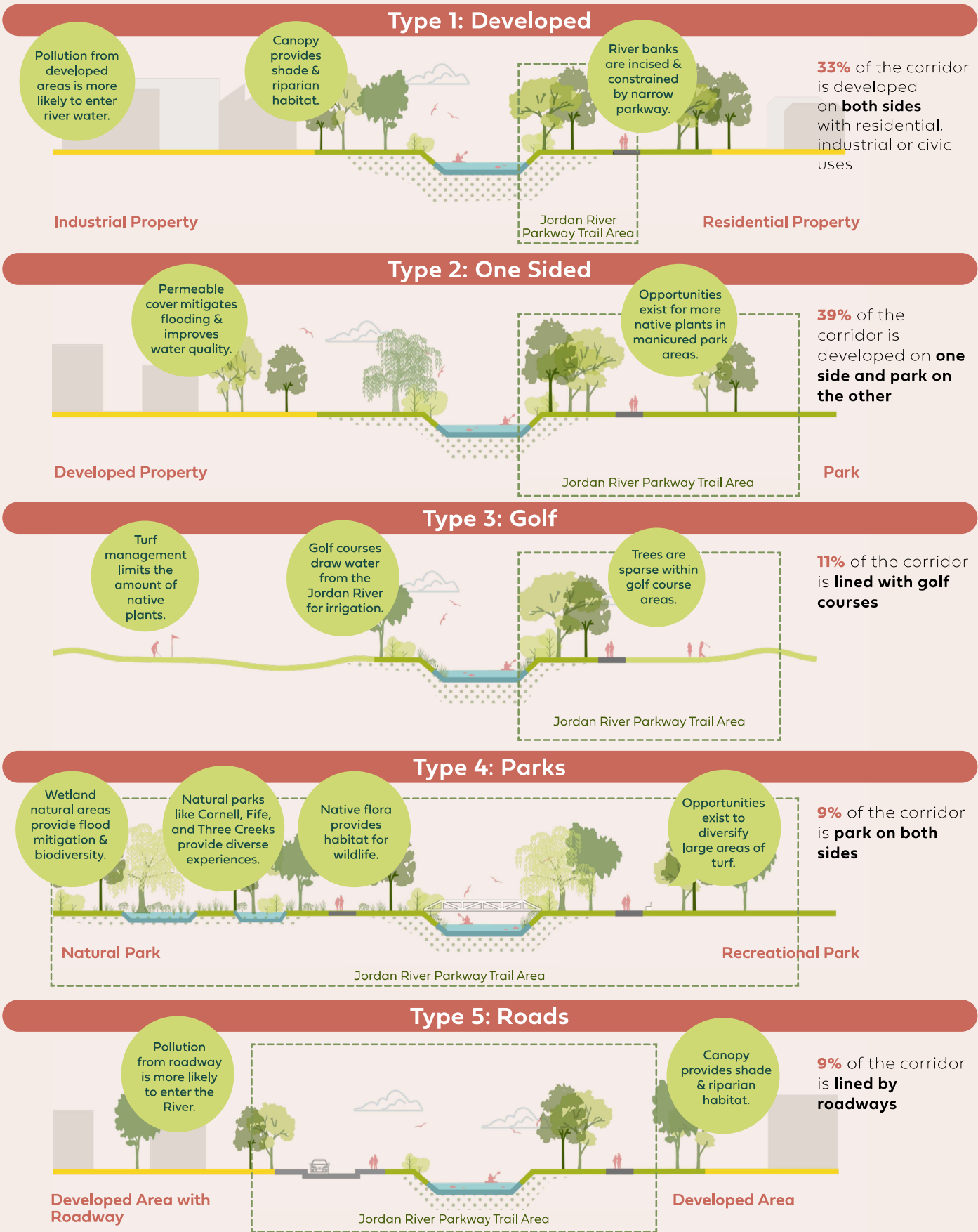
The river remains a meandering corridor, but some historical water bodies have already been filled in, such as Hot Spring Lake.

The dark coloration near the river indicates likely wetlands. The river is a meandering corridor through mostly rural lands at the westernmost edge of the built city.

The downtown core of Salt Lake City has encroached westward beyond the river boundary. Much of the wetlands seen in 1937 have been filled in. The northern section of the site still shows a meandering corridor through undeveloped land.

The river is heavily channelized. Its surroundings are highly developed and much of the open space within the study area is programmed for public use, such as golf.

Land Use Types Along the Corridor Today



Phase 2

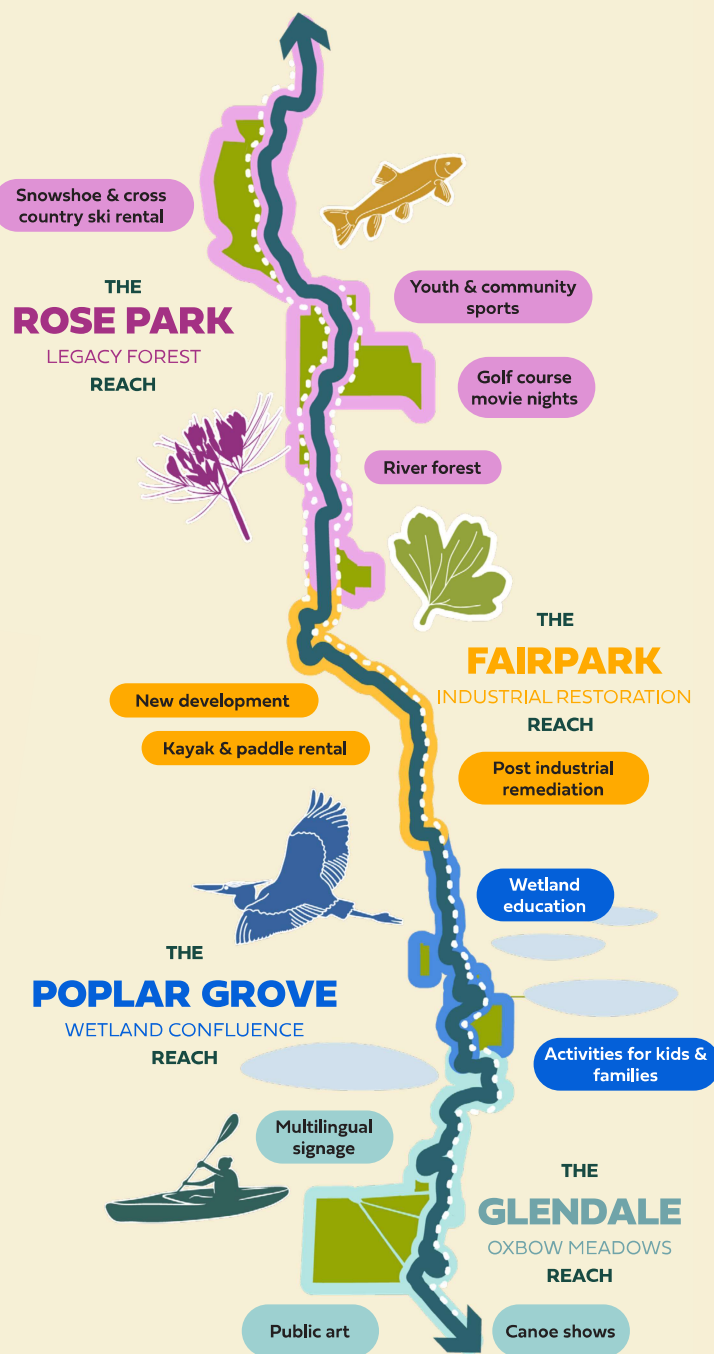
Dream Big

The second phase of planning focused on the development of a framework for the river corridor at a master plan scale. Utilizing the feedback and ideas in the first wave of engagement, five Guiding Principles were developed in collaboration with the Community Advisory Group to ground the plan's goals in the aspirations of the Westside community.

The desired character of the corridor was then tested with the community via the development and evaluation of three imaginative scenarios: Dynamic Districts, River Ribbons, and Meandering Moments. These were visualized at both the system scale (to the right) as well as through three-dimensional sketches of various segments.

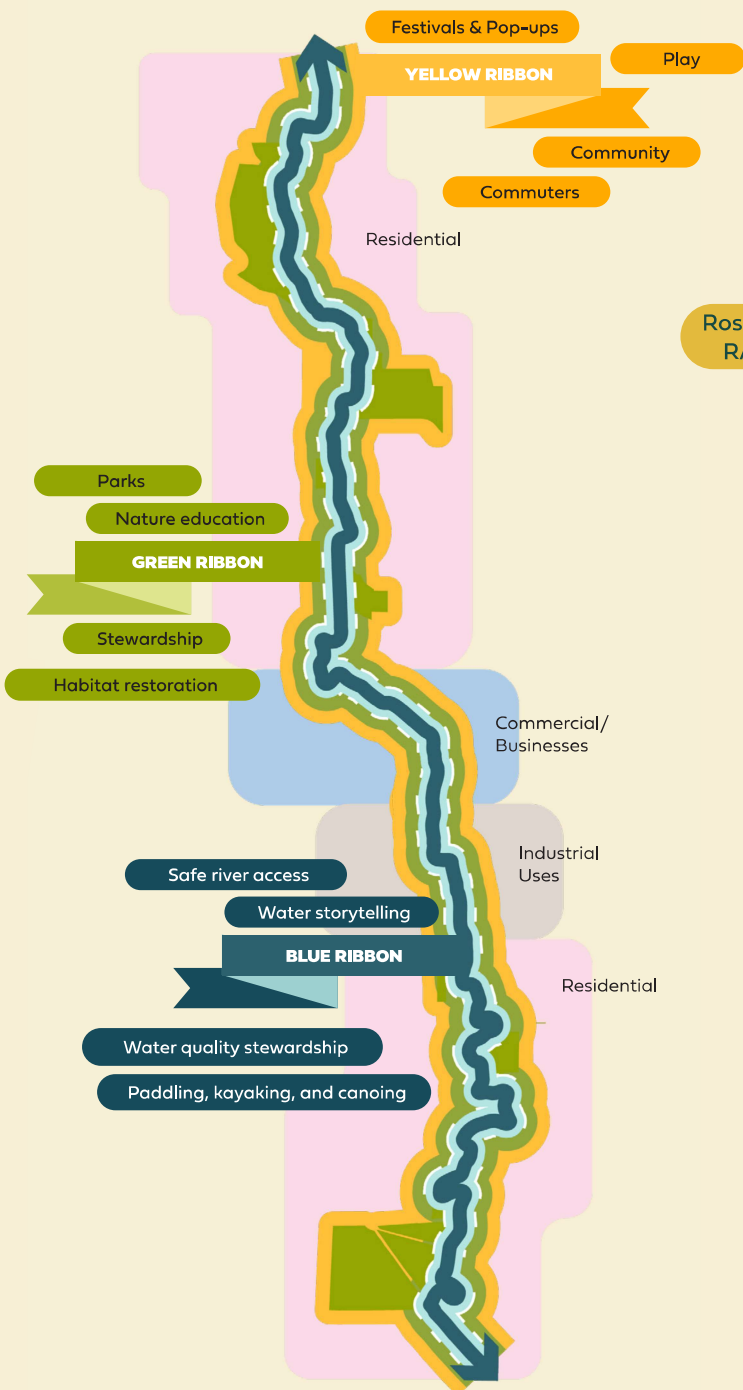
Dynamic Districts

A vibrant, ever-changing corridor that celebrates the diversity of Westside neighborhoods



River Ribbons

A restored river with active, programmed edges and well-connected transition spaces



Meandering Moments

A restored nature education and recreation corridor with unique nodes of activation



Phase 3

Create a Roadmap

Phase 3 focused on the creation of a preferred corridor-wide concept plan with further detail on programming, landscape character, trail connectivity, and ecology. Building on the Guiding Principles and community priorities identified in Phases 1 and 2, the concept was vetted with advisory committees and the public, and high priority ideas from the proposal were identified. The overall concept plan also included five detailed concept plans for areas of potential focus throughout the corridor.

Together, the corridor-wide framework, the five concept plans, and an operations and maintenance plan provide an overall guide for the long-term preservation and enhancement of the Corridor consistent with the community's vision.



● Glendale Oxbow



● Power District and Fairpark



● Community Engagement

August 2023

Stakeholder Focus Groups

51 stakeholders from community organizations, advocacy groups, schools, and city, county, and state departments convened for small group discussions on topics including Ecology, History and Culture, Mobility, Maintenance, Economy & Policy, and Education & Stewardship.

- The Community Advisory Group (CAG) Kickoff

- Technical Advisory Group (TAG) Kickoff

Fall 2023

Community Focus Groups

Led by University Neighborhood Partners, 50 Westside residents gathered in 8 focus groups, conducted in Spanish, Somali, Tongan, and Tibeto-Burman languages at the Hartland Partnership Center. Participants were compensated and discussions included childcare, making participation accessible to individuals often left out of conversations on the Westside.

November 2023

Public Open Houses

At Sorenson Unity Center and Northwest Recreation Center, the team shared back our understanding of the Emerald Ribbon in the form of an exhibit and game board. Residents shared their priorities from a set of options, the challenges they see today, and their dreams for the future.



March 12, 2024

Youth Workshop

At the Northwest Recreation Center, thirty young people between the ages of 6 and 12 participated in a workshop to design their dream park on the Jordan River, expressing their priorities and dreams for the future.



March 13-14, 2024

Public Open Houses

In March, hundreds of residents gathered at two open houses, at Sorenson Unity Center and Mestizo Coffee House to review three concepts for the future of the Emerald Ribbon. Residents cast 1,258 votes on various elements to help shape the next phase of the plan and submitted 501 comments.

- 2 CAG Meetings, including Guiding Principles workshop

- TAG Meeting

March-April, 2024

Online Survey

The three design concepts were ranked by over 561 respondents online. Respondents were predominantly Westside residents but included residents of other Salt Lake City neighborhoods and surrounding areas.

July 10-11, 2024

Public Open Houses

Corridor-wide draft recommendations and proposed concept designs for the five focus areas were shared for feedback. Based on the number of votes, 128 residents gathered to shape the final plan.



July 10-11, 2024

Site Tours with Mayor Mendenhall and Councilmember Puy

The team led site tours of the Glendale Oxbow and Modesto and Bend in the River Parks with Mayor Mendenhall and of the Fisher Mansion and Fairpark area with Councilmember Puy to share proposed designs.

- CAG Site Tour of Modesto Park and Bend in the River

- TAG Site Tour of Cottonwood Park

July-August 2024

Online Survey

A second online survey ensured residents could share feedback in multiple ways and gathered 526 responses.

● Key Insights

A well-maintained natural and cultural corridor

46% of feedback across open houses and focus groups highlighted the need for a safe and clean corridor.

A vibrant community destination

37% of feedback centered around ideas for programming on the river and along the trail.

A place that fosters long-term multigenerational use

18% of comments centered on cherished personal memories: people feel the corridor has gotten worse in recent years and hope it will be different for the next generation.

Stakeholder Feedback

- + Activate the corridor
- + Collaborate with partners
- + Prioritize nature with new best practices
- + Strategically balance uses

Care for Nature

Ecological restoration emerged as the #1 priority across all engagement methods.

Activation in a Healthy Way

More programming and cultural celebration was popular, but only if done in a way that is sustainable to the natural environment.

Perceptions of Insecurity

Public safety remains an urgent priority for residents.



Restoration Priorities: Biodiversity and Water Quality

Improving water quality was highly ranked at open houses and in the online survey, closely followed by improving biodiversity.

Safety & Activation go Hand-in-Hand

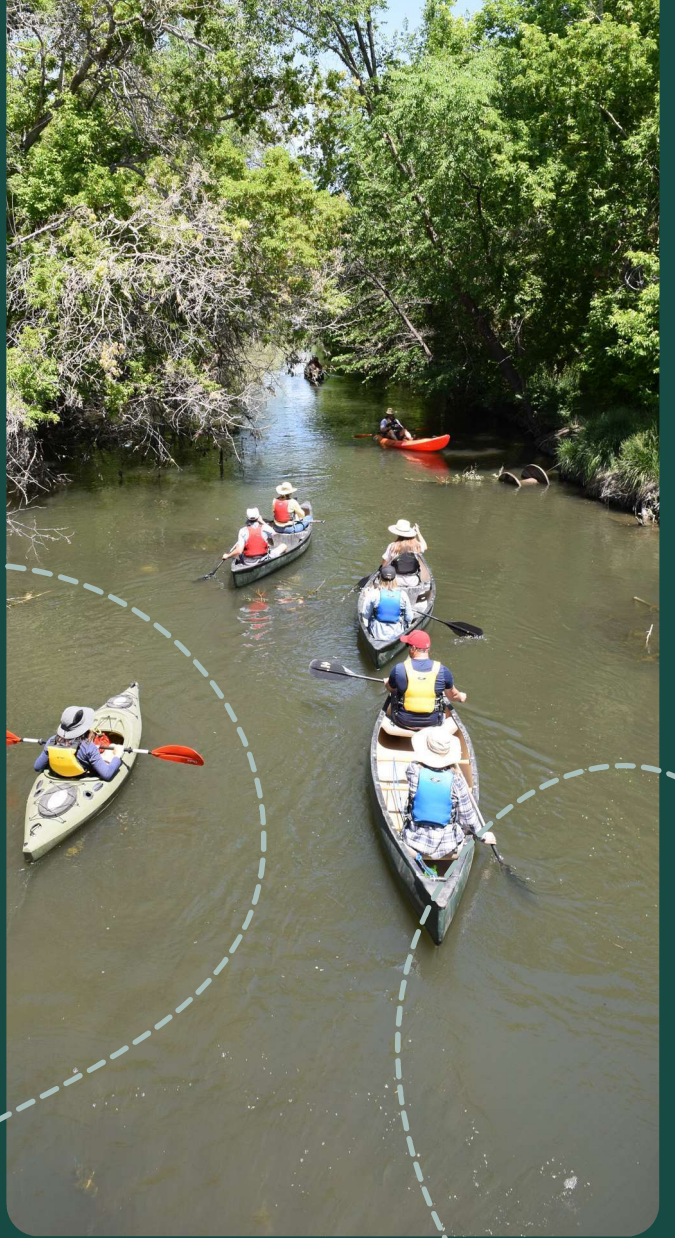
Partnering with the city and state to address housing insecurity was a top rated theme, followed by increased programming on the water and water's edge.

Safer Intersections & a Complete Network

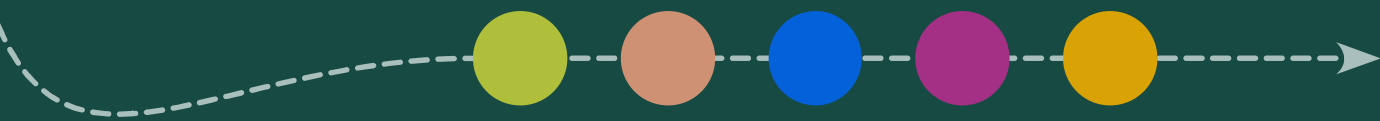
Safer and more visible intersections emerged as a top priority alongside a more complete trail network.

Top Rated Ideas

- + Improve water quality
- + Partner with city and state to address housing insecurity
- + Encourage developers to enhance trail network
- + Safer intersections
- + Prioritize ecological restoration



The Action Plan

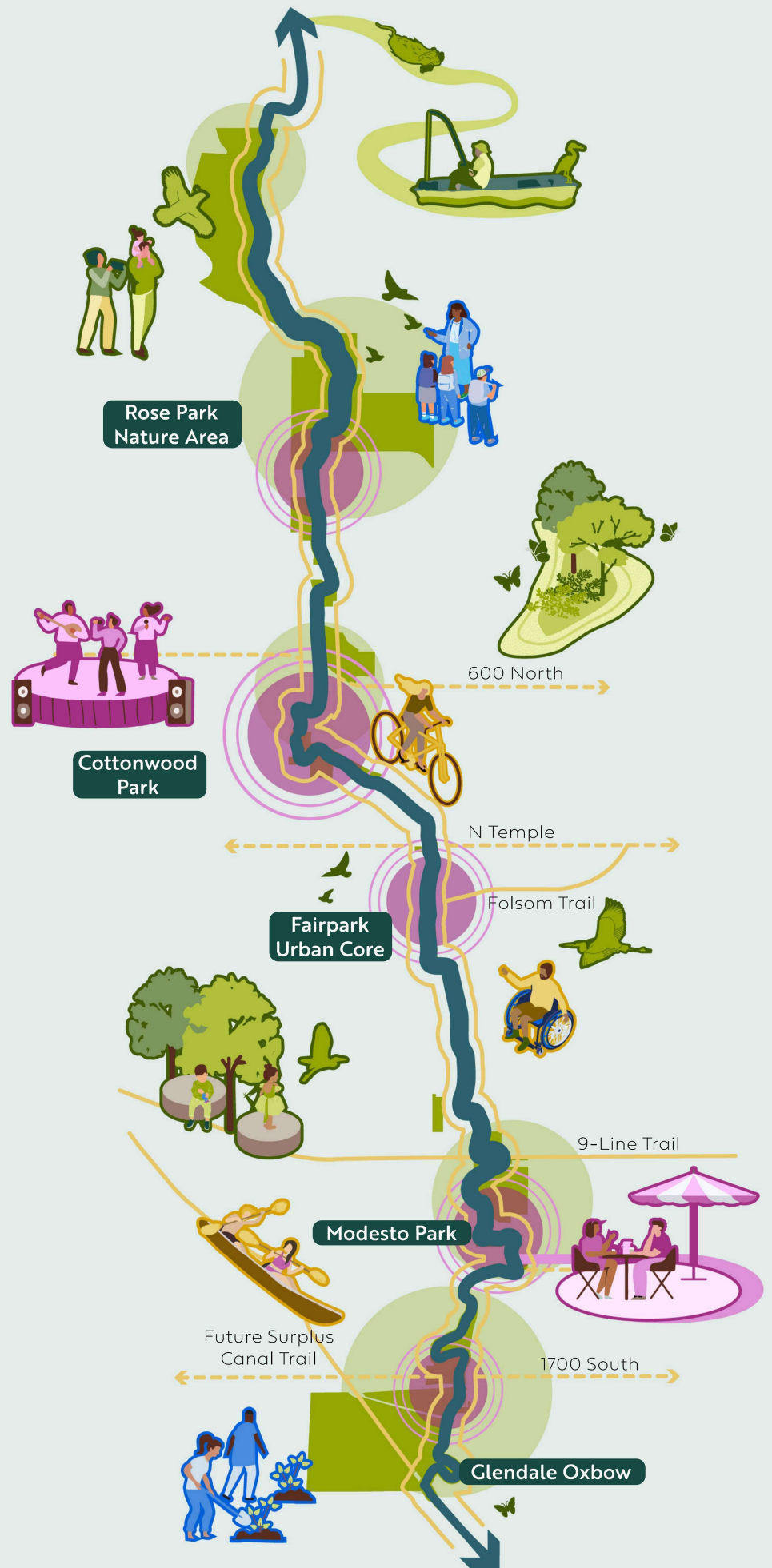


Chapter Contents

Vision Statement & Values	32
Guiding Principles Introduction	40
Principle #1: Celebrate	54
Principle #2: Connect	50
Principle #3: Cultivate Care	66
Principle #4: Restore	76
Principle #5: Activate	86

Vision Statement

The Emerald Ribbon envisions a future Jordan River corridor that is a ribbon of **nature** through Salt Lake City, a community **crossroads**, and the **heart** of the Westside. It is a model of **care** for people, wildlife, and ecosystems.



Action Plan Values





Nature

The lens of Nature highlights the needs of the natural ecosystem along the Jordan River. Across all community engagement, restoring a vibrant natural ecosystem was the #1 priority. The Jordan River is home to over 700 plant and animal species today. As one of the four rivers that feed into the shrinking Great Salt Lake, it will play a critical role in the whole region's resilience in the coming decades. The momentum and support for serious restoration projects on the corridor is clear.



Culture

The lens of Culture focuses on the needs of Westside residents. The Emerald Ribbon runs right through the heart of some of Salt Lake City's most diverse, culturally vibrant, and historically disinvested neighborhoods. While the corridor has more parkland than elsewhere in the city, residents express a frustration that they often find themselves traveling east to enjoy the city's best public places. By better leveraging the hundreds of acres of publicly-owned land along the Jordan River corridor for the benefit of the surrounding community, the Emerald Ribbon can become a cultural destination that makes the Westside thrive.



Connectivity

The lens of Connectivity focuses on the role of the corridor as a critical connector between parks, homes, and businesses. The 10 miles of river that flow through Salt Lake City are part of a large and growing system of trails and waterways but also serve as critical mobility infrastructure within neighborhoods on the Westside. Residents want to use both the trail and the waterway as a transportation method more integral to daily life. A thoughtful, holistic approach to the Emerald Ribbon as a connectivity system across water and land can make the corridor more accessible for both locals and visitors alike.



Care

The lens of Care focuses on the intersectionality of the other lenses: we must care for nature for it to sustain us in return. We must maintain a trail for it to remain useful to the community over time. We must create opportunities for people to thrive for a place to feel vibrant. Perceptions and realities of deferred maintenance on the corridor have shaped public feeling about the Emerald Ribbon in the past. Centering Care will be crucial to the success of the Emerald Ribbon moving forward. Thinking in terms of generations, not just the next few years, will ensure that investments made now are thoughtfully designed to flourish over time.

Nature

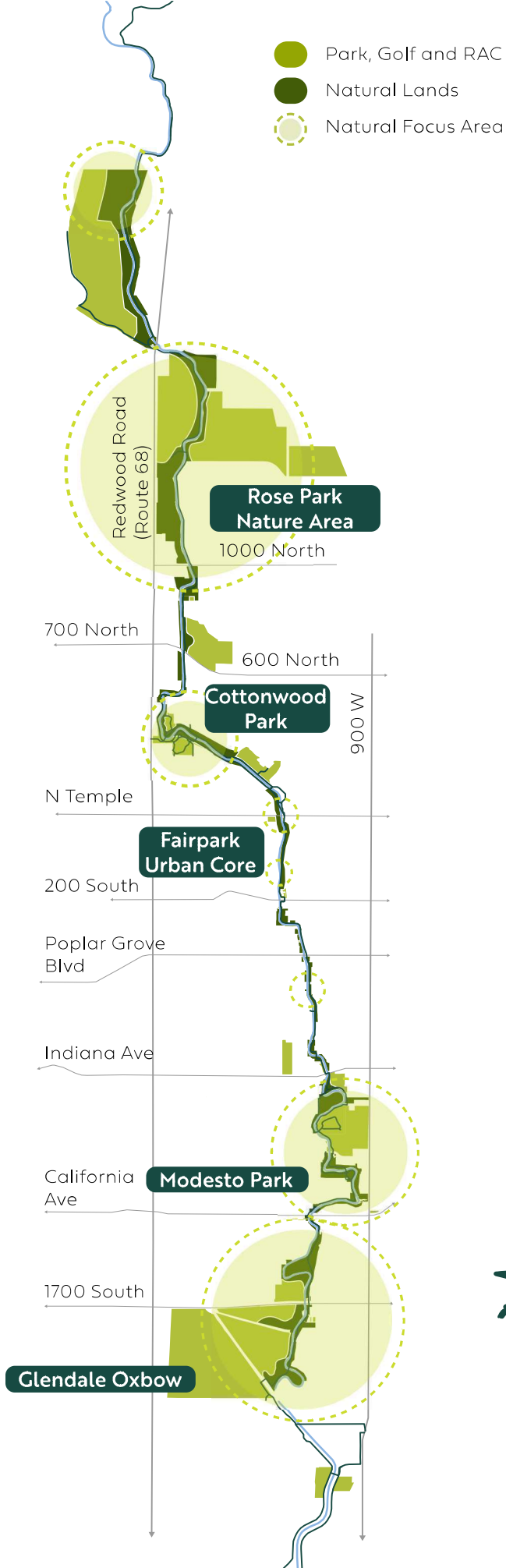


The plan recommends that the area currently managed as natural lands (now 14% of the study area) be increased to at least 30% of the study area. This would mean a shift of management techniques in those areas to focus on the restoration of native species, creation of new wetlands and natural habitats, and the design of nature experiences for people.

Some of the goals most focused on Nature include:

- + Enhancing Nature Experiences (1.1)
- + Creating Biodiverse Habitat (1.2)
- + Making Room for the River (4.1)
- + Keep the River Clean by Managing the Source of Pollution (3.4)
- + Expand Restored Natural Lands (4.3)

Note: the numbers above indicate where to find the goal in the Action Plan. (1.1) indicates Guiding Principle 1, Goal 1.



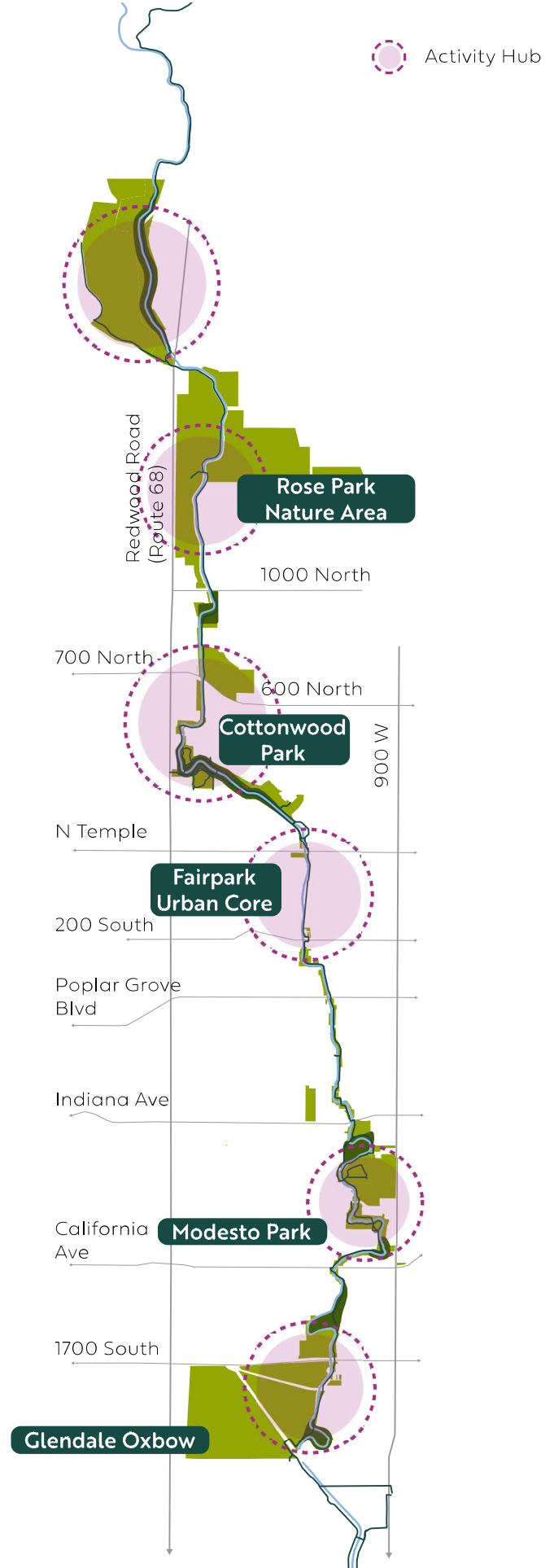
Culture



The plan proposes to increase investment in community resources and invest in new public amenities throughout the corridor, focused at specific hubs designed to minimize impact on the natural environment and concentrate maintenance resources. Many of these center on existing parks, where the plan's goals work in concert to better meet the community's needs.

Some of the goals most focused on Culture include:

- + Expand Public Art Programs (1.3)
- + Celebrate & Support the Culture of the Westside (1.4)
- + Bring Programming to the River and River's Edge (5.1)
- + Support Small Businesses and Commercial Activation (5.2)
- + Create Flexible Event and Gathering Spaces (5.5)



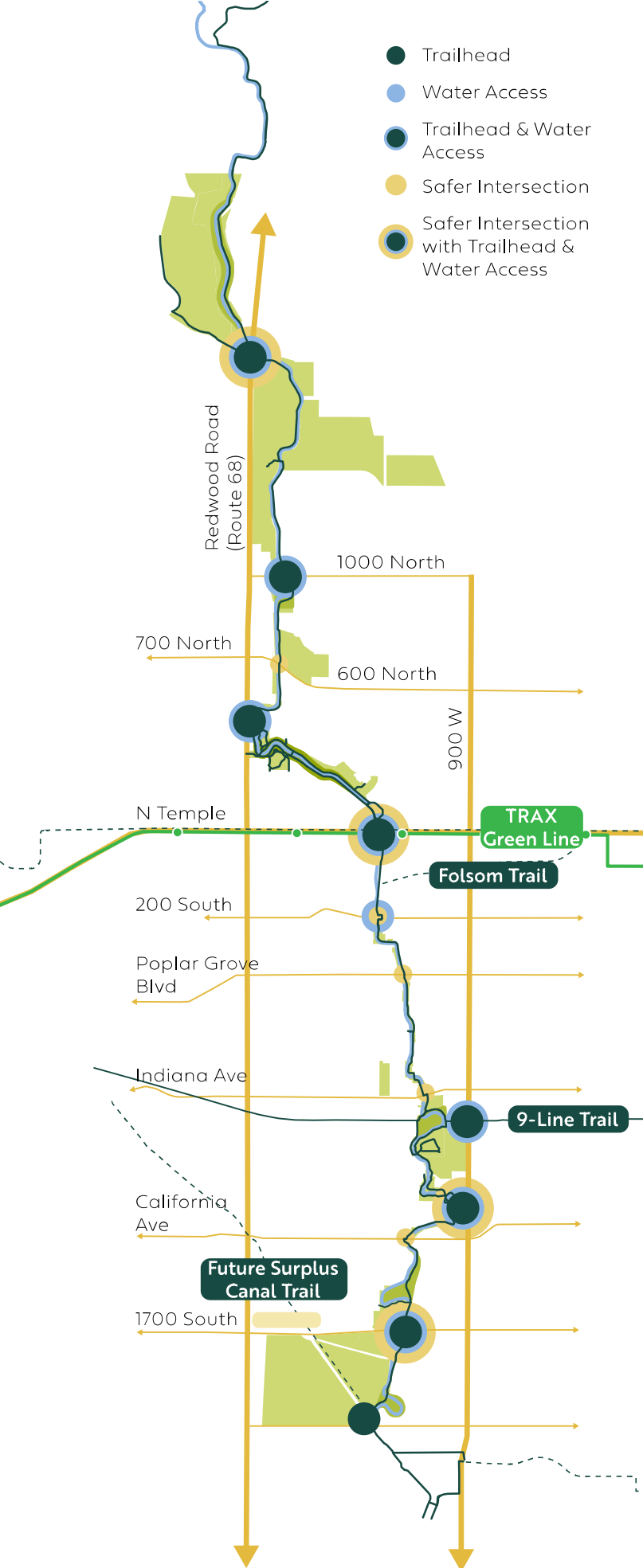
Connectivity



The plan proposes to improve the trail network on the corridor, optimizing for all user types and better connecting into both neighborhoods and other trails. An increase in safe, easy-to-access boat ramps can also increase activity on the water and further galvanize public support for water quality improvement efforts.

Some of the goals most focused on Connectivity include:

- + Create Safer and More Visible Intersections (2.1)
- + Improve Neighborhood Connections (2.2)
- + Expand Trail Widths and Separate Paths Where Possible (2.3)
- + Improve Wayfinding and Signage and Resolve Confusing Trail Connections (2.4)
- + Bring Programming to the Water and Waters Edge (5.1)
- + Improve Trail-Side Amenities (5.4)



Care



The plan centers Care as a theme throughout all goals and strategies, but emphasizes in particular the need to address issues of public safety, streamline management to support other investments on the corridor, and collaborate with the community to steward the Emerald Ribbon long-term.

Some of the goals most focused on Care include:

- + Develop Clear Public-Facing Guidelines for Care (3.1)
- + Partner with the Community to Steward the Corridor (3.2)
- + Leverage Policy to Protect and Enhance the River (4.4)
- + Develop a Multi-Pronged Approach to Public Safety (5.3)



Guiding Principles

The 5 Guiding Principles were created in Phase 1 of the Action Plan process in close collaboration with the Community Advisory Group. They emerged from community priorities voiced in focus groups hosted by University Neighborhood Partners and at public workshops around the corridor. These principles hold the plan accountable to what matters most to Westside residents and serve as the chapters of the Emerald Ribbon Action plan.

1

Celebrate the rich ecological and cultural diversity of the corridor.

2

Connect the corridor into surrounding streets, trails, and waterways.



3

Cultivate collective care of the corridor.



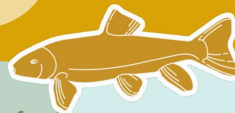
4

Restore and enhance the river ecosystem as a peaceful refuge.



5

Create a safe and vibrant destination.





Action Plan Chapters

The Emerald Ribbon Guiding Principles form the chapters of the Action Plan. The Goals on the following pages provide a roadmap for how Salt Lake City Public Lands can advance each of the community's Guiding Principles. Each goal is supported by a series of Strategies and Action to advance that goal.



1

Celebrate the rich ecological and cultural diversity of the corridor.

Pg 44



2

Connect the corridor into surrounding streets, trails, and waterways.

Pg 54



3

Cultivate collective care of the corridor.

Pg 66



4

Restore and enhance the river ecosystem as a peaceful refuge.

Pg 76



5

Create a safe and vibrant destination.

Pg 88



Provide
places and spaces
to learn about
the history and
biodiversity of the
ecosystem.

Prioritize creating a
healthy environment
to increase biodiversity
and improve water
quality.

Pop-up markets,
food trucks, or events
that highlight small
businesses and celebrate
the rich history and
cultural diversity of the
Westside!

what you shared

**Celebrate the rich
ecological and
cultural diversity
of the corridor.**



Goals

1	Focus on nature experiences	46
2	Create biodiverse habitat	48
3	Expand art programs on the corridor	50
4	Celebrate and support the culture of the Westside	52



Goal #1

Focus on nature experiences

what you shared

I like more wetlands! It make the nature experience more complete.

Fairpark section should have an educational section; it sees a lot at tourists and visitors and needs activation.

Love the nature play for kids + outdoor classrooms!

For many years, the Jordan River has served as a natural and cultural sanctuary for Salt Lake City, especially for the Westside community. However, it has recently faced increasing challenges related to safety and cleanliness. The community has fond memories of engaging with nature along the river corridor and has expressed a desire to experience that more frequently. It is crucial to restore natural areas and improve access to them. Doing so will increase the visibility of the river corridor, promote public awareness, and foster collective care for the area. This will help maintain it as a healthy habitat where wildlife can thrive and people can enjoy nature.



Strategy 1:

Create a comprehensive interpretation and signage plan for the corridor.

Actions:

- + Create an Request for Proposal (RFP) for interpretive design of the corridor in conjunction with natural restoration efforts with a focus on human-nature connections (see: Goal #3: Expand Public Art programs for opportunity to engage artists in all or part of this work).

Strategy 2:

Promote citizen science with a focus on youth programming.

Actions:

- + Develop and test multilingual (Spanish-centric) nature education programs led by Park Rangers on the Emerald Ribbon in collaboration with local community partners, including Northwest Recreation Center, Sorenson Unity Center, and K-12 schools along the Emerald Ribbon.
- + Conduct listening sessions with local schools and youth programs to understand how the Park Rangers and Public Lands can increase a sense of safety and reinvigorate youth interest in nature on the corridor.
- + Support the use of i-Naturalist & e-Bird within the corridor.
- + Explore ways for Public Lands to engage youth in leadership and career building opportunities, including through Youth Ranger programs, apprenticeships, Utah Conservation Corp, and the creation of a Youth Community Council.



Kingsbury Commons

This lush green space features well-maintained walking paths that wind through a diverse array of native plants and mature trees. Kingsbury Commons is a cherished retreat and connects visitors to nature without having to leave the city.

Austin, TX

nature

care

Goal #2

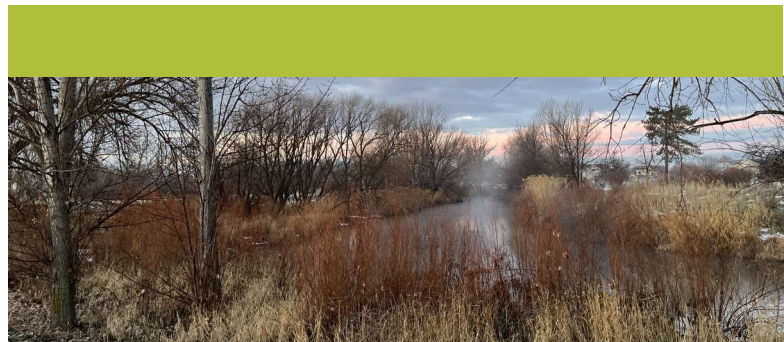
Create biodiverse habitat

**I would love
to see space for
wetlands + wildlife.
Natural
environment!**

**Prioritize
creating a healthy
environment to
increase biodiversity and
improve water quality
to make it more
sustainable.**

**I think the
focus for now
should be on
biodiversity and
wildlife habitat**

The Jordan River corridor provides habitat for over 700 plant and animal species. These species depend on the river's riparian, wetland, and upland habitats that form a vital connector through the urbanized Salt Lake Valley. More than half of the corridor's open space is mowed or taken over by invasive species (i.e. phragmites), which impedes the potential for a truly biodiverse landscape. Restoring open space that is currently occupied by turf grass or invasive species will drastically increase biodiversity of the corridor. Incorporating native plant specimens into the corridor will also help reach this goal.





Strategy 1:

Implement riparian, upland, and wetland restoration.

Actions:

- + Map out opportunities for restoration throughout the corridor based on topography, water table, soils, adjacent uses, current use, and ease of transition (completed as a part of this project).
- + Prioritize areas for restoration (completed as a part of this project).
- + Utilize an adaptive management approach and phasing to allow for capacity building within the maintenance crews as outlined in the Operations & Management Guidelines.
- + Utilize on-staff restoration ecologist to promote cultivation to supplement nursery availability and support the propagation of native plants and seeds in the regional nursery trade.

Strategy 2:

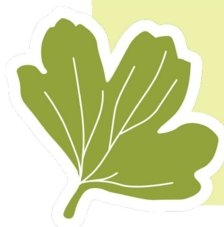
Monitor progress towards restoration goals.

Actions:

- + Utilize and promote citizen science to track biodiversity.
- + Utilize volunteers to track invasive species occurrences and reductions.

Operations & Management Plan

A separate document, the Operations and Management Plan (O&M Plan), recommends standards and practices for Public Lands to implement moving forward to establish a new approach to care and management of the Emerald Ribbon and advance the goals of the Action Plan.



Red Butte Garden

At Red Butte Garden in Salt Lake City, native plantings are carefully curated and wetland areas are carefully managed and restored. Together, the resulting landscapes serve as a vital habitat for a diverse array of flora and fauna.

Salt Lake City, UT

nature

care

Goal #3

Expand art programs on the corridor

Love room for community business and murals! Would love to see public art!

Work with local businesses, private land owners and other city entities to develop more art along the JRT corridor.

Art is vital to a healthy community. I would love to see that be prioritized in these developments!

Art has the power to tell stories and reflect culture in the landscape. In the Westside, where such a vibrant mix of global cultures are represented, immigrants from around the world crave a sense of place that connects them both to Salt Lake City and to their earlier homes. In focus groups with Spanish-speaking residents, people expressed interest in spaces for local artists to exhibit work where art and wellbeing could coexist. Public art is already leveraged to great effect by the city. A focus on uplifting Westside artists towards the goal of celebrating the neighborhoods' cultural heritage should be woven throughout the Emerald Ribbon.





Strategy 1:

Leverage local artists in advancing other goals in the Action Plan, including safer intersections, the design and programming of flexible event spaces, and nature interpretation experiences.

Actions:

- + Develop art guidelines for the Emerald Ribbon.
- + Launch an Emerald Ribbon Artist-in-Residence program that offers a stipend to a Westside artist, and grant that person access to early project ideation.
- + Create an RFP for an artist-led cultural interpretation experience that allows visitors to learn more about the past, present, and future of the historic landscapes of the Emerald Ribbon, including narratives of the area's indigenous peoples and present-day cultural communities.
- + Partner with SLC Public Services Street Division and the Arts Council to determine ways to incorporate art into street design for safer and more visible intersections that also create more awareness of the river for street users.

Strategy 2:

Develop community-led beautification programs.

Actions:

- + Identify locations and amenities on the corridor suitable for community-led beautification, like bridges, pavilions, benches, and tables.
- + Facilitate ongoing partnership with community and volunteer groups to beautify (and do aesthetic-level maintenance) on corridor facilities and amenities.

Strategy 3:

Create sustainable funding pipelines for ongoing art programming.

Actions:

- + Advocate for Salt Lake City Arts Council funding to be allocated towards approved Capital Improvement Projects (CIP) along the Emerald Ribbon.
- + Develop private and philanthropic partnerships to fund arts programming on the Emerald Ribbon.



Cooper's Alley

This revitalized alleyway features an inviting mix of green spaces, art installations, and pedestrian-friendly pathways, creating a dynamic environment for residents and visitors alike. Colorful murals and interactive features celebrate local culture and creativity.

Chattanooga, TN

culture

care

Goal #4

Celebrate and support the culture of the Westside

Painted crossings or gateways would be great to develop community ownership.

Create a program for a small business trail. The trail lacks destinations, i.e., ice cream, tacos, clothes shops, sandwiches, etc...

Westside residents shared dreams of a future place that fosters long-term multi-generational use and celebrates the diverse and dynamic cultures represented on the Westside. Community members expressed special concern for small business support and services to connect residents (especially youth) to economic opportunity. Likewise, through both art and business offerings, residents want to see their culture represented on the Emerald Ribbon. While developing a cohesive and continuous trail experience is paramount, emphasizing and celebrating the cultural diversity of adjacent neighborhoods should happen in parallel.



Strategy 1:

Partner with local organizations and small businesses to increase programming and build community representation and ownership of the Jordan River.

Actions:

- + Create formal agreements with local organizations to regularly program flexible event spaces and/or outdoor classrooms to ensure ongoing activity at such spaces.
- + Audit existing Public Lands' vendor agreements and identify ways to better support small businesses in pursuing opportunities with Public Lands.
- + Explore what internal resources are needed to build out a bigger vendor program beyond the few vending agreements in place today for services like kayak rental, bike rental, and food and drink on the corridor.

Strategy 2:

Create gateways onto the trail on the border into a new neighborhood (ie. Glendale, Poplar Grove, Fairpark, Rose Park) to let people know when they're entering those neighborhoods.

Actions:

- + In conjunction with an artist-led interpretive system to highlight the area's history and present day culture, create highly visible signage to mark the entrance to a new neighborhood on the corridor.
- + Create visible gateways at entrances from major roadways to improve visibility to drivers and cyclists.



LaGuardia Community Greenway

The LaGuardia Community Greenway is a transformative urban project spanning several miles designed to enhance pedestrian-friendly connectivity. Residents celebrate the borough's diverse culture using the greenway's vibrant outdoor social spaces.

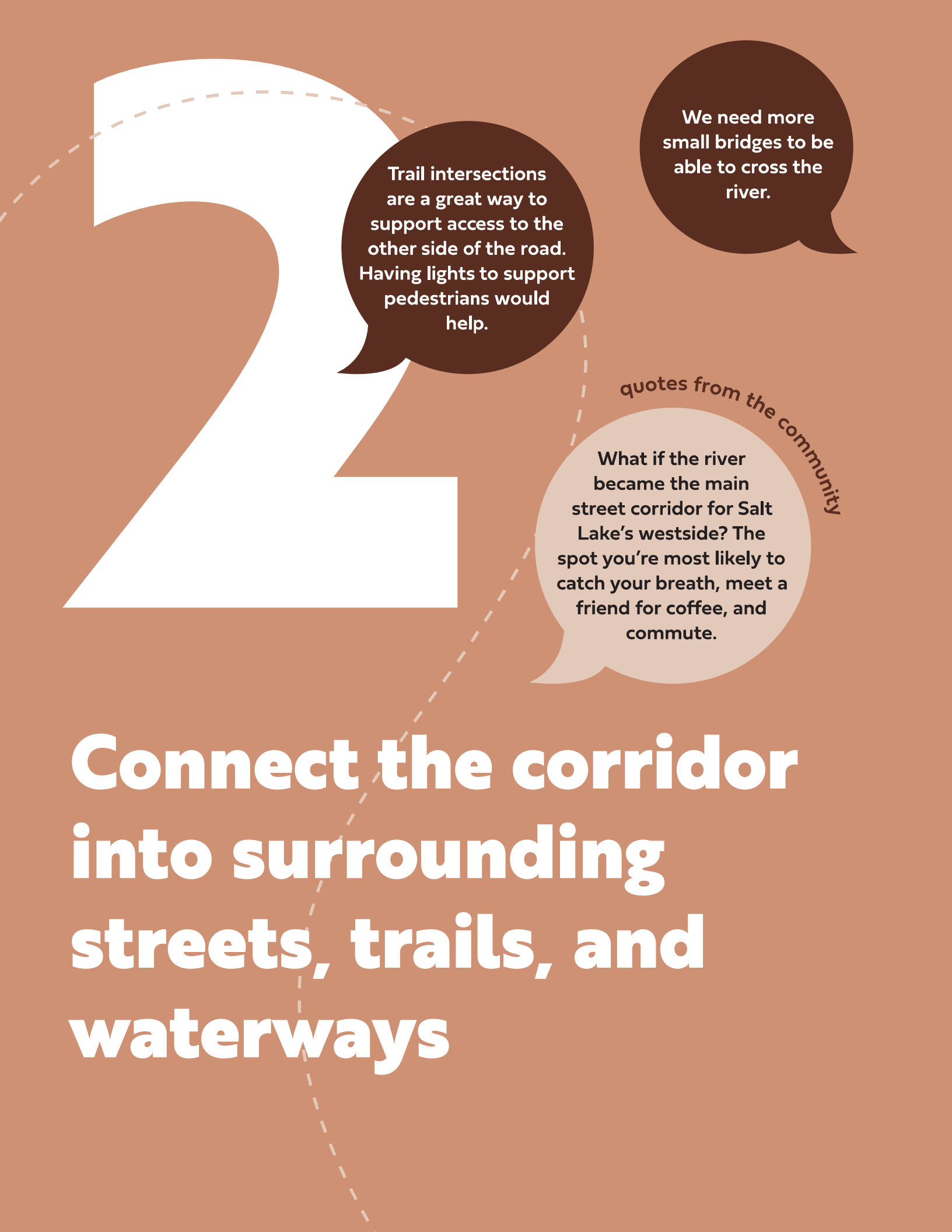
Queens, NY

nature

culture

connectivity

care



We need more small bridges to be able to cross the river.

Trail intersections are a great way to support access to the other side of the road. Having lights to support pedestrians would help.

quotes from the community

What if the river became the main street corridor for Salt Lake's westside? The spot you're most likely to catch your breath, meet a friend for coffee, and commute.

**Connect the corridor
into surrounding
streets, trails, and
waterways**

Goals

1	Create safer and more visible intersections	56
2	Improve neighborhood connectivity to parks and the trail	58
3	Expand trail widths and separate riding and pedestrian paths where possible to reduce conflict	60
4	Improve wayfinding and signage and resolve confusing trail connections	62
5	Improve water access points and connectivity to the river	64



Goal #1

Create safer and more visible intersections

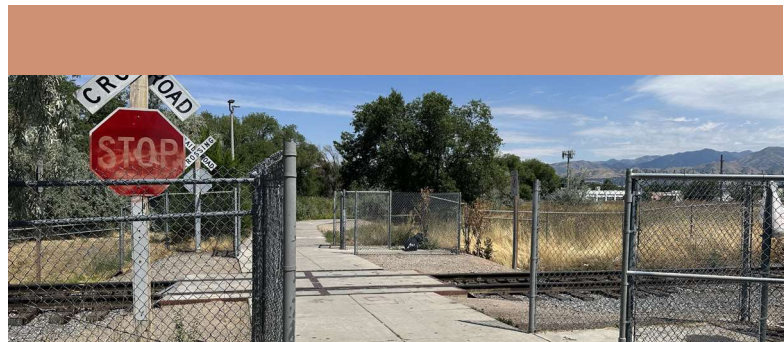
what you shared

Painted crossings!
Or gateways
would be great to
develop community
ownership.

**Need better
traffic calming
at crossing: raised
crosswalks, curb,
flashing lights that
are maintained.**

**Make sure
intersections
are safe by
implementing car
slow down**

Along its 10-mile run through Salt Lake City, the Jordan River intersects the street grid of the City dozens of times. At each intersection, the Jordan River Trail must contend with many different kinds of crossing and streets - from quieter stretches in residential areas to large arteries at neighborhood edges. Only a few of these intersections are grade-separated by either a tunnel (underpass) or a bridge (overpass). The great majority are at grade. This goal emphasizes the need for consistent, safe crossings that are legible to both those on the trail and those traveling on the street grid.



Strategy 1:

Provide safe crossings.

Actions:

- + Clearly identify all at-grade crossings and highlight the desired and safest path of travel using colored concrete, painting, paving, and/or signage.
- + Explore potential for underpasses or overpasses at high-volume and/or high-speed intersections including at North Temple St.
- + Provide signalized crossings at trail intersections with busy streets. Implement pedestrian-activated flashing beacons at minor streets.
- + Explore potential for expanding and enhancing waiting areas or pedestrian refuges at busy streets (with shade, signage and amenities).

Strategy 2:

Provide a clear, recognizable, and continuous trail experience.

Actions:

- + Develop a unifying palette of materials: paving, lighting, site amenities, and signage, to ensure a unified and clear system at all crossings.
- + Create prominent and legible signage to identify and reinforce crossings and alert drivers to trail users at any crossing.



Denver High Line Canal

This 71-mile trail is a popular recreational path for walkers, joggers, and cyclists and features approximately 26 underpasses that allow the trail to seamlessly cross various streets, enhancing its accessibility and continuity while providing a safe passage for trail users.

Denver, CO

nature

culture

connectivity

Goal #2

Improve neighborhood connectivity to parks and the trail

Opening and connecting homes in a safe way to the river.

Access to the river, connectivity and safe transitions from areas are all important.

Providing a connection with the river for people to be more connected to it

The Emerald Ribbon has the potential to be a highly connected corridor; today it faces challenges stemming from historic transportation injustices on the Westside and the piecemeal development and maintenance of the trail. The Jordan River Trail is unique in that it serves as a critical connective tissue within and between Westside neighborhoods in addition to its role as a commuting and recreation corridor. Short travel journeys matter just as much as longer ones.

Throughout the Jordan River corridor, there are many different points of connection between adjacent neighborhoods, trails, and open space resources. Sometimes these connections are clear and welcoming, with signage and amenities that signal the corridor as a place for all people. In many instances, however, the River is barely visible or made inaccessible by either design or lack thereof. This goal emphasizes the opportunities for a more consistently welcoming, accessible, and inclusive series of connections.

Strategy 1:

Complete the trail on both sides of the river (whether paved or soft surface).

Actions:

- + Where repeated foot traffic has already worn informal trails into the landscape, improve connection from those unpaved trails to the paved trail.
- + Establish a multi-year plan with the city's legal and real estate teams to reduce encroachments onto the river.

Strategy 2:

Conduct a study of possible street closures to enhance connectivity to parks and the trail.

Actions:

- + Complete a traffic analysis to determine whether there is potential to close low-traffic streets adjacent to the Emerald Ribbon. Potential opportunities include 300 S and Fremont Ave.

Strategy 3:

Increase local neighborhood cut throughs to the corridor.

Actions:

- + Conduct an assessment of frequency of street access to the Jordan River Trail and establish a baseline target for how often there should be a connection (potential baseline could be 0.25 miles, which takes an able-bodied person 5 minutes to walk).
- + Add new trail connections to streets and into neighborhoods to ensure no user has to walk/ride further than 5-10 minutes to get on or off the trail via ADA-accessible trail connections.
- + Priority projects include: Gold Place at Modesto Park, connection into Northwest Recreation Center and adjacent streets, Walnut Street near Og-Woi People's Garden, the northeastern corner of Cottonwood Park, connection into the Southern section of Riverside Park, and access to Redwood Road between 1000 N and 1900 N.



The Katy Trail

This trail, built on an old railroad right-of-way, links multiple neighborhoods and provides a recreational corridor that promotes walking, biking, and community interaction. Its success highlights the potential of rail trails to integrate various parts of a city.

Dallas, TX

connectivity

Goal #3

Expand trail widths and separate riding and pedestrian paths where possible to reduce conflict

Recommend widening the existing trail to 12' to better accomodate all trail users.

If you can make the trail wide enough, separate lanes for walking and biking would improve safety. Many of us have pets so a few access points for dogs would be nice.

Would love to see bridges wide enough for pedestrian + cyclist to pass each other.

Today, the trail is 10 feet wide at most points, two feet under the NACTO recommended width for a two-directional shared use trail. That means that pedestrians, cyclists, and other riders are exposed to potentially dangerous conflicts if multiple people are on the trail and passing at the same time. Expanding the trail width is critical if the city intends to increase usage. In line with other goals in the Action Plan, there is interest in creating nature paths along the trail as well as moving the trail further back from the river to make room for habitat restoration. In engagement activities, separating a 'fast lane' from slower, unpaved pedestrian routes that wind through nature experiences was very popular. This strategy is focused on improving the trail experience while meeting both needs.



Strategy 1:

Conduct inventory of existing trail system condition.

Actions:

- + Conduct a trail inventory and condition assessment to assess trail widths, materials used, and facility conditions.
- + Use the inventory to set priorities for replacement.

Strategy 2:

Replace existing trail over the next ten years to meet new standards.

Actions:

- + Develop new trail standards for the Emerald Ribbon in three types: shared use paths (where all modes share the trail), separated use paths (with different modes of travel have separated trails), and soft surface nature trails.
- + Complete path between Fisher Mansion and Cottonwood Park to new standards, including separated use paths and nature trails.

Strategy 3:

Develop new bridge standards and develop a plan for gradual replacement of the most narrow bridges.

Actions:

- + Conduct an evaluation of all existing bridges for safety and maintenance needs.
- + Gradually replace bridges with a new standard width for multi-use trails and replace wooden boards with a bike/scooter-friendly flooring material.
- + Evaluate visibility of bridges from the trail and remove vegetation. Add lighting where needed to enhance feeling of safety.



Chicago Lakefront Trail

This multi-use path along Lake Michigan connects diverse neighborhoods, offers recreational opportunities, and enhances connectivity within a city. The path network utilizes creative design strategies to separate bikes and pedestrian traffic.

Chicago, IL

connectivity

Goal #4

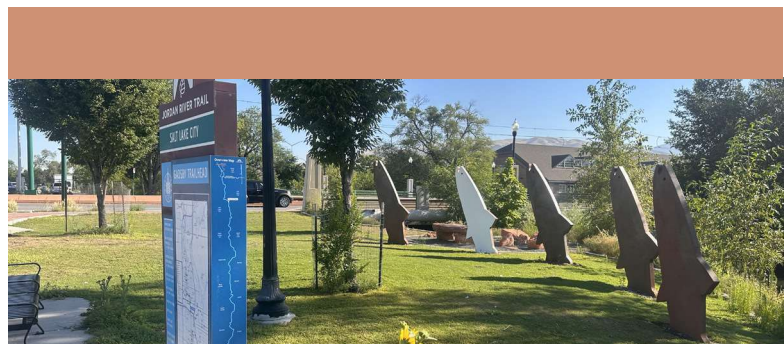
Improve wayfinding and signage and resolve confusing trail connections

A universal sign and different color code for each district!

Trail signage needs to be clear to users who to stay on the trail and which way. Large "TRAIL" arrows are needed.

Better signage so that walkers stay out of the bike lanes (and vice versa).

While the trail is consistently available along the 10-mile study area, the need to improve confusing decision points and develop clear and consistent wayfinding emerged as a priority across stakeholder and public engagement. Whether for short local trips by foot or longer journeys on wheels, the trail's existing signage, while informative, is inconsistent at indicating connections to other trails or roadways. There is an opportunity to better celebrate the corridor's role as a main artery and guide users to surrounding amenities. Since the trail crosses streets at over a dozen places along the Emerald Ribbon, each intersection poses a challenge to wayfinding: while some crossings have clear sightlines to the trail on the other side, some lose the trail and lack clear wayfinding to find it again.





Strategy 1:

Develop a comprehensive wayfinding strategy under the jurisdiction of the Department of Public Lands.

Actions:

- + Release an RFP for a complete wayfinding and environmental signage system that builds on the existing design.
- + Launch a new user-friendly map displaying the full Emerald Ribbon and its connections to other trails and waterways both in print and online.

Strategy 2:

Redesign and clearly mark missing segments in the Jordan River Trail.

Actions:

- + North Temple Street trail redesign (see Transformative Projects) - clarify land ownership on the parcel of land north of the N Temple intersection on the western side of the corridor. Acquire any land needed to complete the broken portion of the trail.

- + Redesign the trail segment north of 1700 S next to the pump station as a clearly painted and marked on-road bike route with wayfinding that indicates it is the JRT.

Strategy 3:

Improve connections to trails that meet the Jordan River Trail.

Actions:

- + Build new trail segment to connect the Folsom Trail to the JRT at Fisher Mansion, with a focus on restoring the riparian ecology and developing nature experiences.
- + Redesign the intersection of the JRT and the popular 9 Line Trail to reduce confusion, improve wayfinding, and maximize its potential as a key trail crossroads.
- + Facilitate better connectivity to the Surplus Canal Trail (which is managed by Salt Lake County); if the trail is redesigned as a formal bicycle trail, build a clear and well signed connection to the JRT.
- + Collaborate with West Valley City to ensure there is clear signage and wayfinding at the intersection of Parley's Trail and the JRT, and add signage to tell JRT trail users how to connect to Parley's Trail.



Sarasota Bay Park

Paths meander across a 10-acre park that sits at the edge of Sarasota Bay, connecting visitors with the site ecology. The trail uses wayfinding and signage to amplify species, such as the Mangrove Bayou Walkway.

Sarasota, FL

culture

connectivity

Goal #5

Improve water access points and connectivity to the river

I would love to have a river taxi to take you to businesses on the river.

I like seeing the river flow because it relaxes me - still a strong relationship, when we walk by it and see the flow run quickly, i teach my kids about the danger and power of water.

Kayaking and canoeing on the Jordan River today is commonly considered an activity only for the brave. There are accessible boat ramps in a few locations, but many have been poorly maintained and lack parking access that would make them truly usable to boaters. New trailheads have high quality boat ramps and should be expanded into a more complete system of water access that makes the water trail accessible to a broader audience. Access should also be prioritized for non-boaters through improved water visibility, fishing overlooks, and restored riverbanks that make walking down to the river's edge safe for all. During focus groups facilitated by University Neighborhood Partners, the Karen Community of the Westside, hailing from Myanmar and Thailand, shared that the Jordan River's northward flow makes it a holy river for their community. If the water was cleaner and water access safer, the community would engage in spiritual ceremonies along its edges.



Strategy 1:

Provide increased access points to the river.

Actions:

- + Create a system of water access points, with larger entrance and exit points (boat ramps with adjacent parking) at significant public park sites and minor access points (for boaters to rest or pause) at public nodes.
- + Develop a high quality standard for boat ramp design that utilizes best practices to ensure accessibility for a variety of recreational needs and abilities.
- + Create overlooks that allow for water views and fishing access.
- + Include public access points in all riverbank restoration projects, increasing options for people of all abilities to safely walk down to the water's edge.

Strategy 2:

Add signage on the water trail at each overpass or bridge.

Actions:

- + Incorporate signage facing the water trail to indicate to boaters which cross-street they are passing.
- + Add wayfinding signage for boaters to indicate upcoming boat ramps and water access and exit points.
- + Add wayfinding signage for boaters to indicate nearby points of interest, such as adjacent parks, Fisher Mansion, etc.



New York State Canal System

The New York State Canal Corporation and the Erie Canalway National Heritage Corridor offer competitive grants to enhance access and connections to the canal system, providing funding for recreational amenities, wayfinding signage, events, and more.

State of NY

nature

culture

connectivity

3

A healthy river in SLC requires great collaboration with everyone upstream.

what you shared

My dream is that every person in SLC understands and feels their personal connection to the Jordan River and its watershed.

Cultivate collective care of the corridor



Goals

1	Establish a public narrative around “Keeping it Wild”	68
2	Partner with the community to steward the corridor	70
3	Develop an effective long-term care model for the corridor	72
4	Keep the river clean by managing the sources of pollution	74



Goal #1

Establish a public narrative around 'Keeping it Wild'

My dream for the future of the Westside is local stewardship to maintain it clean and support its well-being.

Current facilities and landscapes are poorly maintained, esp. south of Jordan park, would want to be convinced of the parks depts intention to maintain.

what you shared

Across stakeholder and public engagement, there is a strong perception that public land along the Emerald Ribbon is under-maintained compared to park land elsewhere in Salt Lake City. The more robust Operations & Management Guidelines (O&M Guidelines) that accompanies this plan substantiates some of those concerns and found that many management teams are under-resourced and tend to be stretched across many acres of land city-wide, making it challenging to meet their goals. The O&M Guidelines puts forth a roadmap to address consistent management inequities on the corridor. In addition, with the goal to increase the percentage of lands managed as natural lands on the corridor (see Guiding Principle #4, Goal 3), it will be important to set standards for what the public will see when they visit natural areas. Natural lands and restoration areas can be seen as messy or unkempt, especially in early stages; setting expectations will allow city staff to manage the corridor in a proactive rather than reactive manner.



Strategy 1:

Streamline management areas within the Emerald Ribbon and support an increase in natural lands.

Actions:

- + Update management areas within the Emerald Ribbon (whether by reducing the number of land types or developing Emerald-Ribbon specific areas), allowing for more streamlined management protocols.
- + Develop clear and consistent management guidelines for natural lands.
- + Invest in professional training for Public Lands staff to support the growing focus on natural lands and restoration efforts on the Emerald Ribbon.

Strategy 2:

Clearly communicate difference between natural lands and park lands and their differing management standards.

Actions:

- + Include the designation of Natural vs. Park lands in public-facing maps and guides to the Emerald Ribbon (see Goal #3 Improve Wayfinding - Action 3.1.2).
- + Create new, user-friendly park signage at gateways to parks to differentiate between parks as compared to the corridor as a whole.

Strategy 3:

Integrate environmental education efforts into existing Public Lands processes.

Actions:

- + Develop restoration education materials and programming to occur alongside regular volunteer events.
- + Expand environmental education programs led by Park Rangers and develop corridor-wide programming focused on interpreting ecology and restoration efforts.
- + Collaborate with the school district to identify experiential and nature-based education partnerships to activate spaces as outdoor classrooms.

Strategy 4:

Create visitor-centric native restoration areas in the corridor with a focus on visually appealing species.

Actions:

- + Develop three to four priority restoration demonstration areas accessible via boardwalks or overlooks that protect species growth while allowing visitors to interact with the project.
- + Develop design standards for overlooks and/or boardwalks into natural restoration areas. Develop signage standards for restoration zones.
- + Develop fencing standards to thoughtfully protect restoration areas from human intervention while also making them appealing and visible to visitors.

Goal #2

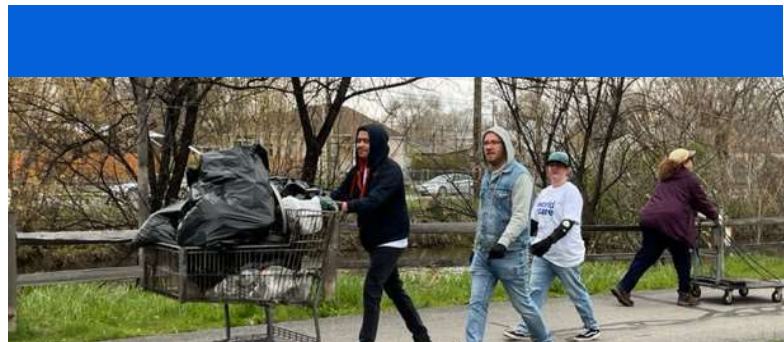
Partner with the community to steward the corridor

Let's clean out the trash everywhere! This could be a monthly volunteer clean up event.

I know I would like to volunteer time helping clean up the river and parks and learn more about the habitat and what I can do at home to help indigenous species.

More organized opportunities for the public to help clean the river. An "adopt a section of the river" program where individuals help maintain sections.

Partnerships with community organizations and neighbors will help care for the corridor as well bolster the sense of community on the Westside. While many of these partnerships do currently exist, organizing tasks for volunteers and landowners will create an efficient system to get work done. Public Lands' new Stewardship Program is an excellent start and should be further invested in to ensure that community members build a vested interest in the health of the Emerald Ribbon. The program's existing volunteer events centered around clean-ups and planting should be expanded on the Emerald Ribbon in coordination with restoration efforts. The program can also fold in consideration of adjacent landowners as a key population to engage and educate about the goals of this plan.



Strategy 1:

Create opportunities for ongoing stewardship within the corridor in partnership with local organizations.

Actions:

- + Work with organizations to create at least 30 volunteer events within the next 3 years (towards the goal of 10/year).
- + Use the O&M Guidelines to create task oriented projects for volunteer organizations to take on.
- + Develop a 1-year pilot partnership with 2-3 organizations who are well equipped to leverage volunteer efforts within a portion of the corridor. Evaluate pilots and consider expansion if effective.

Strategy 2:

Create guidelines and incentives for landowners in the study area to care for native landscapes.

Actions:

- + Create a pamphlet to distribute to landowners in the next year. The pamphlet should include information specifically about how to plant and manage native plants on private property, how to reduce impervious surfaces, and the role of green infrastructure.
- + Create incentives for landscape restoration/management. List existing incentives (i.e. turf trade).



Mass Audubon Salt Marsh Science Project

Mass Audubon engages students in grades 5 through 12 to learn about salt marshes and how to manage invasive species along the North Shore. Data collected from the project since 1996 helps scientists guide others on how to restore the marsh ecologies.

Newburyport, MA

nature

culture

care

Goal #3

Develop an effective long-term care model for the corridor

The concept seems most suited to gather community support to maintain it.

I have some concern about the three different maintenance groups being able to work together consistently.

Operating and managing the Emerald Ribbon is already a highly collaborative effort between the city, county, state, federal agencies, and private actors. There are many well organized community-based organizations who work near or around the corridor and are invested in its success, but these groups have little formal support from Public Lands to engage on the Emerald Ribbon and no venue in which to collaborate or exchange ideas. The Community Advisory Group and Dinner on the River events show the potential for these groups to overlap more frequently. It is rare today for successful urban river corridors to be managed and operated entirely by public entities. The most effective care and governance model for the Emerald Ribbon likely includes a new approach to public-private partnership.



Strategy 1:

Support the development of a private governance body to coordinate stakeholders and advocate for the success of the Emerald Ribbon.

Actions:

- + Evaluate the best model for public-private partnerships on the corridor and the potential for a conservancy or “Friends-of” groups.
- + Gather key players to plan the creation of a private entity that can bridge gaps in staff capacity, raise funding, and lead program development.
- + Consider developing a quarterly gathering of stakeholders to build ongoing momentum for work on the corridor and encourage collaboration.

Strategy 2:

Assess overlapping jurisdictions in the corridor related to care and management. Organize a cross-departmental group to evaluate and streamline ownership between departments.

Actions:

- + Audit management practices at Public Lands that are duplicated by the activities of other public-sector and private-sector partners, like tree removal from the waterway.
- + Identify which duplicated management practices Public Lands wants to take clearer ownership of or more formally offload, especially in conjunction with increased investment in volunteer and nonprofit support.
- + Organize an inter-agency group of city, county, and state stakeholders to develop a streamlined management approach in conjunction with the recommendations in this plan.



Franklin Park Coalition

The Franklin Park Coalition focuses on revitalizing the 527-acre park's natural features with maintenance largely carried out by local volunteers and community members. The Coalition engages residents in both stewardship practices and community events.

Boston, MA

nature

culture

care

Goal #4

Manage the sources of water pollution

I think water quality will be critical to make water access work here.

I hope that the bulk of any improvements in all areas starts with clean water and increased flow.

The water quality within the Emerald Ribbon is poor due to a number of intersecting factors: significant improvements can be made by addressing point source and non point source pollution. This plan recognizes that many conditions within the Emerald Ribbon stem from factors outside the study area. Collaboration with Salt Lake City Public Utilities is crucial to addressing water quality issues. Studies have identified dissolved oxygen and E. coli levels out of compliance with state and federal regulations within the Jordan River in Salt Lake City. By working with Public Utilities more closely, Public Lands can advance the goal of a swimmable Jordan River by advocating for green water infrastructure, pet waste reduction programs, and innovative practices that benefit Salt Lake City, the county, and the state.



Strategy 1:

Support Public Utilities use of SLC right-of-way draining to the Emerald Ribbon for green infrastructure.

Actions:

- + Further analyze water quality problem areas to determine how best to treat water before it reaches the Jordan River utilizing green infrastructure best practices.
- + Implement green stormwater infrastructure practices in all right-of-way when water can affect water quality in the Jordan River. Prioritize areas with substantial stormwater outflows, water quality issues, and ample right of way for green stormwater infrastructure.
- + Utilize existing precedents such as 900 S and/or others to create replicable green stormwater infrastructure improvements that can be duplicated throughout the areas draining to the Jordan River.

Strategy 2:

Support Public Utilities in evaluating waste systems in the corridor and along tributaries affecting the Jordan River.

Actions:

- + As part of the Total Maximum Daily Load (TMDL) study currently underway, advocate for the evaluation of septic systems in the corridor and along tributaries for potential impacts to water quality.
- + Where appropriate, advocated for modernization of wastewater systems in the corridor and along tributaries that are impacting or could impact water quality.

Strategy 3:

Highlight and enforce waste reduction programs for pets in the corridor and along tributaries.

Actions:

- + Install additional waste stations in the corridor and along tributaries.
- + Create a public information campaign to highlight the need to keep pets on leash adjacent to water bodies to reduce erosion and contain wastes unless in off-leash areas.
- + Create buffers between off leash areas and waterways to reduce the chances of waste and erosion impacting the Jordan River and its tributaries (i.e. Cottonwood Park Dog Park).



Anacostia Waterfront Initiative

The Anacostia Waterfront Initiative focuses on enhancing water quality and restoring ecosystems through monitoring, community involvement, and sediment cleanup efforts, addressing historical contamination to promote biodiversity and improve environmental health in the region.

Washington, D.C.

nature

culture

care



Restore as much natural area as possible, and try to acquire and purchase land that is not currently being used before it can be developed.

I dream of clean water for the fish and fishing.

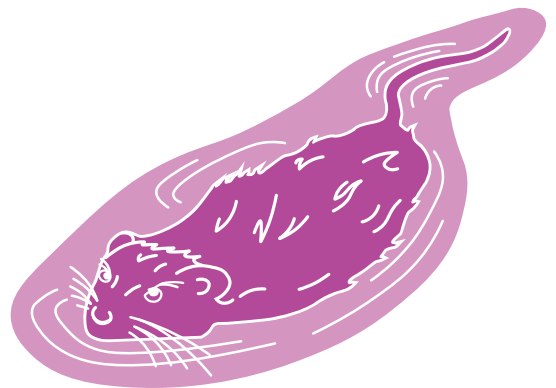
quotes from the community

Heal the river and its function to then build recreation and connection around that.

**Restore and
enhance the river
ecosystem as a
peaceful refuge**

Goals

1	Make room for the river	78
2	Expand restored natural lands	80
3	Introduce more visitors to natural areas and the river by connecting and expanding the Jordan River Parkway Trail system	82
4	Leverage policy to protect and enhance the river	84



Goal #1

Make room for the river

what you
shared

I love the wide river banks that would help support a healthier habitat for birds & animals.

Wider banks would encourage erosion control, better wildlife habitat & safety buffer for those using path.

Love extending and restoring banks more restoration overall - the river already is home to wildlife but we should make expanded banks.

The Jordan River's banks and floodplains are constrained due to fill, levees, and other flood control structures that are used to protect the adjacent neighborhoods. While these adjacent land uses must be protected, there is room in the river corridor to pull back levees and grade down fill, creating more room for floodwater and natural river dynamics. The water quality within the Emerald Ribbon is poor because of alterations to hydrology as well as point source and non point source pollution. Solutions for improved water quality include getting more water into the system, incorporating green infrastructure (especially at outfalls), and adding complexity to the river channel. These solutions will help dilute urban runoff, filter urban stormwater, and maintain flows and ecosystems during dry seasons.

Strategy 1:

Move the levee away from the river.

Actions:

- + Conduct a feasibility study with FEMA and Salt Lake County to move and improve the levee on the north end of the corridor away from the banks in order to protect more homes from flood risk while giving the river room to flow.

Strategy 2:

Use grading changes to expand floodplain volume, thereby reducing flood threats, creating more room for flow, and expanding the opportunities for riparian and wetland habitat restoration.

Actions:

- + Create overflow channel at 2100S oxbow and restore wetlands and riparian areas.
- + At 900 South River Park grade edge of channel lower to create wetlands and riparian areas.
- + Use the recommended plant communities data and priorities identified by the Operations and Management Guidelines to identify additional areas for wetland and riparian restoration that benefit from grading changes and expansion of the floodplain.

Strategy 3:

Increase water flow into the corridor.

Actions:

- + Work with Salt Lake County and the state to increase flow in the main channel of the river, which is currently being diverted to the Surplus Canal due to a lack of overall management. Negotiate flow to ensure that any excess water - after water rights and flood control requirements are met, enters the Jordan River.
- + Work with the Salt Lake County and the County to modernize the diversion system at 2100 S such that the system can work remotely and be tied into flows at City Creek and Three Creeks to allow for greater flows while reducing flood risk.
- + Create a multi governmental task force to update practices and policies associated with water divergence at 2100 S.

Strategy 4:

Restore natural channel geometry to the River.

Actions:

- + Work with the State and Salt Lake County to evaluate stream channel geometry. Identify opportunities to rebuild a pool/riffle system at parts of the river that better carry sediment loads during low flow periods to create more diverse riparian habitat and a more natural river system.
- + Implement at least two natural channel design projects in the corridor in the next three years with the state and county. (priorities include 2100 S Oxbow, Peace Labyrinth, and Rose Park).



Goal #2

Expand restored natural lands

I'd love to see expanded and restored banks with buffer zones.

Please expand the radius of protected land and, if possible, help some of the bordering industrial businesses to relocate.

My priorities for the river are to preserve, expand, and improve existing natural areas along the river.

Expanding and restoring natural lands meets the community goals and Salt Lake City's goals to increase nature in the corridor and enhance human/nature experiences. More natural lands will bolster ecosystem services, provide important habitat for wildlife, and create comfortable and peaceful places for visitors. While expanding natural lands will be time and labor intensive up front, management of these areas over the long term will take less of the city's resources than traditional park spaces.

Strategy 1:

Increase natural lands from 14% to at least 30% of the corridor by 2035.

Actions:

- + Change the management of underutilized turf areas to natural areas within the next 3 years.
- + Implement Adaptive Management Practices to facilitate transition to natural area management.
- + Implement the priority restoration areas identified in the Operations and Management Guidelines within the next five years.

Strategy 2:

Increase staffing along the corridor to facilitate transition in management.

Actions:

- + Conduct specialty training for Parks Division staff in landscape restoration techniques appropriate for the corridor.
- + Increase specially trained Parks staff and Natural Resource Technicians.



The Wild Mile

The Wild Mile is an ambitious urban renewal project that transforms a stretch of the Chicago River into a vibrant, green space dedicated to ecology and recreation. The park features floating gardens, wetlands, and elevated walkways.

Chicago, IL

nature

culture

connectivity

care

Goal #3

Introduce more visitors to natural areas and the river by connecting and expanding the Jordan River trail system

Don't do all this work/spend all this money just to hand it over to developers.

Ensure the trail is protected FROM development. Not WITH development.

Opening and connecting homes in a safe way to the river.

Salt Lake City is the only city in Salt Lake County with an official riparian ordinance. The Riparian Corridor Overlay District designates a 100-foot buffer from the Annual High Water Line (AHWL) and mandates no development requiring heavy equipment within 25 feet from the AHWL. Projects such as paths, stairs, or open patios are allowed with a permit. Between 25-50 feet from the AHWL, lighter construction is allowed as-of-right, but no new large structures are permitted. 50-100 feet from the AHWL, all development permitted by zoning is allowed, excluding leach fields, stormwater retention ponds, and commercial parking lots. While the ordinance is effective at creating a buffer for development, the existing ordinance does not include consideration of the trail, putting it at risk with new development. Especially as the Fairpark and Power District areas look towards major development activity, protecting and expanding the trail and ecological health of the river will be critical.

Strategy 1:

Expand the existing riparian protection ordinance to include consideration of the Jordan River trail.

Actions:

- + Increase development buffer widths where possible as recommended by the 2022 Jordan River Blueprint Refresh. Support the preservation and enhancement of buffers through voluntary review by the Jordan River Commission Technical Advisory Committee or staff.
- + Update the Salt Lake City Riparian Overlay District to include the requirement for any large development projects within the Overlay District to either develop new segments of the Jordan River Trail or protect and maintain the existing trail.

Strategy 2:

Enhance regional and local collaboration with riverfront landowners and trail stewards.

Actions:

- + Invest in neighborhood connector paths between the river trail, residential neighborhoods, and key community destinations.
- + Consider right-of-way easements that create density credits for development projects along the river.
- + Collaborate with the Jordan River Commission and Salt Lake County to create safe connections between the Jordan River trail network and surrounding communities.



River-to-Ridge Trail

The Open Space Institute protected 360 acres of land stretching from the Walkill River to the foothills of the Shawangunk Ridge from further development in flood-prone land. In 2020, volunteers planted 100-foot vegetated buffers along the river full of native species.

New Paltz, NY

nature

culture

care

Goal #4

Leverage policy to protect and enhance the river's ecological health

The river itself needs improvement through control of stormwater!

Protect and restore the riparian zone while also providing clear access points to get down to the water.

Protecting and restoring the riparian zone while also providing clear access points to get down to the water, so people can access it without trailblazing across the protected areas.

Salt Lake City can enhance the Jordan River and surrounding developments by adopting "environmental superiority" standards for development practices along the corridor. Advanced stormwater management systems, riparian buffers, and green infrastructure will protect water quality and support wildlife habitats. Preserving open spaces for parks and natural areas will foster community cohesion and ecological health. These goals can be achieved through policy and codes that ensure forthcoming development enhances and protects the river corridor. These measures will improve residents' quality of life and make the Jordan River corridor a vibrant, sustainable, and cherished part of the city.



Strategy 1:

Require the development within the corridor meet high standards of environmental superiority.

Actions:

- + Work with the Salt Lake City Planning Department to develop an Environmental Superiority Policy that incentivizes meeting higher standards of environmental protection and human/nature connection for projects within the Riparian Corridor Overlay District, including requirements for stormwater management, impervious surface minimization, air quality, tree canopy, public access to the corridor, inclusion of public facilities along the riverfront, and native landscaping requirements.
- + Support and/or require LEED and SITES Certification or equivalent for construction and landscape.

Strategy 2:

Develop eco-landscape requirements for new development projects.

Actions:

- + Ensure at least 50% of the river's edge on any project is maintained in native plants with at least a 50' setback.

- + Support and/or require landscapes in the corridor to utilize native plants.
- + Support and/or require landscapes in the corridor to evaluate and enhance soil fertility where needed.
- + Support and/or require the use of green infrastructure to enhance water quality within the corridor.

Strategy 3:

Enforce and expand development limitations in riparian buffer zone in high sensitivity areas.

Actions:

- + Evaluate violations on Riparian Corridor Overlay District requirements, prioritizing areas of high environmental sensitivity such as wetlands and restoration areas.
- + Enforce Overlay District regulations, with a focus on land uses that at higher risk to pollute.



Massachusetts Wetlands Protection Act, 2014

The Massachusetts Wetland Protection Act safeguards wetlands critical for flood control and habitat. It mandates permits for any construction within 200 feet of a protected wetland, ensuring careful management of potential impacts and ecological preservation.

State of MA

nature

care

5

quotes from the community

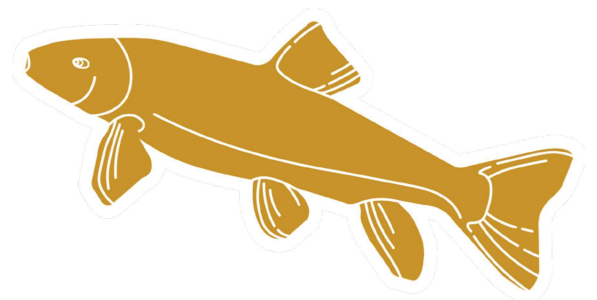
I would love to see it as a main artery for walking + biking. Street market + festivals with food trucks. The place to be.

Help small local businesses to sell on the river. Have support on the river to assist people get their business permits.

Activate the corridor to create a safe and vibrant destination

Goals

1	Bring programming to the water and water's edge	88
2	Support small businesses and commercial activation	90
3	Develop multi-pronged approach to public safety on the corridor to address short-term and long-term goals	92
4	Improve trail side amenities	94
5	Create flexible event and gathering spaces	96



Goal #1

Bring programming to the water and water's edge

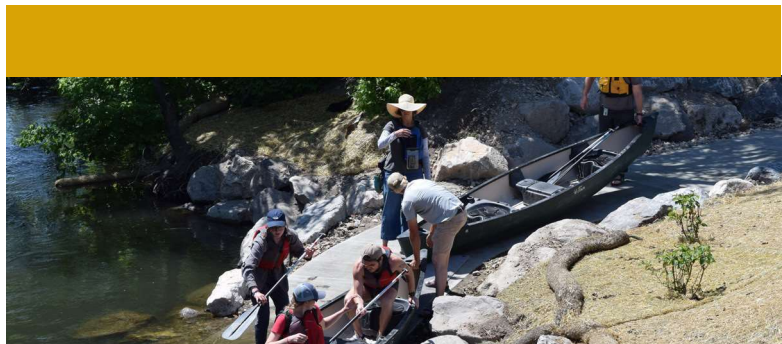
what you shared

I love the idea of community murals and kayak rentals on the river!

Boat rentals is a great idea. Dynamic interaction with the water. A destination for families/festivals.

A kayak launch sounds fantastic. I'd love to be able to walk to a place I can paddle.

The Jordan River corridor is a unique opportunity for immersion in nature in the City and a continuous ribbon of greenway. Yet, the river itself is often just a glimmer of reflection through the trees; a visual asset just out of reach. There are only a handful of places, for instance, where users are welcomed to engage the river itself. This goal emphasizes the potential of intentional design to create more access to the river's edge and the water itself through increased access points, more diverse ways to access the river, and more programming and uses that capitalize on the presence of water.



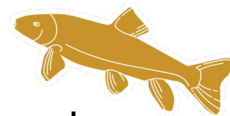
Strategy 1:

Diversify the activation and programming of the river.

Actions:

- + Create opportunities for temporary and permanent art installations that engage the river and its surrounding natural and cultural diversity.
- + Increase the use of the river for fitness and community-related uses like boat races, community rides, and floats.
- + Pursue programming partners for water recreation, including a paddle or kayak share program.

Strategy 2:



Make lively destinations at the river's edge that improve symbolic, physical, and visual access to the river.

Actions:

- + Work with SLC Community and Neighborhoods (CAN) department and local community-based organizations to identify the process and partners needed to create a true public access node at the Fisher Mansion.
- + Implement the focus area designs to create an equitable distribution of community spaces.



Hubbard Park

The new kayak launch at Hubbard Park provides the Village of Shorewood with a new access point to the Milwaukee River. This addition to the park expanded recreational amenities, and allows visitors to experience the park from a unique vantage point.

Shorewood, WI

nature

culture

connectivity

Goal #2

Support small businesses and commercial activation

I'd love to see trail-side small business development at key nodes.

Create a program for a small business trail or river-oriented path along the trail. The trail lacks destinations like ice cream, tacos, clothing shops, sandwiches, beer, and small art.

Creation of a community feeling for the neighborhoods. Add more space for small/local businesses.

Throughout the planning process, community members expressed the desire for more connection to the vibrant and vital communities of West Salt Lake City. One particular opportunity that frequently emerged in dialogue was the potential for more small business and commercial activation to celebrate the unique and diverse cultures of the Westside. The growth of commercial and business opportunities near the corridor can also provide places for pause, rest, and refreshment to corridor users. This goal recommends physical, programmatic, and policy changes to encourage both the short and long-term potential for more small business and commercial activation along the corridor.

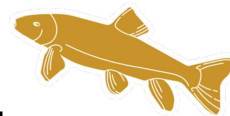
Strategy 1:

Understand and remove barriers to small business and commercial activation of the river.

Actions:

- + Host listening sessions with business owners and vendors to understand barriers to use of the river corridor.
- + Assess clarity of existing policies and practices related to vendors on the river corridor with an emphasis on identifying places to streamline.

Strategy 2:



Develop a framework to identify sites and opportunities for activation.

Actions:

- + Identify and outfit short-term and temporary activation sites with necessary infrastructure (power, lighting, appropriately-scaled and designed space).
- + Inventory long-term sites for small business and commercial activation including existing and potential places within a five-minute walk of parks along the corridor that are easily accessible to park visitors.



Pop-ups along the Bassin de la Villette

Eateries along the Bassin de la Villette in Paris activate the waterfront, creating a vibrant pulse for visitors. These temporary dining spots engage both locals and visitors at the water's edge, contributing to the city's dynamic social scene.

Paris, FR

culture

connectivity

Goal #3

Develop multi-pronged approach to public safety on the corridor to address short-term and long-term goals

Patrolling to make sure homeless camps stay off and away from the trail will help the community feel safer. Lighting also is important.

Police presence does not equal safety for all. There needs to be a solution outside of increasing police patrols.

Though this Action Plan may not have any budget to improve social service resources, it must advocate for better access and outreach by the surrounding cities collectively.

Many of the goals and strategies in this Action Plan are contingent on the ability for Salt Lake City Public Lands and its partners to address the increasing concerns over public safety on the corridor today. Many places on the corridor remain beloved and in high use by the community, but other places are increasingly avoided due to the presence of campsites or individuals suffering from substance abuse disorders. While this is a complex issue tied closely to a national crisis in housing, the impact on Public Lands and the Emerald Ribbon in particular is stark. The increasing concern over safety on the Jordan River Corridor in the last five years must be reversed for the Emerald Ribbon to succeed as a thriving ecological and cultural place in Salt Lake City.

Strategy 1:

Balance a services-first approach with increased police patrols.

Actions:

- + Support an increase in patrols in close coordination with the Salt Lake City Police Department and Homeless Engagement and Response Team (HEART) to address illegal activity, increase top-of-funnel coordination, and place more people into supportive programs.
- + Advocate for an increase in social services budget and programs city-wide to address the impact of housing insecurity on the city's parks.
- + Continue to build interagency collaboration and partnership through the Salt Lake Valley Coalition to End Homelessness and other similar bodies.

Strategy 2:

Shift amenities into higher visibility areas and activate street edges.

Actions:

- + In all park redesigns and new investments, focus amenities like playgrounds, pavilions, grilling areas, and shade structures along street edges and in higher visibility areas with clear sightlines

to surrounding neighborhoods.

- + Focus on the design and activation of street edges in public lands, including the improvement of gateways, park signage, and welcoming trail connections at high-visibility entrance points.

Strategy 3:

Improve methods to field complaints and concerns on the corridor.

Actions:

- + Explore the potential to implement an Emergency Call Box or mobile app alert system along the Emerald Ribbon Corridor in collaboration with the Salt Lake City Police Department.
- + Conduct an audit of the process of submitting a complaint to the city from the perspective of a resident and document the available resources, identifying where Public Lands is involved (or not) and how the Department can optimize their resources.
- + Identify whether an employee-safety evaluation is needed. Ensure that internal resources are available for maintenance staff and park rangers to document safety concerns and that mental health resources are available to staff.



Village Green Park Redesign & Crime Reduction

Challenges around crime, drugs, and underutilization festered due to poor park access from homes and the street. New amenities and community programs boosted park use by 25%. Collaboration between citizens, police, and nonprofits reduced crime by over 50%.

Macon, GA

culture

care

Goal #4

Improve trail amenities

More trail amenities - trash, benches.

I like the idea of providing more waste bins and benches for greater access.

Yes to trash bins + benches!!!

Great riverfronts and their often associated greenway trails include a wide range of things to do, places to rest, spaces to learn, and access to both natural and design experiences. While there are numerous wonderful experiences today along the Jordan River corridor, there is also a tremendous opportunity to expand offerings. This goal aims to make the trail experience more delightful and comfortable for people of all ages, backgrounds, and abilities who walk or ride on the trail. This includes increasing both the amount and quality of amenities, shade, and experience.

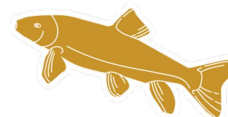
Strategy 1:

Add more higher quality amenities throughout the Emerald Ribbon.

Actions:

- + Choose new standard design for benches, trash cans, and water fountains that reflects the public's interest in the corridor as a nature-centric experience.
- + Increase frequency of trash receptacles along the corridor to every 200-300 feet along the trail.
- + Increase frequency of water fountains and water refill-stations so that at least one is available at every park (per new Park / Natural Lands designation) that is functional from May through September.

Strategy 2:



Increase shaded rest-spaces for trail users.

Actions:

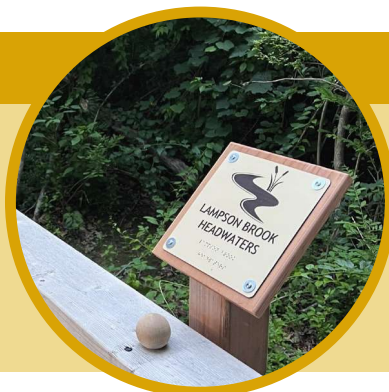
- + Identify high-visibility locations where trail users are likely to feel safe resting
- + Increase regular frequency of rest areas and create a new standard so that all rest areas include a bench, trash can, and map

Strategy 3:

Create a lighting standard for the corridor and fill any gaps in safe, nature-friendly lighting.

Actions:

- + Fill gaps in lighting to ensure safety throughout the corridor
- + Develop a new nature-friendly lighting standard and transition existing lighting to that standard over time



The Lake Wallace Sensory Trail

Designers created a sensory trail around Lake Wallace to make recreation accessible for all abilities. The community-led process resulted in features like wildlife observation points, interpretive signage in braille, and benches sourced from local trees.

Belchertown, MA

nature

culture

connectivity

care

Goal #5

Create flexible event and gathering spaces

Dedicated spaces for gathering or festival space.

It would be incredible to see the Jordan River incorporated into the daily lives of more Salt Lakers and to see people celebrating and enjoying each other in one of our most (at least with the potential to be) spectacular city amenities.

I love the creating places for gathering.

The 2019 Salt Lake City Parks & Public Lands Needs Assessment identified that only a few parks city-wide are equipped with essential event infrastructure like water and electricity, none of which are on the Westside. High demand for those spaces puts pressure on parks like Pioneer Park and Liberty Park that do have well-equipped event spaces and reinforces the idea that Westside residents need to travel East for high quality experiences. Event plazas are only as effective as their programming, and existing partnership and events staff may need additional capacity to support new spaces. For an investment in new flexible event spaces to be successful, local organizations must be consistently engaged to host events in those spaces and feedback loops must exist to ensure that the rental and programming process works well for everyone involved.



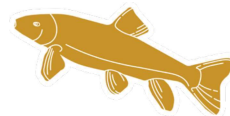
Strategy 1:

Dedicate some parks on the Emerald Ribbon as Special Event Parks and develop community-scale event infrastructure in those parks.

Actions:

- + Develop new public programming space at Rose Park adjacent to the existing Golf Course Clubhouse designed for performances and events that includes necessary light, sound, water, and electricity infrastructure.
- + Study where there is demand and the necessary transportation accessibility (ie. parking, maintenance, and food truck accessibility) for a new community event plaza at an existing Emerald Ribbon park. If sufficient need is identified, convert one existing park into a Special Events Park designation and build a new event plaza. Potential areas for consideration include Peace Labyrinth Open Space, Jordan Park, and Cottonwood Park.

Strategy 2:



Increase partnership management capacity at Public Lands with a focus on department-led programming.

Actions:

- + Partner with a Westside community-based organization(s) to organize year-round programming at any new special events facilities. Consider a contract agreement with a local organization to run programming for a dedicated space.



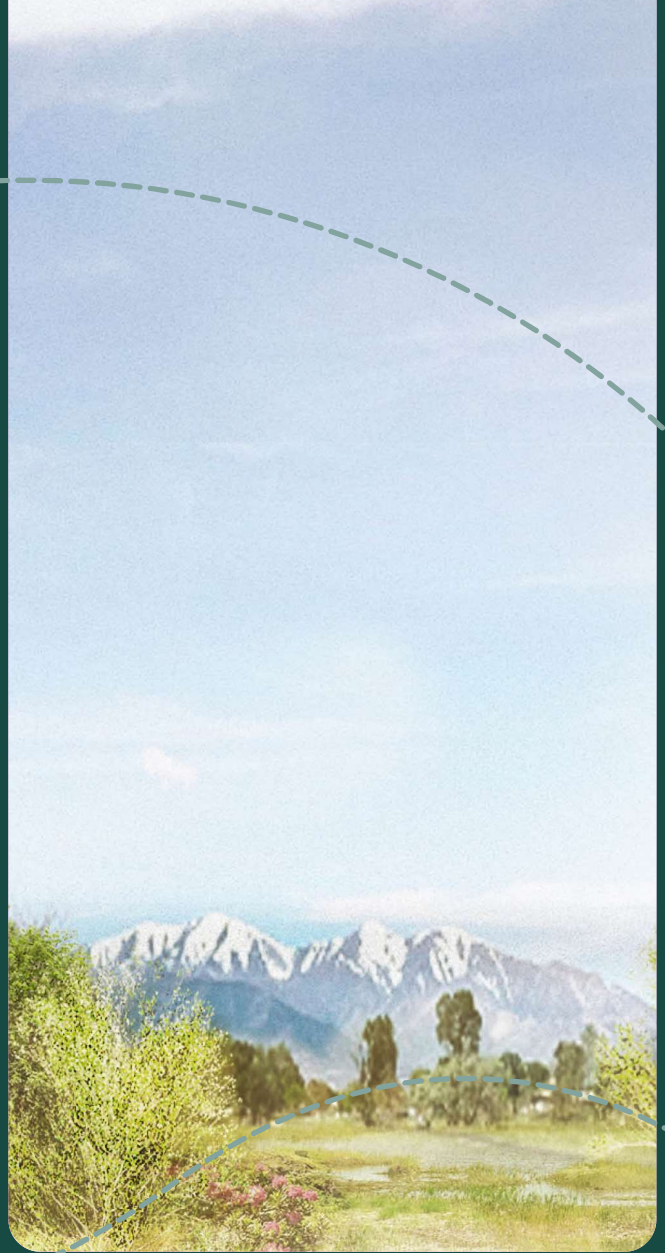
Beach Campus Detroit

Beach Campus transformed an underutilized space into a flexible, beach-like urban amenity. With movable seating, shade structures, and a large lawn, it encourages socialization and diverse outdoor activities with a focus flexibility and user comfort for a range of users.

Detroit, MI

culture

care





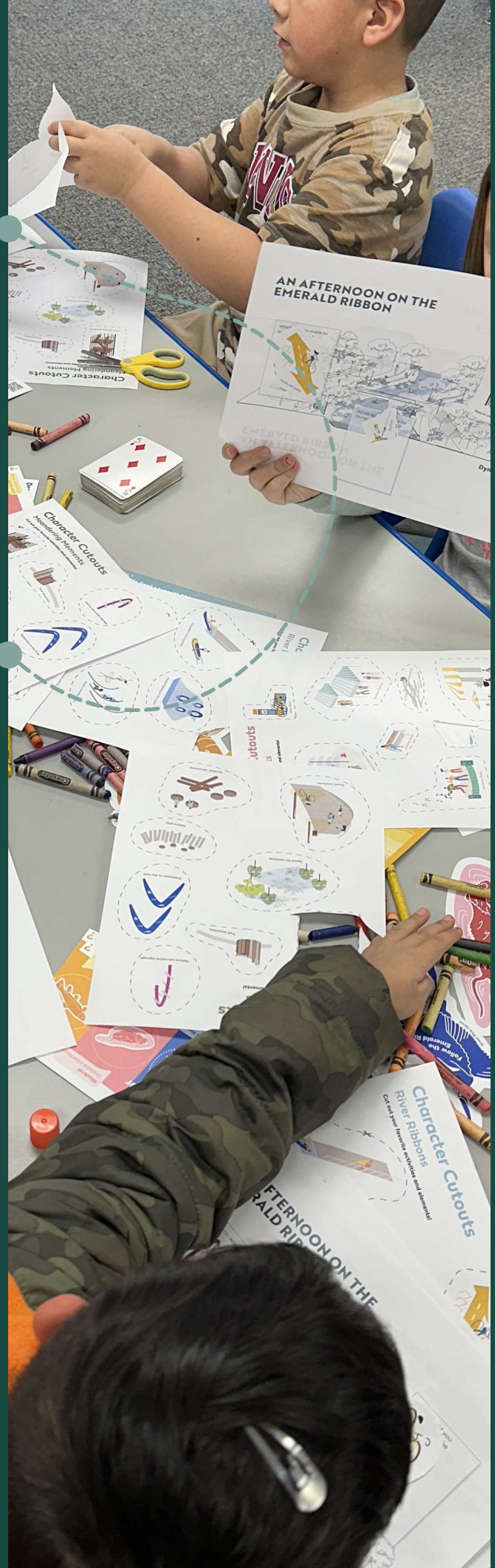
Bringing the Vision to Life



Chapter Contents

Planning for Long-Term Success	100
Prioritizing the Action Plan's Goals	108
Transformational Projects	114
Phase One and Bond Funding Priorities	158

How to Realize the Vision



2025

In year one, set the groundwork for future work, initiate deeper dive strategies, and begin planning to implement transformational projects, including restoration efforts.

Strategies: Subject of a Deeper Dive

Pg. 109

Pilot Programs

Pg 116

Start Phase One Bond Priorities

Pg. 158

Strategies: Ongoing Evolution

Pg. 112

2026–2027

In years 2-3, begin implementation of bond funding phase one priorities, continue gradual transformation to natural lands, and establish the ground work to increase programming and care in highly activated spaces.

Develop Framework for Care

Pg. 102

Implement Phase One Bond Priorities

Pg 158

Strategies: Short-Term Opportunities

Pg. 110

2028—2035

In years 4-10, complete bond priorities and move on to the remaining transformational projects. Pursue necessary but hard long-term strategies and evolve the new framework for care in a restored and activated corridor.

Goals & Strategies: Long-Term Change

Pg 109

Complete Transformational Projects

Pg. 112

Planning for Long-term Success

Salt Lake City and Public Lands have made significant capital investments in recent years along the corridor. Contemporary park design best practices encourage planners, designers, and city leaders to place equal emphasis on the ongoing financial picture to support the long-term success of corridor investments. The community feels the difference: feedback gathered through this planning process often centered on notions of care and perceptions of lack of care on the Emerald Ribbon today.

To ensure the Emerald Ribbon has the best chances for a long and successful trajectory, the current approach to programming, managing, and acquiring funding to support long-term park care must be expanded.

Caring for the Corridor

To the right, an aspirational care model outlines what levels of operational investment are needed to become consistent with community aspirations. Depending on the level of programming, a revived and restored Emerald Ribbon might require an annual operating budget of between \$7M to \$10M annually. While this represents a significant increase in current annual spending, funding does not need to come from public dollars alone; cities managing comparable river corridors rely on a combination of public funding, contributed dollars, captured value, and earned revenue, to cover the costs of long-term care and activation.

Components of a Culture of Long-term Care



Caring for the Corridor

Operating Costs

+



Investing in the Corridor

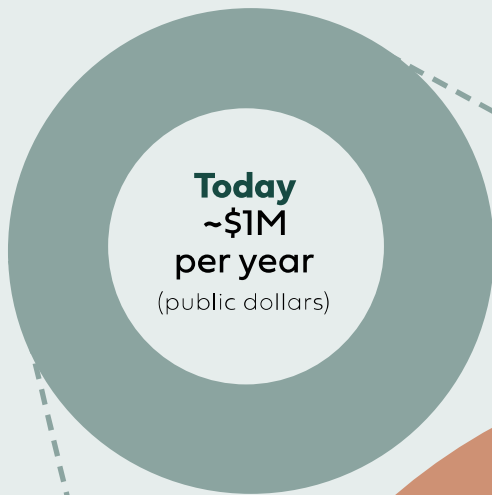
Capital Costs

+



Governing the Corridor

Governance



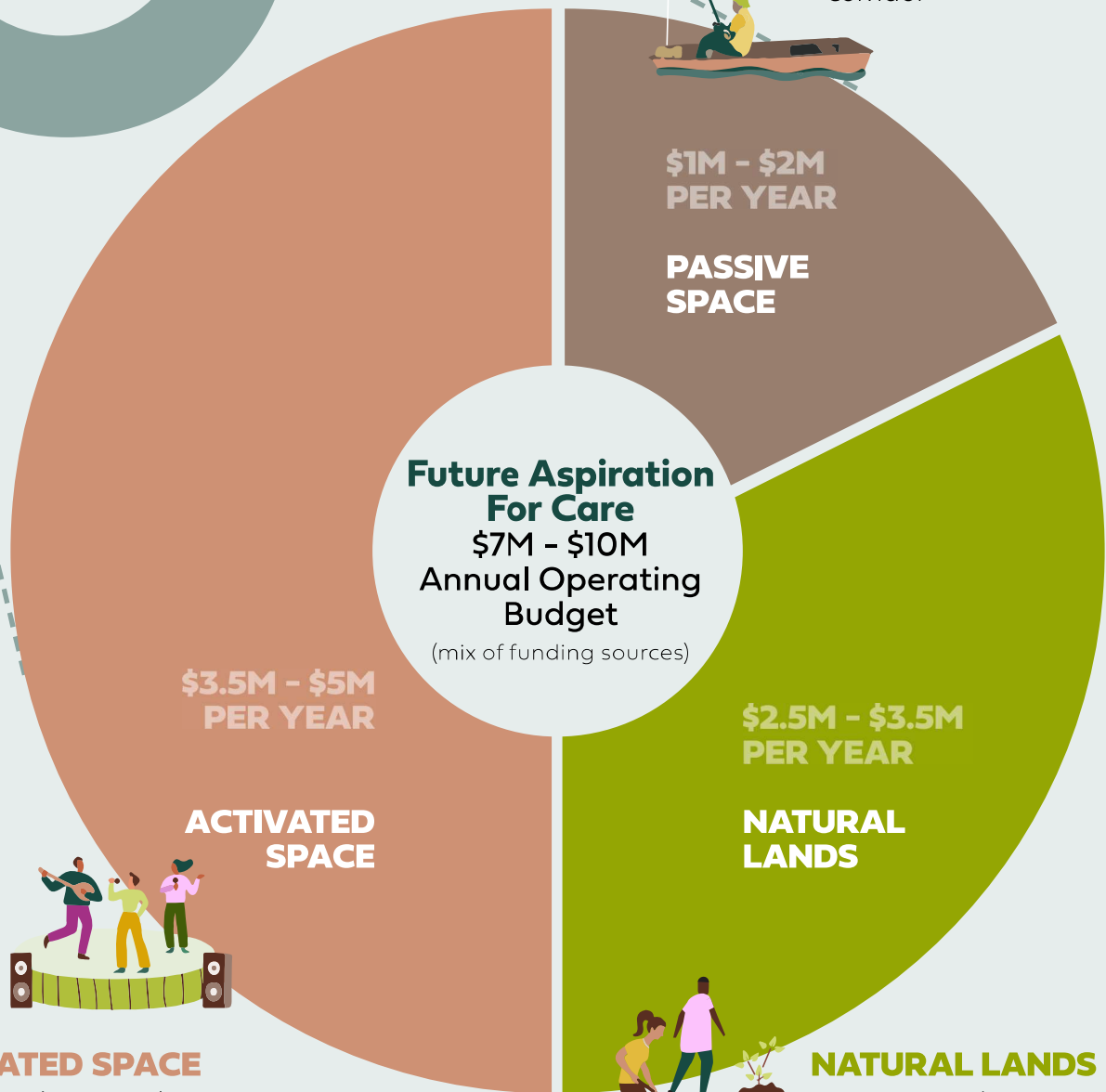
PASSIVE SPACES

are well-cared for areas along the corridor with limited activities, like narrower stretches of the trail.

\$20K-\$30K

per acre per year

assuming 55-60 acres of passive space along the corridor



ACTIVATED SPACE

are heavily used spaces that are intensively managed and programmed to create a great user experience.

\$50K-\$75K

per acre per year

assuming 60-70 acres of activated park space along the corridor

NATURAL LANDS

are managed as restored natural areas. Costs include monitoring and management tailored to native ecosystems.

\$8K-\$12K

per acre per year

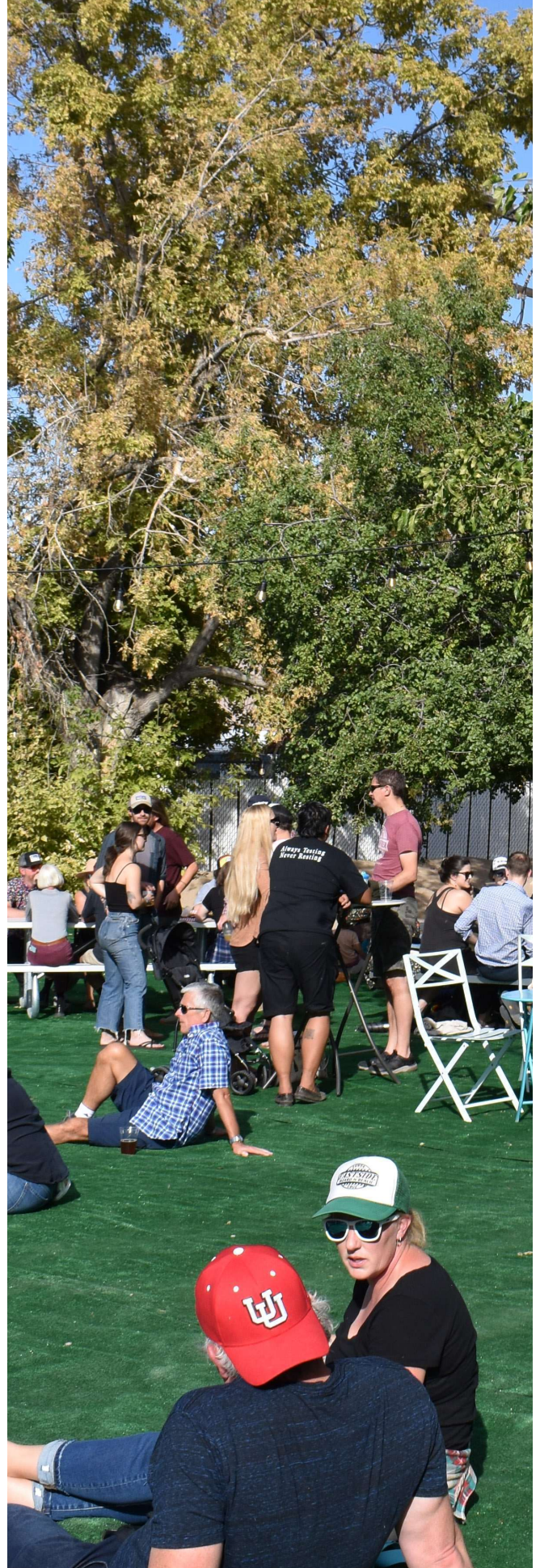
Increase from 130 acres today to over 270 acres in the future

Investing in the Corridor

In terms of capital costs, comparable parks around the country cost between \$2M to \$3.5M per acre – many of which leverage public, contributed, and earned income mechanisms. The immediate opportunity of \$9M of bond funding is a strong start, and many creative funding sources exist to support further investment. Additional funding sources are currently underutilized or unavailable to Public Lands but could be explored on a path to implementation.

This Action Plan includes both corridor-wide strategies and transformational projects to provide a multi-pronged approach to implementation. Both of these types of change need to be grounded in realistic budgets in order to be realized. To establish reasonable costs, a number of benchmarks were evaluated and inventoried. These helped to create broad conceptual costs per element below. **These costs include an additional 50% to cover soft costs, contingencies, and escalation.**

These conceptual costs are a handy tool in planning for change. In the following pages, these costs will be applied to the concept designs to help facilitate a realistic approach to near and long-term funding. They can also be used for prioritizing other actions.



Park Space

\$2,500,000 per Acre



Glendale Park, Salt Lake City

A number of similar, recently completed community parks with amenities and a level of finish similar to the concept design helped establish a conceptual cost of \$2,500,000 per acre. These included Glendale Park in Salt Lake City, River's Edge Park in Council Bluffs, Iowa, and New Park at 47th & Telluride in Denver, Colorado.

Ecological Restoration

\$150,000 per Acre



Clear Creek Restoration, Tacoma, Washington

Ecologically-oriented projects - including bank stabilization, wetland restoration, and habitat enhancements - can be accomplished for a conceptual cost of \$150,000 per acre. Benchmarks here included Tacoma's Clear Creek, Marsh Creation in New Orleans, and riparian restoration in Hamilton City, California.

Trails and Greenways

\$3,500,000 per Mile



Carolina Thread Trail, Charlotte, North Carolina

While trail and greenway costs can range dramatically, there are a number of comparable, urban greenway corridors like the Carolina Thread Trail in Charlotte, North Carolina, Path400 in Atlanta, Georgia, and the Marquette Greenway in Illinois. These point to a conceptual cost of \$3,500,000 per mile for greenway and trail construction. This includes the development of trail-side amenities, signage, and wayfinding.

Governing the Corridor

It is rare today to see successful urban river corridors improved, managed, and operated purely by public entities. Many different forms of public-private partnerships, conservancy models, and “Friends of” groups can help to bridge the gap in capacities, raise funding, and help to enliven the corridor with activation. The examples to the right showcase a few comparable corridors that can serve as models for the Emerald Ribbon. Each of these examples has a dedicated external organization (in some cases, more than one) to support the programming, fundraising, management and operations, or community outreach.





High Line Canal, Denver, CO

Ownership and Management: Denver Water
Capital Development, Fundraising, and Programming: High Line Canal Conservancy

In 2023, through the leadership of the High Line Canal (HLC) Conservancy, the Great Outdoors Colorado (GOCO) awarded a \$7 million dollar grant for improvements to 28 miles of the High Line Canal Trail in Denver. The HLC also facilitated the clean up of over 15,500 pounds of litter in 2023.



Buffalo Bayou, Houston, TX

Ownership: City of Houston and Harris County Flood Control District
Capital Development, Maintenance, Fundraising, and Programming: Buffalo Bayou Partnership (BBP)

In 2022, the BBP received a \$100 million gift from Kinder Foundation, which is leveraging another \$210 million of public and private investments to construct new bayou parks, trails, housing, cultural destinations, and infrastructure improvements into low income neighborhoods along the Bayou's east side.



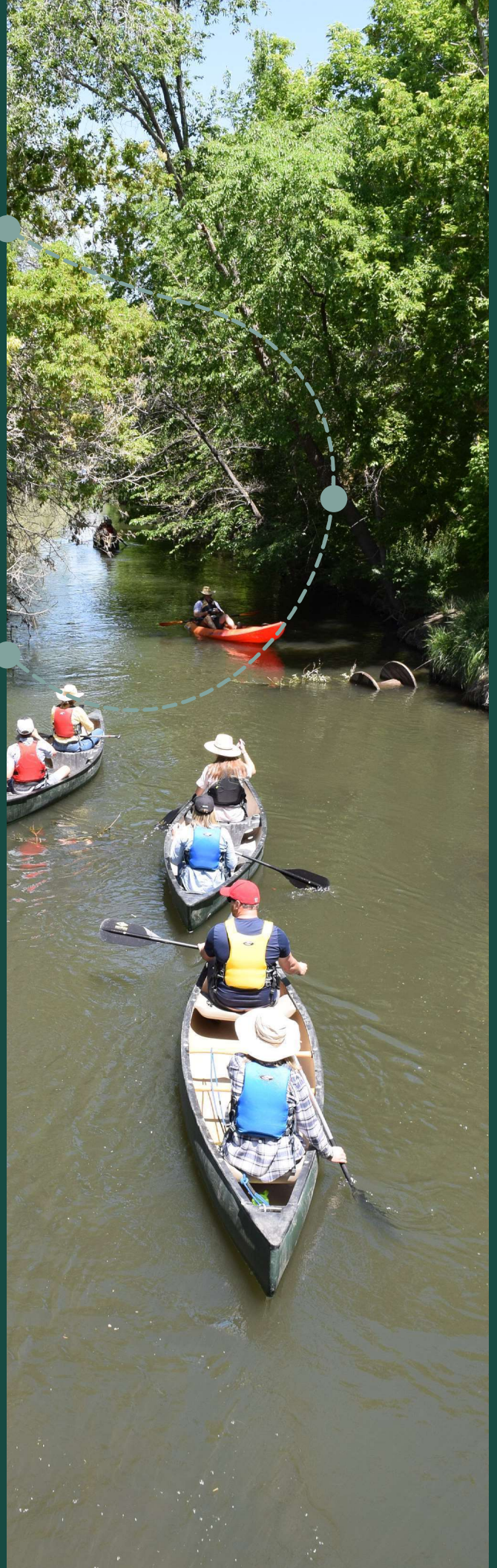
Joe Louis Greenway, Detroit, MI

Management, Maintenance, and Outreach: City of Detroit
Capital Development and Fundraising: Joe Louis Greenway Partnership (JLGP)

Beyond their role in funding and constructing the Greenway, JLGP is currently providing funding and technical assistance to support businesses that have been displaced by the Greenway and acquired land adjacent to the Greenway to expand food/beverage businesses and affordable housing.



Prioritizing the Action Plan's Goals



The goals, strategies, and actions in this plan provide guidance for transformation of the corridor to align with the community's vision. Here, the Action Plan outlines, based on technical considerations, the different potential implementation pathways and timelines. The Action Plan identifies a multi-pronged approach to implementation.

Cost	Organizational Complexity	Potential Project Duration	Community Impact
<div> <div></div> <div></div> <div></div> </div> <div>< \$250K</div>	<div> <div></div> <div></div> <div></div> </div> <div>Can be done independently or by a small team with limited process and permitting barriers.</div>	<div> <div></div> <div></div> <div></div> </div> <div>1-3 years</div>	<div> <div></div> <div></div> <div></div> </div> <div>Would benefit the smallest number of people or user groups</div>
<div> <div></div> <div></div> <div></div> </div> <div>\$250K - \$2M</div>	<div> <div></div> <div></div> <div></div> </div> <div>May require multiple agencies or face process and permitting barriers, but not both.</div>	<div> <div></div> <div></div> <div></div> </div> <div>3-5 years</div>	<div> <div></div> <div></div> <div></div> </div> <div>This would benefit multiple user groups.</div>
<div> <div></div> <div></div> <div></div> </div> <div>> \$2M</div>	<div> <div></div> <div></div> <div></div> </div> <div>Requires multiple agencies or jurisdictions, enabling work or permitting.</div>	<div> <div></div> <div></div> <div></div> </div> <div>5-10+ years</div>	<div> <div></div> <div></div> <div></div> </div> <div>This impact would be felt by the majority of the corridor's users.</div>

Subject of a Deeper Dive

While many of the strategies in the Action Plan are framed as tangible projects, the list below outlines initiatives that will require more time and planning to better define and realize. A deeper dive into these topics is the necessary next step to clarify the work ahead.

		Cost	Complexity	Project Duration	Community Impact
1.1.1	Create a comprehensive interpretation and signage plan for the corridor	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>
2.4.1	Develop a comprehensive wayfinding strategy under the jurisdiction of the Department of Public Lands	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>
3.2.2	Create guidelines and incentives for landowners in the study area to care for native landscapes	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>
5.3.3	Improve methods to field complaints and concerns on the corridor	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>

Short-Term Wins for Immediate Impact

The strategies listed below are achievable in the short-term, having limited complexity and cost. Framed as “quick wins”, these items can begin in the next year for visible community impact.

		Cost	Complexity	Phase Length	Community Impact
1.1.2	Promote citizen science with a focus on youth programming				
2.1.1	Provide safe crossings				
2.2.3	Increase local neighborhood cut-throughs to the corridor				
2.4.2	Redesign and clearly mark missing segments in the Jordan River Trail				
3.1.2	Clearly communicate difference between natural lands and park lands and their differing management standards				
4.3.2	Increase staffing along the corridor to facilitate transition in management				
4.3.1	Expand the existing riparian protection ordinance to include consideration of the Jordan River trail				
5.1.1	Diversify the activation and programming of the river				
5.2.2	Develop a framework to identify sites and opportunities for activation				
5.3.1	Balance a services-first approach with increased police patrols				
5.4.2	Increase shaded rest-spaces for trail users				
5.5.1	Dedicate some parks on the Emerald Ribbon as Special Event Parks and develop community-scale event infrastructure in those parks				
2.3.1	Conduct inventory of existing trail system condition				

Long-Term Changes

These strategies involve broad systemic change that will take the most time, collaboration, money, and effort to be realized. They are framed here as items that can be started now. They will most likely require collaboration and be realized over the long term.

























































		Cost	Complexity	Phase Length	Community Impact
1.2.1	Implement riparian, upland, and wetland restoration				
1.3.2	Develop community-led beautification programs				
2.3.3	Develop new bridge standards and develop a plan for gradual replacement of the most narrow bridges				
4.1.1	Move the levee away from the river				
4.4.1	Require the development within the corridor meet high standards of environmental superiority				
5.3.2	Shift amenities into higher visibility areas and activate street edges				
5.5.2	Increase partnership management capacity at Public Lands with a focus on department-led programming				
3.3.2	Assess overlapping jurisdictions in the corridor related to care and maintenance. Organize a cross-departmental group to evaluate and streamline ownership between departments				
3.4.3	Support Public Utilities in evaluating waste systems in the corridor and along tributaries affecting the Jordan River				
4.4.2	Develop eco-landscape requirements for new development projects				
4.4.3	Enforce and expand development limitations in riparian buffer zone in high sensitivity areas				
4.1.3	Increase water flow into the corridor				
4.2.1	Increase Natural Lands to 30% of the corridor by 2030				

Key Opportunities for Ongoing Evolution

More complex than a single capital improvement yet easier than systemic, large-scale transformation, the following strategies are important and requiring ongoing investments that involve some complexity and time to be realized.

		Cost	Complexity	Phase Length	Community Impact
3.1.4	Create visitor-centric native restoration areas in the corridor with a focus on visually appealing species				
1.2.2	Monitor progress against restoration goals				
1.3.1	Leverage local artists in advancing other goals in the Action Plan, including safer intersections, the design and programming of flexible event spaces, and nature interpretation experiences				
2.1.2	Provide a clear, recognizable, and continuous trail experience.				
2.2.1	Complete the trail on both sides of the river (whether paved or dirt)				
2.3.2	Replace existing trail over the next ten years to meet new standards				
3.1.1	Streamline management areas and support an increase in natural lands				
3.2.1	Create opportunities for ongoing stewardship within the corridor in partnership with local organizations.				
3.2.3	Support the development of a private governance body to coordinate stakeholders and advocate for the success of the Emerald Ribbon				
4.1.2	Use grading changes to expand floodplain volume, thereby reducing flood threats, creating more room for flow, and expanding the opportunities for riparian and wetland habitat restoration.				
4.1.4	Restore natural channel geometry to the river				
3.4.1	Support Public Utilities use of SLC right of way draining to the Emerald Ribbon for green infrastructure				

Key Opportunities for Ongoing Evolution

4.3.2	Enhance regional and local collaboration with riverfront landowners and trail stewards				
2.5.1	Provide increased access points to the river				
5.1.2	Make lively destinations at the river's edge that improve symbolic, physical, and visual access to the river.				
5.2.1	Understand and remove barriers to small business and commercial activation of the river				
5.4.1	Add more higher quality amenities throughout the Emerald Ribbon				
1.3.3	Create sustainable funding pipelines for ongoing art programming				
1.4.1	Partner with local organizations and small businesses to increase programming and build community representation and ownership of the Jordan River				
1.4.2	Create gateways onto the trail on the border into a new neighborhood (ie. Glendale, Poplar Grove, Fairpark, Rose Park) to let people know when they're entering those neighborhoods				
2.4.3	Improve connections to trails that meet the Jordan River Trail				
2.5.2	Add signage on the water trail at each overpass or bridge				
3.1.3	Integrate environmental education efforts into existing Public Lands processes				
3.4.3	Highlight and enforce waste reduction programs for pets in the corridor and along tributaries				
5.4.3	Create a lighting standard for the corridor and fill any gaps in safe, nature-friendly lighting				
2.2.2	Conduct a study of possible street closures to enhance connectivity to parks and the trail				



Rose Park Nature Area

**Cottonwood
Park**

Rose Park

Fairpark

Poplar

Transformational Projects

These five locations were identified and further explored in conceptual plans in the following chapter. These locations were selected because they explore a variety of contexts and experiences along the corridor, from a largely undeveloped and relatively wild area to neighborhood parks, an urban stretch with limited public land but high connectivity to the rest of the city, and lands adjacent to golf courses. The sites were also selected to ensure geographic distribution of future investment along the Emerald Ribbon.

Glendale



Fairpark Urban Core

Modesto Park

olar Grove

Glendale Oxbow

Jordan River

The Value of Popping Up

A Cycle of Learning

While the Action Plan lays out a clear series of next steps, there is much that cannot be known about the future. In any planning process, questions remain, community needs evolve, and priorities shift over time.

The Action Plan embraces the potential to adaptively manage implementation by recommending the use of pop-up programs, projects, and policies. “Pop-ups” are short-term and/or temporary examples of potential implementation strategies. They enable the community to imagine change and learn about proposed techniques and processes. Feedback and lessons learned from the development of pop-ups can be leveraged in order to adapt and improve long-term implementation.

Here are three ideas for pop-up projects that could start immediately!



Expanding Program Opportunities



Lot Lab, Boston

Artful Testing

The Westside of Salt Lake City is home to numerous organizations, groups, and businesses who could take a more active role in activating the Emerald Ribbon. A pop-up project that engages these potential partners in a temporary activation could help inspire more engagement with the corridor, test new programs, and grow the roster of potential community-driven events.

Success Story: Now + There, an arts organization with the goal of using temporary public art to create change, transformed an empty lot in the Charlestown Navy Yard into a testing ground for public art.

Previewing Ecological Change



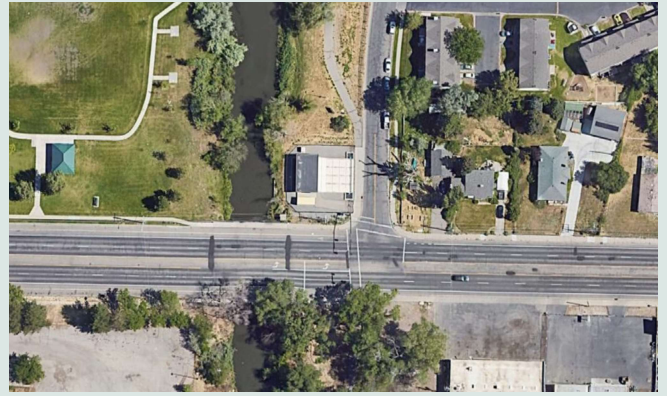
Congress Avenue, Austin

Environmental Education

The community shared its desire for a nature-forward vision for the Emerald Ribbon. Achieving this will require new design, planting, and maintenance strategies and processes. Pop-ups could be used to mock-up and test some of these new approaches. In the example above, community members were invited to measure the temperature of different paving types to understand how material selection impacts microclimate.

Success Story: As part of a vision plan for Congress Avenue, a series of pop-ups allowed community members to test new ideas.

Transforming Traffic Tactically



Existing Condition



Street Pilot, Seattle

1700 S Trail Intersection

The intersection of the Jordan River Trail and 1700 S is a great opportunity for a pop-up approach. Here the trail is less continuous and legible to users. Pop-up tactics could test safety measures such as changes to the activated crosswalk signals and paint to make the crossing more visible to drivers. These could be in place for a period of time with users providing real-time feedback that could inform a long-term series of improvements.

Success Story: The City of Seattle used painting and tactical approaches to testing new traffic and pedestrian patterns.





1

Develop a New Wildlife Area at Glendale Oxbow

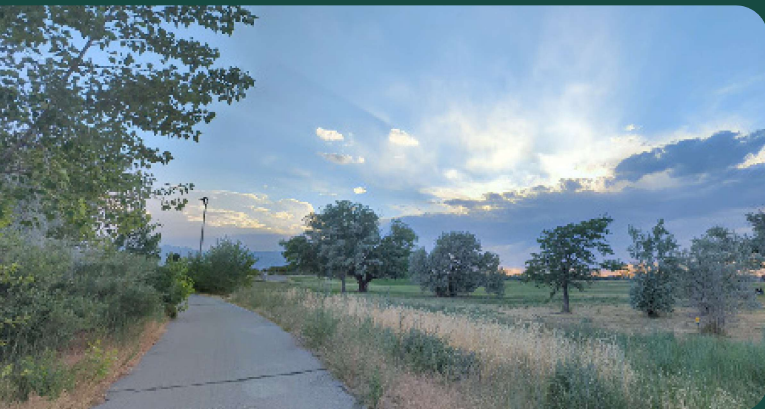
The southern gateway of the Jordan River corridor as it enters Salt Lake City proper, the Glendale Oxbow is both a confluence of city-wide systems like the Surplus Canal and the Jordan River Trail and a unique moment of natural beauty thanks to the sculptural form of the river. With the construction of a new regional park in the Glendale neighborhood, this stretch of the corridor is soon to be home to a great new urban park replete with amenities, play, and water access.

Develop a New Wildlife Area at Glendale Oxbow

Existing Conditions

The 2100 S Oxbow is located just east of Glendale Golf Course. The opposite bank is dominated by commercial and industrial uses that contribute to a steep, eroding river bank. The area is less frequented by trail users, with scattered unhoused encampments occasionally found within the peninsula. Golfers at Glendale Park can see the area, but it remains peripheral to their experience. On the eastern bank of the river, commercial and industrial land uses encroach on public lands and infringe on the required buffers for the Jordan River.

The area is generally mowed but holds significant potential for riparian, wetland, and upland restoration. Notably, there are numerous interesting features in the area, such as a spring on the north side of the trail bridge between the river and the trail, areas of the oxbow that present opportunities for wetland creation, a low-lying area at the bend in the river adjacent to the golf fairway that could become a wetland, a low-lying bench on much of the western bank of the river, and moderately sloping banks on the Westside that are conducive to riparian woodland restoration.





Develop a New Wildlife Area at Glendale Oxbow



The Proposal

This underused site is a great place to give space back to nature along the river. New wetland areas and expanded floodplain will provide better habitat for birds and other animals. People will be able to enjoy the natural environment through seating areas, interpretive signage, and wildlife viewpoints. The proposal also includes improvements to enhance the area as a gateway for people. A new trailhead with parking is proposed on 2100 S. To the west of the river, a new trail will be added along with natural landscaping and new trees.





Develop a New Wildlife Area at Glendale Oxbow



The following estimates assume 0.71 acres of park redesign, including the trailhead on 2100 S, overlooks, picnic tables, and amenities along the boardwalk. Restoration estimates assume 17.07 acres of restoration. Trails and greenway estimates cover 0.63 miles of improvements, including a 100-foot buffer for amenities like lighting, benches, trash cans, and fountains. These are order-of-magnitude cost estimates based on peer comparison data, with soft costs included in all three estimates.

Estimated Full Build-Out Cost	\$6,081,603
Park	\$1,687,535
Restoration	\$2,372,222
Trails & Greenway	\$2,020,846

Phase One Projects



Community Park Space

Park

\$689,275

Park investments in the Glendale Oxbow in Phase One are minimal but include two boardwalks, which should be developed in conjunction with restoration projects. Lowering the grade of the existing plane to encourage wetlands will create a new nature area; thoughtful creation of nature experiences for people should happen side by side with those projects, including interpretive experiences.

Ecological Restoration

Restoration

\$1,417,496

This area is a strong potential pilot area for restoration efforts, some of which can be conducted internally at Public Lands. The Phase One priority is to lower the grade of the existing ground plane to be conducive to wetlands at the oxbow and along the bank to the north. This should be done alongside the removal of invasives and installation of native riparian tree mottes.

Greenway & Trail Improvements

Trails & Greenway

\$192,462

Phase One prioritizes the creation of a new trailhead at the intersection of the Jordan River Trail and 2100 S. As the southern edge of the corridor, the trailhead will serve as the entrance into the Emerald Ribbon from South Salt Lake and West Valley City. The largely industrial area today provides few amenities to trail users; a new trailhead that include waste receptacles, water refill stations, shade, and parking for trail users will make the area more accessible to the community.

2



Reimagine Modesto Park and Bend in the River

Modesto Park and Bend in the River are poised for a transformational design that will unlock their full potential as vibrant community spaces. Today, public concern over safety, outdated amenities, and poor maintenance makes these parks fall short of their promise. The new vision introduces a dynamic 'community porch' with shaded seating, a nature playground, and an outdoor classroom, alongside enhanced pathways and a formal trailhead with improved access. Ecological upgrades will revitalize riverbanks, expand wetlands, and enhance wildlife habitats. The redesign will create a welcoming, connected, and ecologically thriving hub for the entire community.





Reimagine Modesto Park and Bend in the River

Existing Conditions

Today, Modesto Park and Bend in the River offer expansive green space to the adjacent neighbors. Yet, the composition of elements, ecological improvements, and park edges fall short of the potential for a great neighborhood park. Concerns about safety, coupled with outdated amenities, prevent this from being a true community hub.

The park edge along Modesto Avenue feels uninviting and inaccessible due to a lack of meaningful amenities, poor maintenance of vegetation, and limited views of the river. Safety issues with the existing playground in the south and the under-programmed outdoor classroom in the north deter people from engaging with the water and the park's features.

The parking area along Fremont Ave, which serves as an entrance to the park, has been a cherished community space, offering a strong foundation for enhanced community gathering place with better connectivity to Bend in the River Park.





Reimagine Modesto Park and Bend in the River



The Proposal

This concept addresses safety concerns and introduces a new 'community porch' with shaded seating, a lawn, cooking areas, a nature playground, and art installations. Enhanced pathways and new access from 900 W will improve the parks' relationship to the surrounding neighborhood. A small lot on Fremont Ave will become an enhanced trailhead with increased visibility into the park and a new boat ramp.

Ecological improvements include regrading riverbanks to reduce erosion, expanding wetlands for wildlife and stormwater management, removing invasive plants, and protecting significant trees to enhance the park's ecological function and visitor experience.





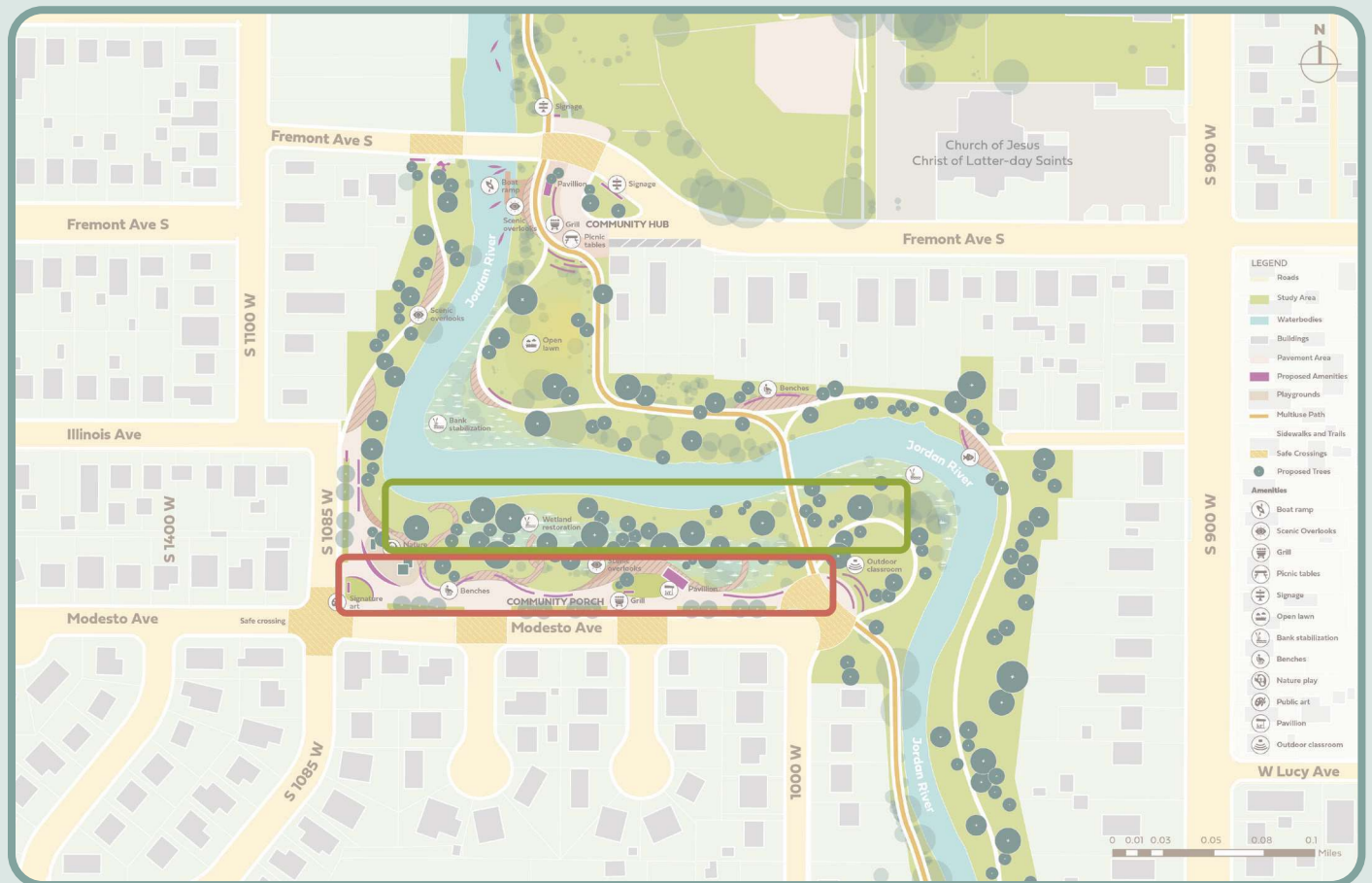
Reimagine Modesto & Bend in the River Park



The following estimates assume 2.37 acres of park redesign, including creating the ‘community porch,’ renovating the trailhead on Fremont Ave, and adding amenities along the trail. Restoration estimates assume 7.44 acres of restoration. Trails and greenway estimates cover 0.33 miles of improvements, including a 100-foot buffer for amenities like lighting, benches, trash cans, and fountains. These are order-of-magnitude cost estimates based on peer comparison data, with soft costs included in all three estimates.

Estimated Full Build-Out Cost	\$7,725,517
Park	\$5,633,040
Restoration	\$1,033,939
Trails & Greenway	\$1,058,538

Phase One Projects



Community Park Space

Park

\$3,636,519

The 'community porch' along Modesto Avenue is the recommended first phase of investment in public park space. The ability to deliver walkable amenities to the nearby neighbors and improve sight lines and access to the river make this a priority.

Ecological Restoration

Restoration

\$391,896

Adjacent to the "Porch", a first phase capital project could include expansion and enhancement of the existing wetland as well as regrading and restoration of the river's edge. This action builds on recent good work while growing the ecological value.

Greenway & Trail Improvements

Trails & Greenway

\$0

Greenway and trail improvements will be a focus of effort and investment in the long term, but are not included in Phase One projects. Priorities could include the creation of a new trail connection to S 900 W at Gold Place and the replacement of the existing boat ramp, which should be relocated to the north side of the park for easy access from Fremont Ave.

3



Center Nature and Activate Public Space in Fairpark

The Power District and Fairpark, together, constitute a significant portion of the Jordan River corridor, and both experiencing considerable new development. This offers an opportunity to center the community's priorities in the creation of a more urban stretch of the river with active uses and more vibrant public spaces. At the same time, care should be taken to ensure the river itself feels public and that the ecological health of the river is prioritized.

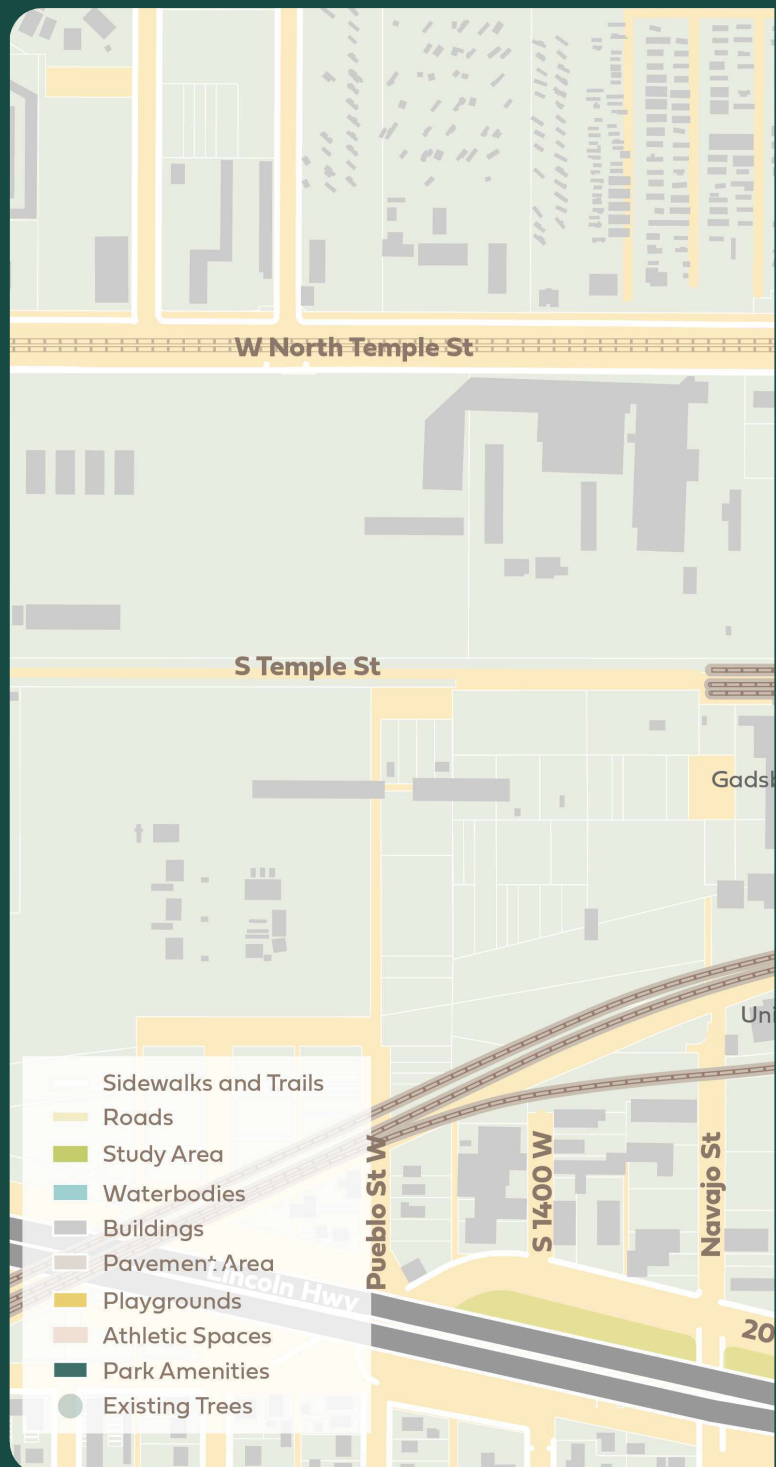
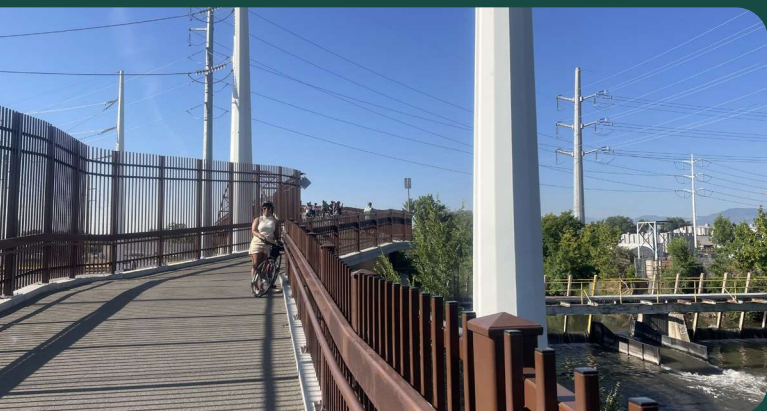


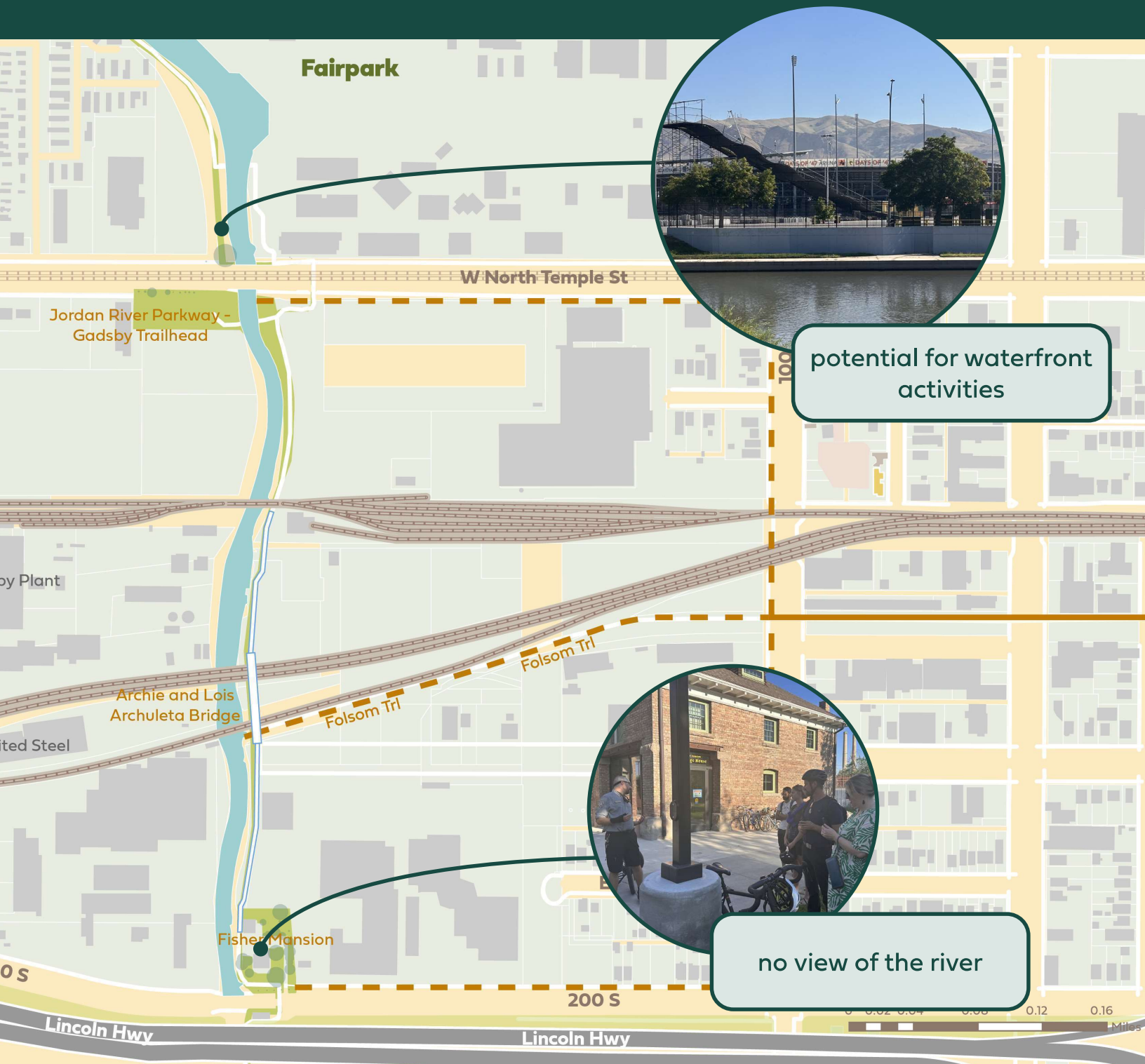


Center Nature and Activate Public Space in Fairpark

Existing Conditions

Today, the segment of the Jordan River between Fisher Mansion and Cottonwood Park runs through a highly industrial area. The area is crisscrossed by major railroads and by the TRAX Green Line at North Temple, which connects downtown to the Fairpark and Jordan River Trail. The existing Gadsby Trailhead at North Temple Street (which includes a parking lot and boat ramp) has been defined by undesirable activity in recent months, restricting its use as a gateway to the Jordan River corridor. The Fisher Mansion and adjacent Carriage House, recently remodeled for use as a Public Lands office and headquarters for the Park Rangers, has enormous potential but is fenced off from the river and offers no trailside amenities today. The trail becomes especially confusing at the North Temple Street intersection near the TRAX station, where one of the few deadly pedestrian-involved accidents on the corridor occurred.



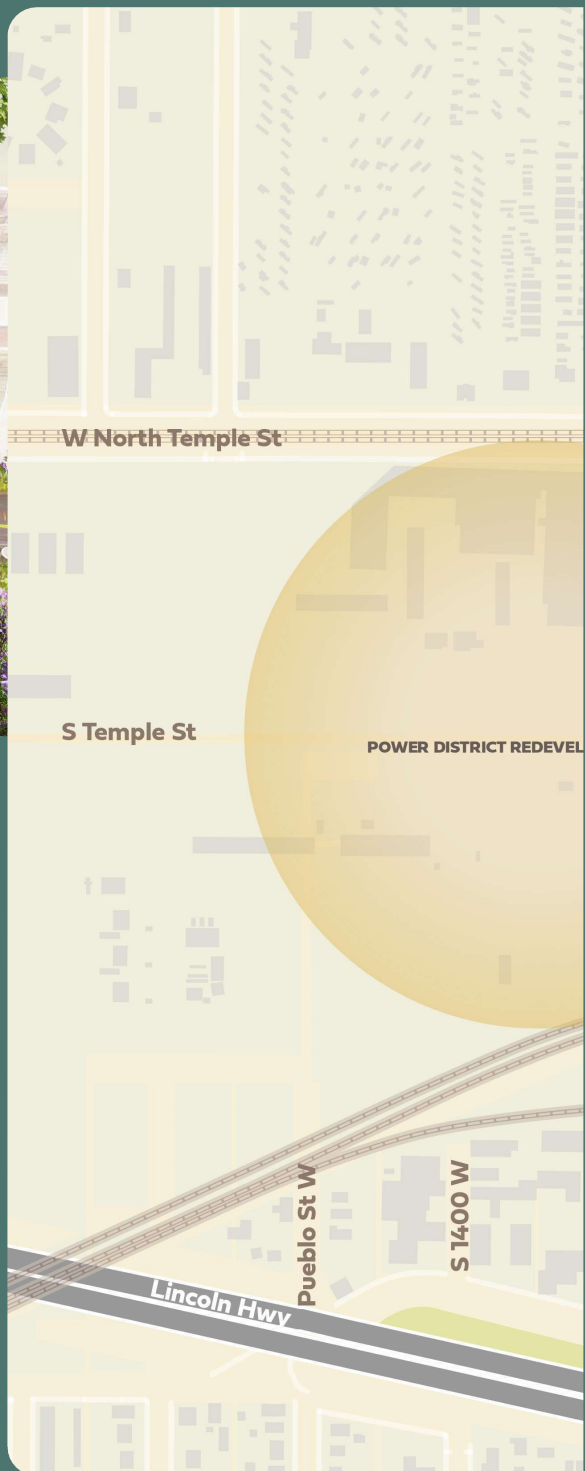


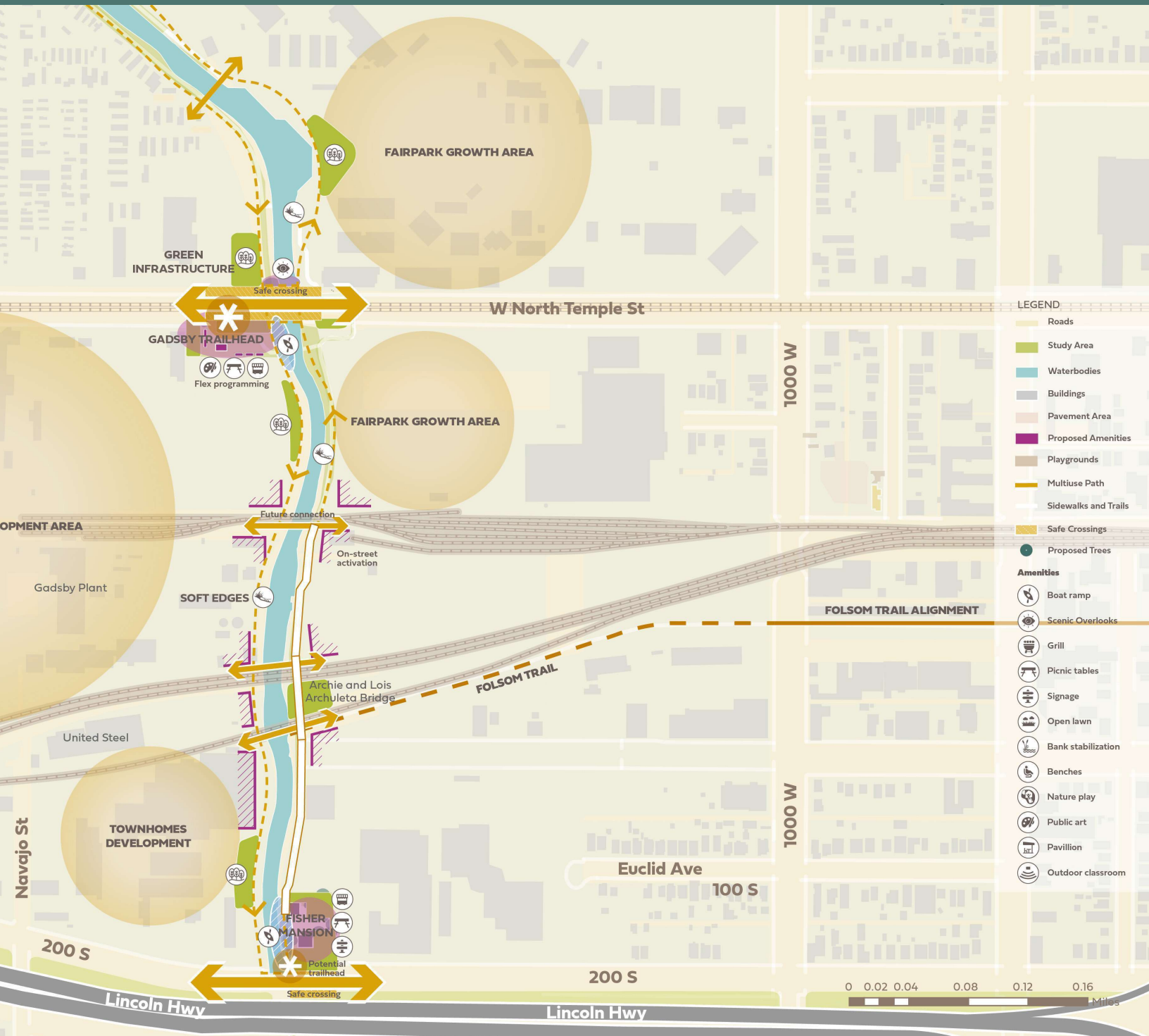
Center Nature and Activate Public Space in Fairpark



The Proposal

In this changing district, the plan focuses on providing safe and comfortable connections for trail users, businesses, and future residents. This concept illustrates improvements and activation at the Fisher Mansion and the Gadsby Trailhead. These areas have the potential to become hubs for community events, water recreation, and nature education for the river. The City will work with the Power District developers and the Fairpark community to improve the Jordan River experience as this area grows. Policy changes (recommended in Guiding Principle 4, Goals 4 and 5) are paramount to ensure that new development meets the needs and priorities of Westside residents, including environmental superiority.





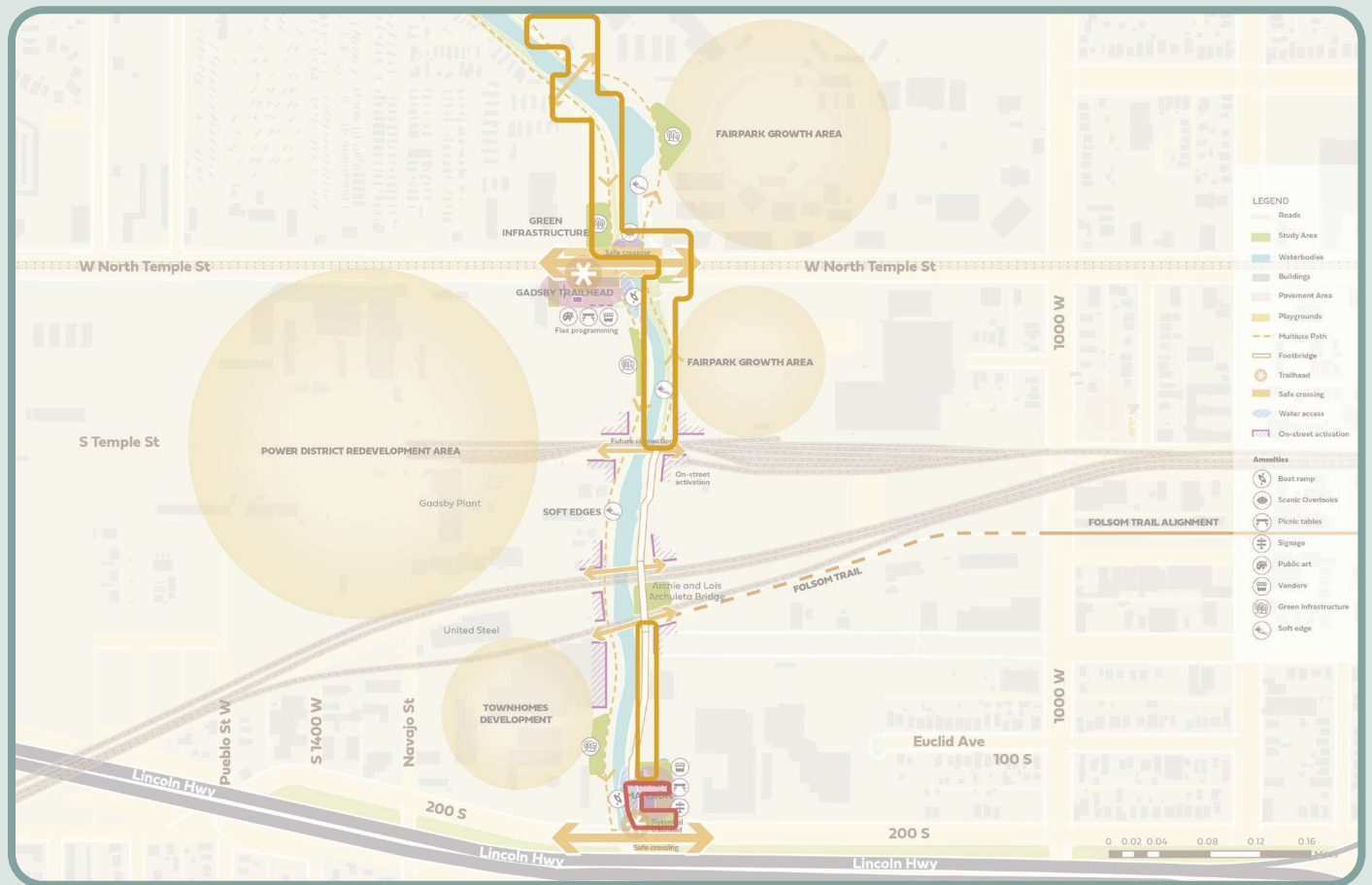
Center Nature and Activate Public Space in Fairpark



The following estimates assume 1.48 acres of park redesign. Restoration estimates assume 1.09 acres of restoration. Trails and greenway estimates cover 1.07 miles of improvements, including a 100-foot buffer for amenities like lighting, benches, trash cans, and fountains. These are order-of-magnitude cost estimates based on peer comparison data, with soft costs included in all three estimates.

Estimated Full Build-Out Cost	\$7,101,387
Park	\$3,517,679
Restoration	\$151,478
Trails & Greenway	\$3,432,231

Phase One Projects



Community Park Space

Park

\$1,449,854

Capital park improvements in a first phase focus on the city-owned Fisher Mansion and its adjacency to the trail and existing boat ramp, transforming it into a public amenity. A redesign should better open the mansion onto the trail, improve water access and visibility, and incorporate space for vendors, including a kayak rental.

Ecological Restoration

Restoration

\$0

While no capital improvement dollars are suggested for restoration projects in Phase One, Public Lands should begin a process with the Planning Division to evaluate what an environmental superiority policy could look like for development between 200 S and North Temple St to protect and enhance the health of the river with new construction.

Greenway & Trail Improvements

Trails & Greenway

\$1,700,077

The first of two priority projects is the completion of the trail connection to the new Folsom Trail, opening up the JRT and Fisher Mansion to other trail users. The other critical priority is to complete the missing segment of trail north of N Temple St, which suffers from safety, visibility, and quality issues today. This will protect and enhance the trail as new development transforms the area.

4



Bring New Life to Cottonwood Park

Cottonwood Park is set for a remarkable transformation that will redefine its role as a community hub. Currently, the park's distinctiveness is overshadowed by navigation challenges and limited engagement, making the community park fall short of its potential. The new proposal aims to enhance connectivity with realigned trails, fresh nature walkways, and a vibrant 'community porch' on the southern edge. Upgrades to the trailhead and the potential future relocation of the levee will improve access, visibility, and the park's relationship with the river. This redesign promises to create a more cohesive, inviting space for all.





Bring New Life to an Expanded Cottonwood Park

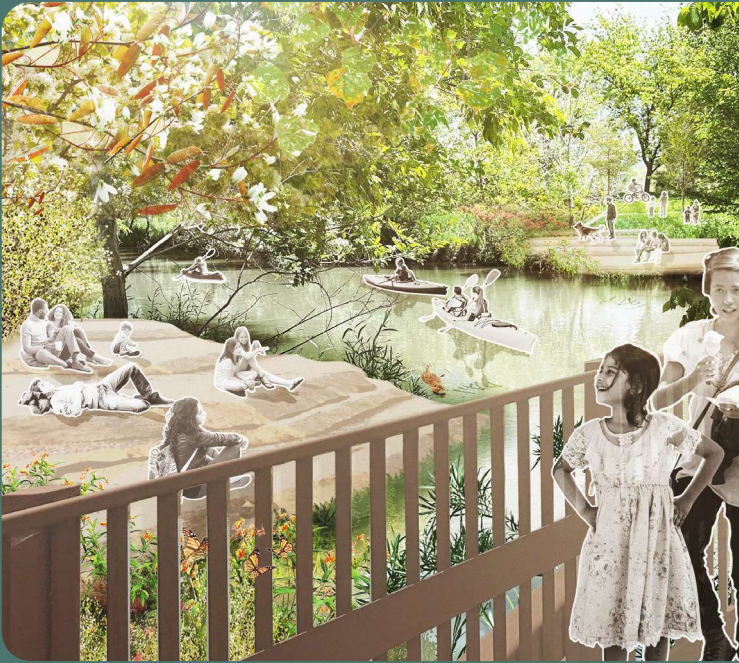
Existing Conditions

Cottonwood Park is a distinctive open space stretching across the river. On one side, a popular dog park serves as a cherished neighborhood spot but has the potential for enhanced water visibility and connectivity to the rest of the park. The current trail design has no wayfinding to the other side of the river, making it difficult for visitors to navigate the entire park. On the other side of the river, the community park offers essential green space and some amenities but falls short in engaging community members effectively. The trail design and lack of activities facing the street discourage deeper exploration of the park. Additionally, the levee creates a natural barrier to the river, leading to safety concerns and increased likelihood of encampments. Improving connectivity, visibility, and engagement in both areas could significantly enhance the park's usability and safety, creating a more cohesive and welcoming space for the community.



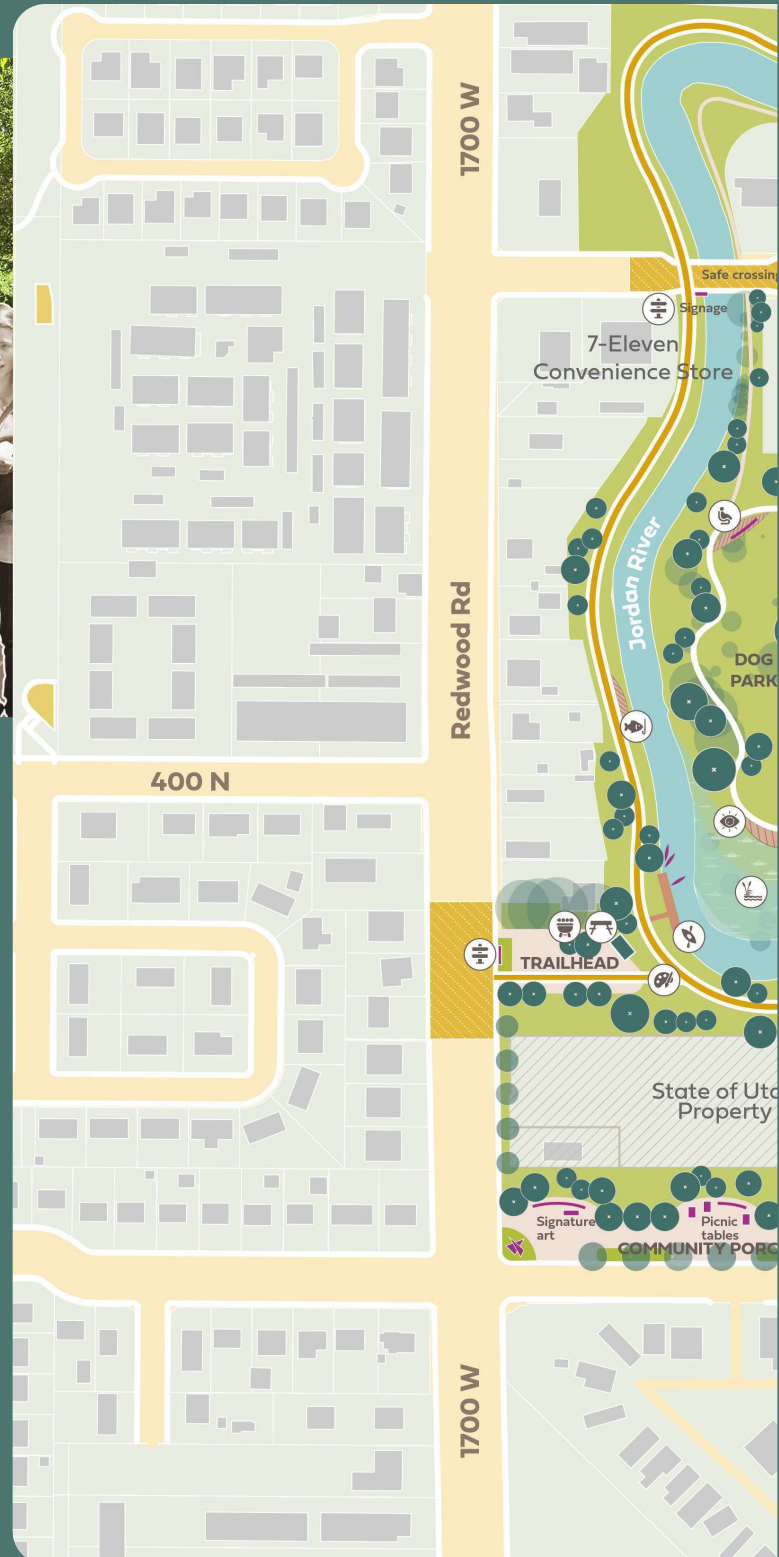


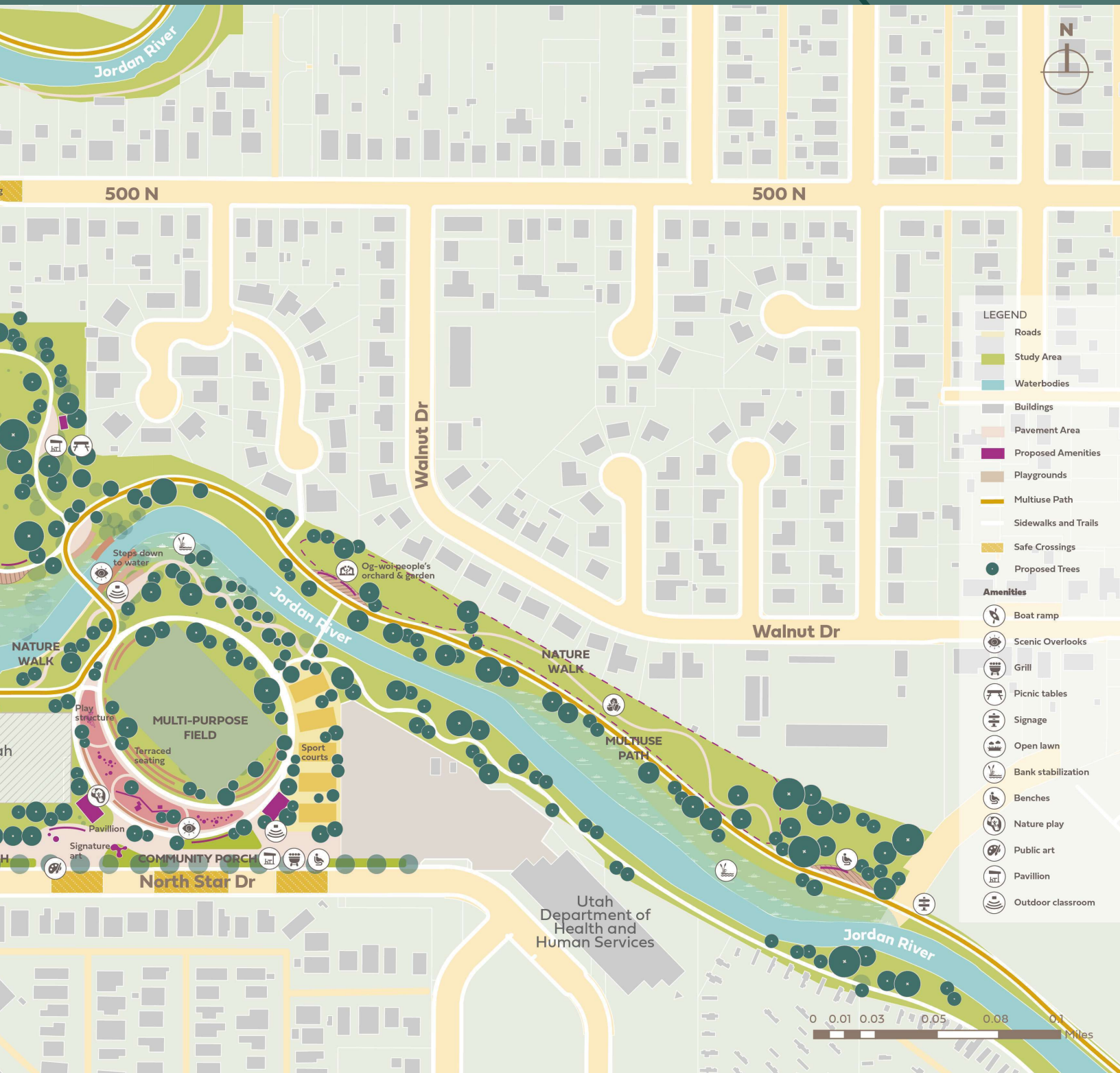
Bring New Life to an Expanded Cottonwood Park



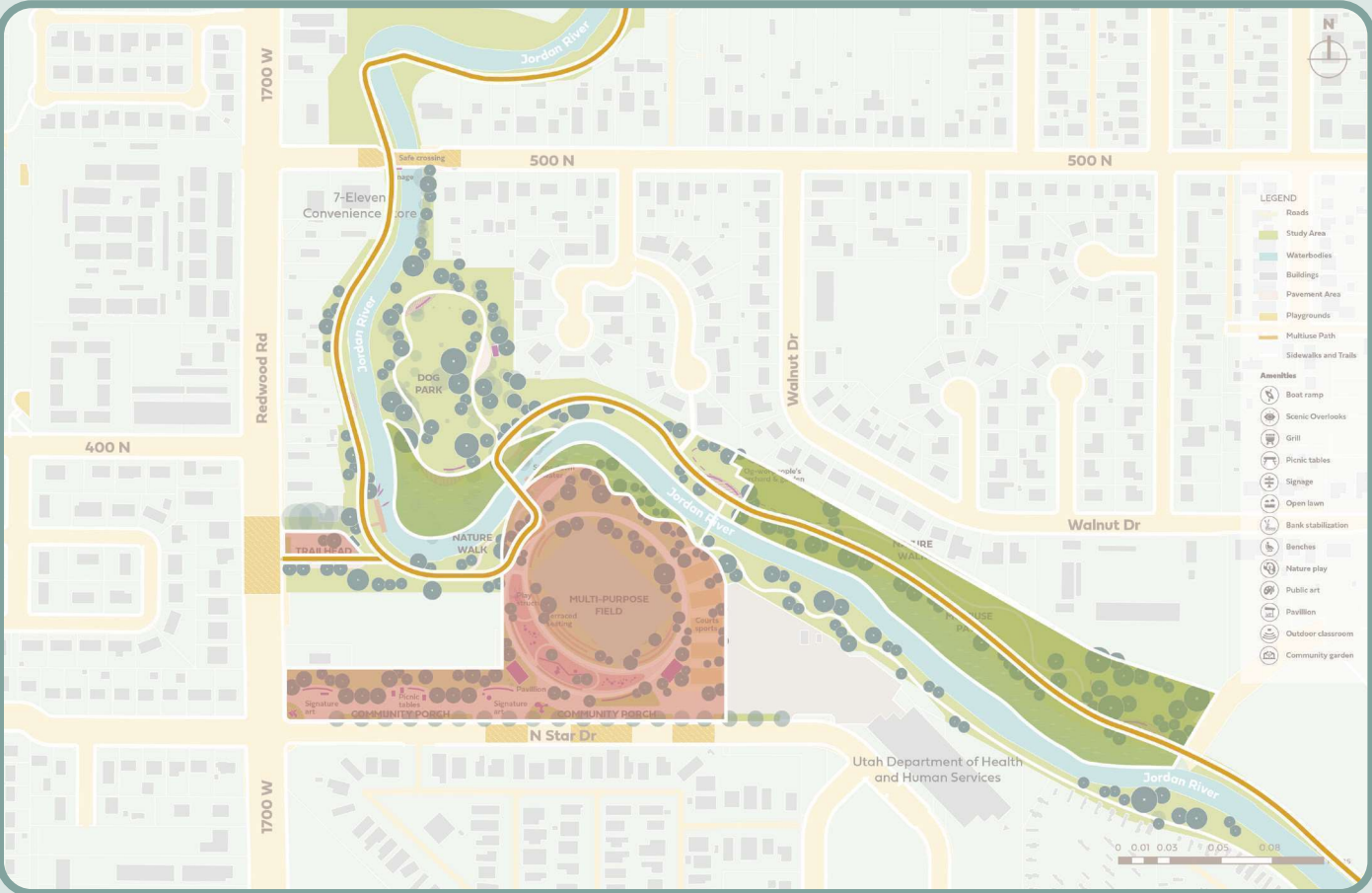
The Proposal

This concept enhances connections within the park and between the park and the river. Realigned trails and new signage will simplify navigation, while nature walkways will offer fresh experiences for walking and biking. Recreation amenities will be concentrated at the south end, creating a welcoming 'community porch'. The existing dirt parking lot on Redwood Road will be upgraded to a trailhead with artwork, signage, new restrooms, and a boat ramp. In the longer term, relocating the levee further from the river will improve visual and physical connection to the water, providing more space for the river to flood.





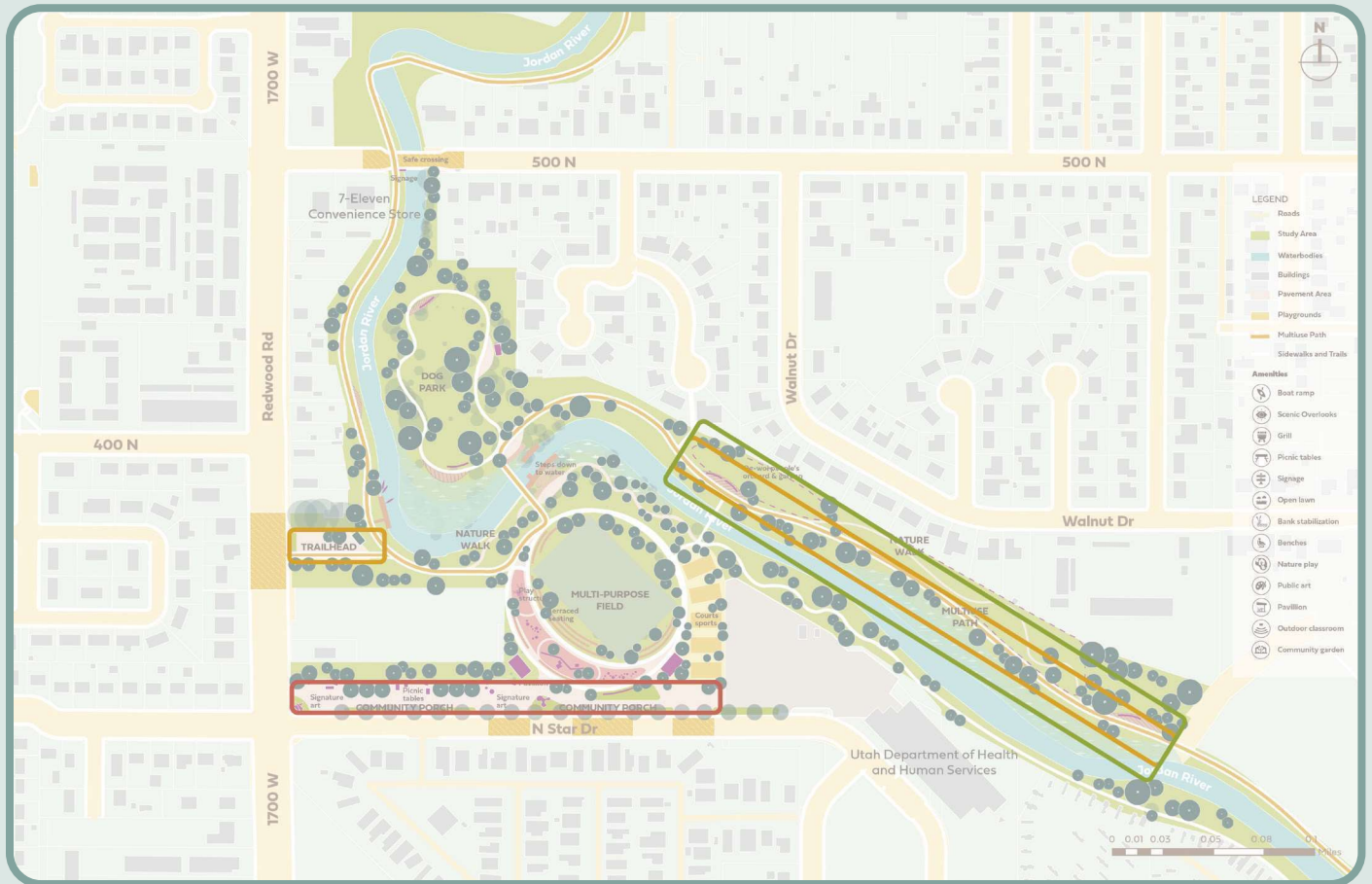
Bring New Life to an Expanded Cottonwood Park



The following estimates assume 8.36 acres of park redesign, including the creation of the 'community porch,' recreational sports fields, and the trailhead. Restoration estimates assume 7.61 acres of restoration. Trails and greenway estimates cover 1.1 miles of improvements, including a 100-foot buffer for amenities like lighting, benches, trash cans, and fountains. These are order-of-magnitude cost estimates based on peer comparison data, with soft costs included in all three estimates.

Estimated Full Build-Out Cost	\$24,456,156
Park	\$19,870,131
Restoration	\$1,057,564
Trails & Greenway	\$3,528,462

Phase One Projects



Community Park Space

Park

\$5,347,822

Park investments during Phase One will focus on the creation of a community porch along the southern edge. This addition will create a welcoming and inviting area, enhancing connectivity with the neighboring community and maximizing the project's impact.

Ecological Restoration

Restoration

\$836,601

With so much acreage, there is immense potential to restore and enhance natural lands at Cottonwood Park. Phase One projects include the removal of invasive plants, restoration of native species in the riparian area, and the establishment of an upland plant community on the northern edge of the river. In Phase One, the installation of stormwater wetlands at the toe of the slope is recommended to develop this area as a natural land pilot program ripe for nature experiences for people.

Greenway & Trail Improvements

Trails & Greenway

\$962,308

Trail and greenway improvements in Phase One are closely tied to restoration efforts, as the regrading of the bank along the northeast section of the park will require moving the primary trail back from the river. Doing so creates an opportunity to upgrade this segment of trail to be a wide, marked, multi-use trail. Likewise, development of unpaved nature trails to create a loop along the north and south edges should happen after restoration efforts.

5

Develop a New Nature Park near Rose Park Golf Course

The Rose Park Golf Course today is a well-used space separated from the river by a large, continuous levee. While this levee reduces flood risk for many nearby neighbors, it physically and visually separates them from the river. While the golf course is well-loved, the adjacent Rose Park Golf Course Driving Range is underutilized and in a prime location for a nature area. Similar to Cottonwood Park, the potential exists to create more “room for the river” by relocating portions of the levee and developing wetlands. In doing so, this concept creates more expansive hydrologic function and new habitat for wildlife.





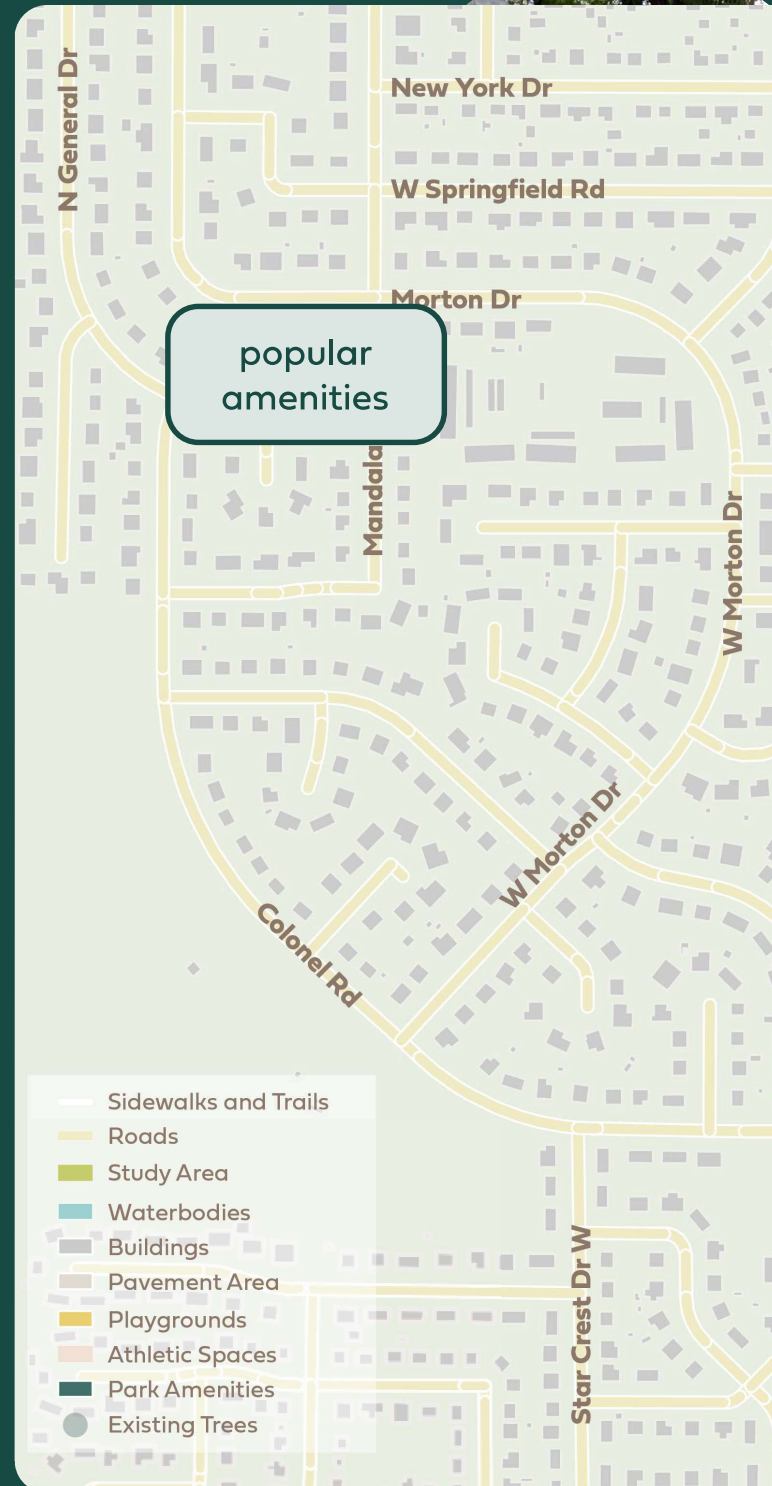
Develop a New Nature Park near Rose Park Golf Course

Existing Conditions

The Rose Park area includes Rose Park Golf Course, Roots Disc Golf Course, and the greenbelt between them adjacent to the Jordan River. Boundaries include the river and Reclamation Road to the north, 1200 W and residential housing to the east, 1000 N to the south, and Redwood Rd to the west. Both golf courses and the formal east-side trail and informal west-bank gravel trail are actively used.

A levee along the western bank, currently non-compliant with regulations, will need upgrades to meet higher flood levels and stricter standards. The golf course features mowed areas with specimen trees in the roughs. For much of its length, the course is separated from the river by fencing, the levee, and dense vegetation. Some planting has occurred in the disc golf area.

Significant potential exists for expanding the floodplain and restoring riparian woodlands, wetlands, and uplands to enhance the site's ecological health and improve the experience for course and trail users.



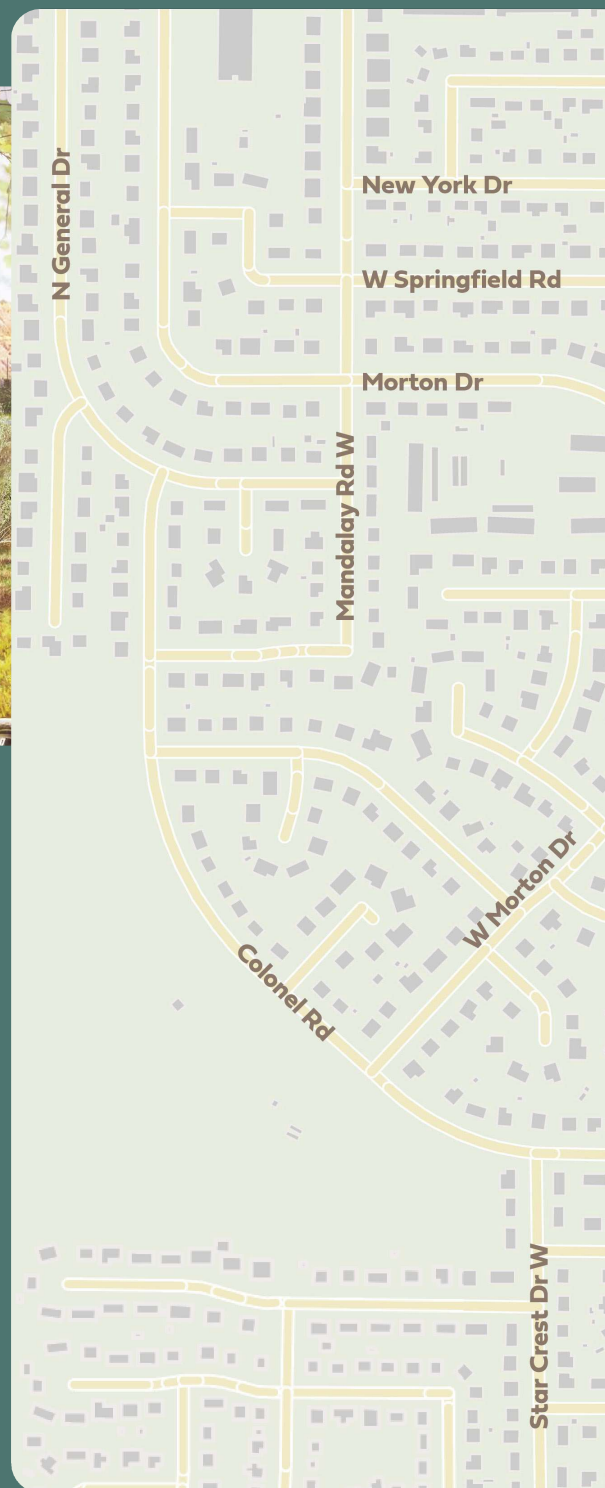


Develop a New Nature Park near Rose Park Golf Course



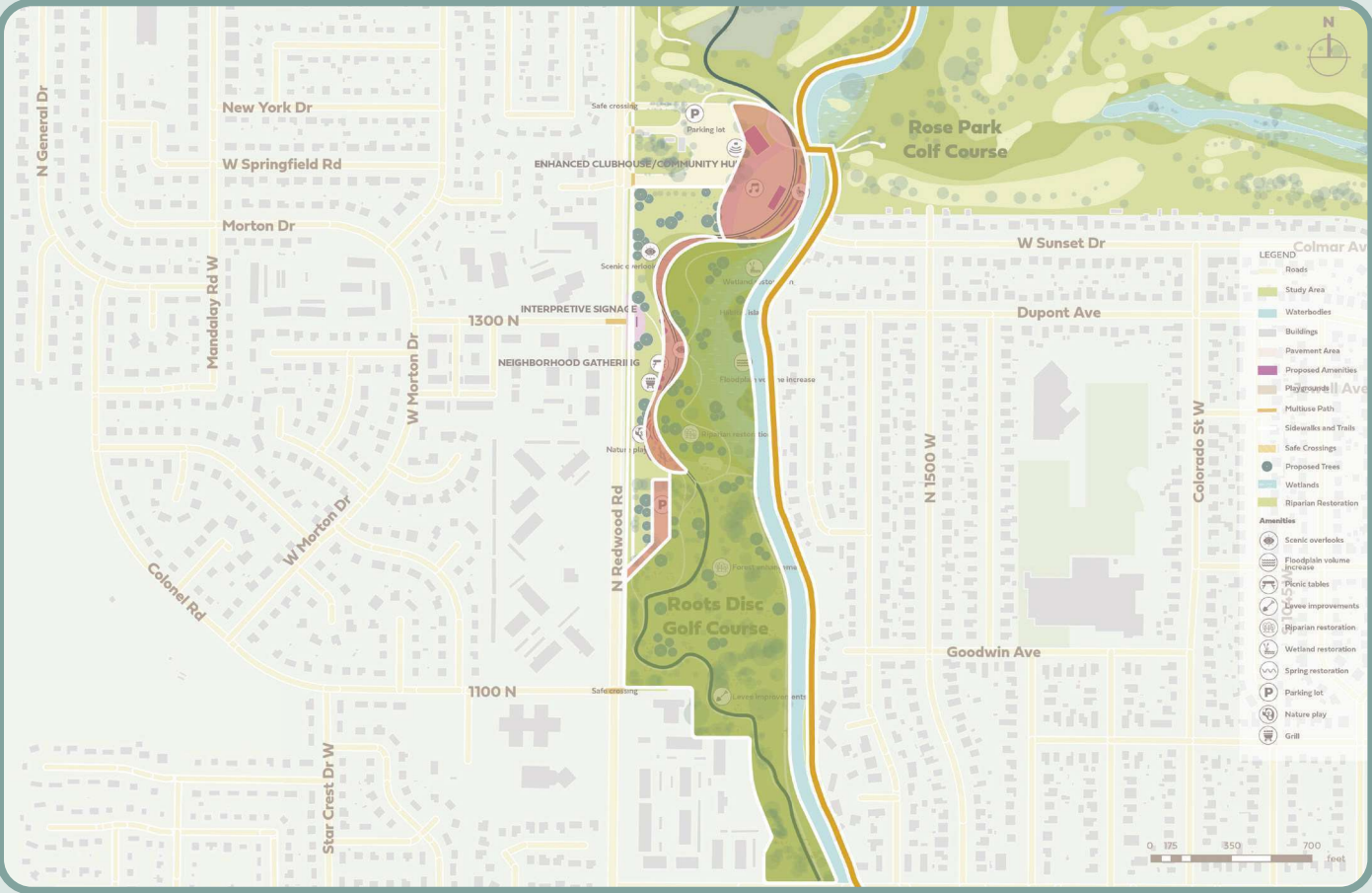
The Proposal

This concept reflects ongoing discussion to transition the underutilized driving range at Rose Park Golf Course into a publicly accessible park and nature area. A pathway through Roots and the driving range would become a slower, scenic walking route. A new gathering space and a nature playground incorporates amenities to better serve the broader community. A large nature preserve will include scenic overlooks and educational signage. An enhanced clubhouse can serve both golfers and trail users, and steps down to the water would provide new boat access.





Develop a New Nature Park near Rose Park Golf Course



The following estimates assume 5.35 acres of park redesign. Restoration estimates assume 31.95 acres of restoration. Trails and greenway estimates cover 0.83 miles of improvements, including a 100-foot buffer for amenities like lighting, benches, trash cans, and fountains. These are order-of-magnitude cost estimates based on peer comparison data, with soft costs included in all three estimates.

Estimated Full Build-Out Cost	\$19,818,417
Park	\$12,715,933
Restoration	\$4,440,099
Trails & Greenway	\$2,662,385

Phase One Projects

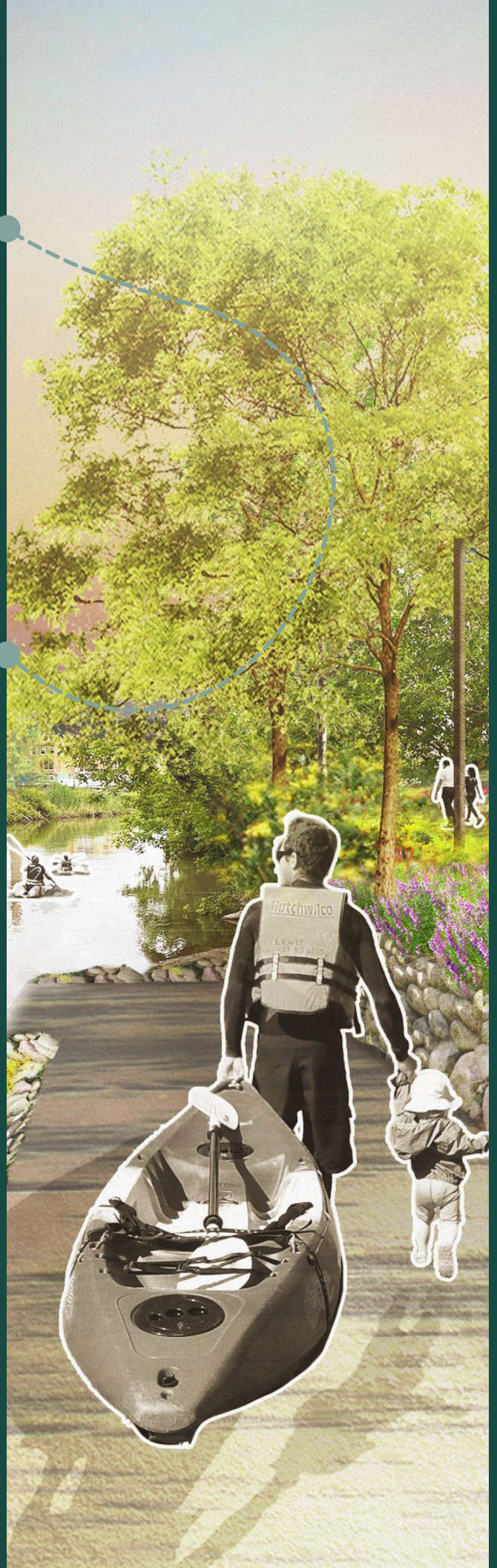
Feasibility Study

\$300-500k

A feasibility study for relocating the levee between Redwood Road and 1000 North must assess the new alignment's geotechnical and environmental suitability. It should evaluate design and construction needs to meet regulatory standards and ensure effective flood protection. The study must also consider integrating the levee with proposed park uses (as described in this document), estimate costs for dismantling the old levee and constructing the new one, and include considerations for community impacts. Additionally, it should provide a timeline and risk management plan to address relocation challenges.

No design or construction is proposed as part of Phase One for this project.

Phase One & Bond Funding Priorities



The following chapter identifies how the GO Bond funding can support the near-term evolution of the Emerald Ribbon for Westside residents and the city as a whole. Projects were prioritized by area of highest need in the community, greatest opportunity in regards to natural restoration potential, and to lay the foundation for the ongoing implementation of the goals of this plan. The projects were also prioritized to ensure a balanced distribution of investment in regards to geography and project type (between highly activated parks, natural lands, and trail and safety). They are structured to ensure that they are feasible and will, coupled with effective ongoing management and thoughtful programming, make a tangible difference in the lives of residents within Phase One.

To facilitate further planning, a Phase One approach was identified for all five Transformational Projects. Not all of the project identified as phase one efforts are proposed as priorities for Bond Funding.

Building on the operating cost estimates included on Pg. 101, each category of proposed capital projects suggests a framework for the ongoing care of those investments.

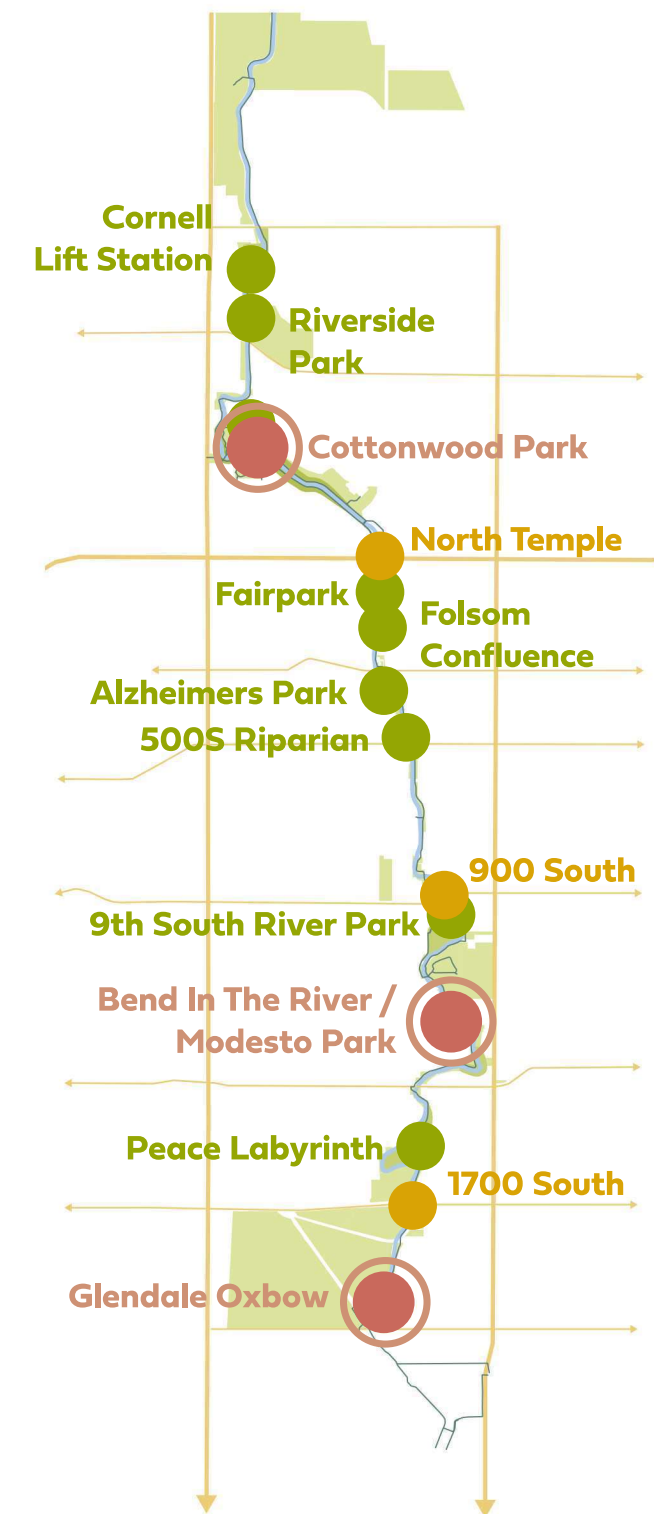
An evolution of the governance model on the Emerald Ribbon is an important precursor to meeting the community's demands in regards to improved maintenance and management practices. Investment in the long-term care of the corridor (and public communication about those investments) must go hand in hand with new capital improvements.

Available bond funding covers the majority of priorities identified on the following spreads, but about \$5 million of additional funding is necessary to achieve the vision set forth on the following pages. Some of that is already confirmed via other funding sources.

Phase One Priorities

\$11.5M for Phase One Priorities including \$9M in Bond Funding

Note: Soft costs such as design fees, permitting costs, contingencies and escalation are included in these budget numbers. For full methodology of cost modeling, see pages 102-103.



Transformational Projects

Bend in the River & Modesto Parks

\$3M (Bond) + \$1M (Addl CIP) = \$4M Total

A first phase here includes the ‘community porch’ along Modesto Avenue and enhancement of the existing wetland as well as regrading and restoration of the river’s edge. See page 126 for details.

Cottonwood Park

\$3M (Bond) + \$1.5M (Addl CIP) = \$4.5M Total

A first phase here includes trail and greenway improvements closely tied to restoration efforts along both sides of the river to the east. This also includes improvements to the trailhead on Redwood Road. See page 142 for details. This work can likely be completed now without being removed by levee relocation in the future.

Glendale Oxbow

\$500K (Bond)

A first phase here includes invasive removal, native planting, regrading for new wetlands, and restoration of the existing spring. See page 118 for details.

Note: The Action Plan identifies the need for a feasibility study as the first step of the work ahead at Rose Park and therefore is not included in this round of capital improvements.

Total Funding: \$9M
Bond Funding: \$6.5M
Add’l Dedicated CIP Funding: \$2.5M

Corridor-Wide Restoration Projects

Peace Labyrinth

\$150K

Riparian planting, invasives removal, regrading for wetlands, and slope stabilization.

9th South River Park

\$200K

Riparian planting and regrading for wetlands.

500 South Riparian

\$150K

Bank stabilization, invasives removal, and riparian restoration.

Alzheimers Park

\$100K

Establish and enhance riparian community. Tie into existing irrigation.

Riverside Park

\$200K

Conversion of mowed area to riparian area and connection to existing irrigation.

Cornell Lift Station

\$125K

Invasive removal, enhanced habitat, and expansion of the existing wetland.

Fairpark

\$50K

Establish/enhance riparian community along trail. Install irrigation.

Folsom Trail

\$25K

Establish/enhance riparian community along trail. Install irrigation.

Total Funding: \$1M
Bond Funding: \$1M

Corridor-Wide Safety Focused Projects

Wayfinding Redesign

\$700K

Create and implement a corridor-wide wayfinding system to address safety concerns and improve navigation.

North Temple Street Intersection and Trail

\$700K

Develop community-driven plan for the North Temple Street intersection public realm to occur in conjunction with new development, enacting the recommendations of the plan regarding trail design and intersection visibility. Clarify Public Lands land ownership on the quarter mile trail segments north and south of North Temple Street to determine whether collaboration with a potential developer or an internal redesign should be pursued.

1700 South Trail Intersection

\$50K

Increase intersection safety and visibility through activated crosswalk signals and paint to make the crossing more visible to drivers.

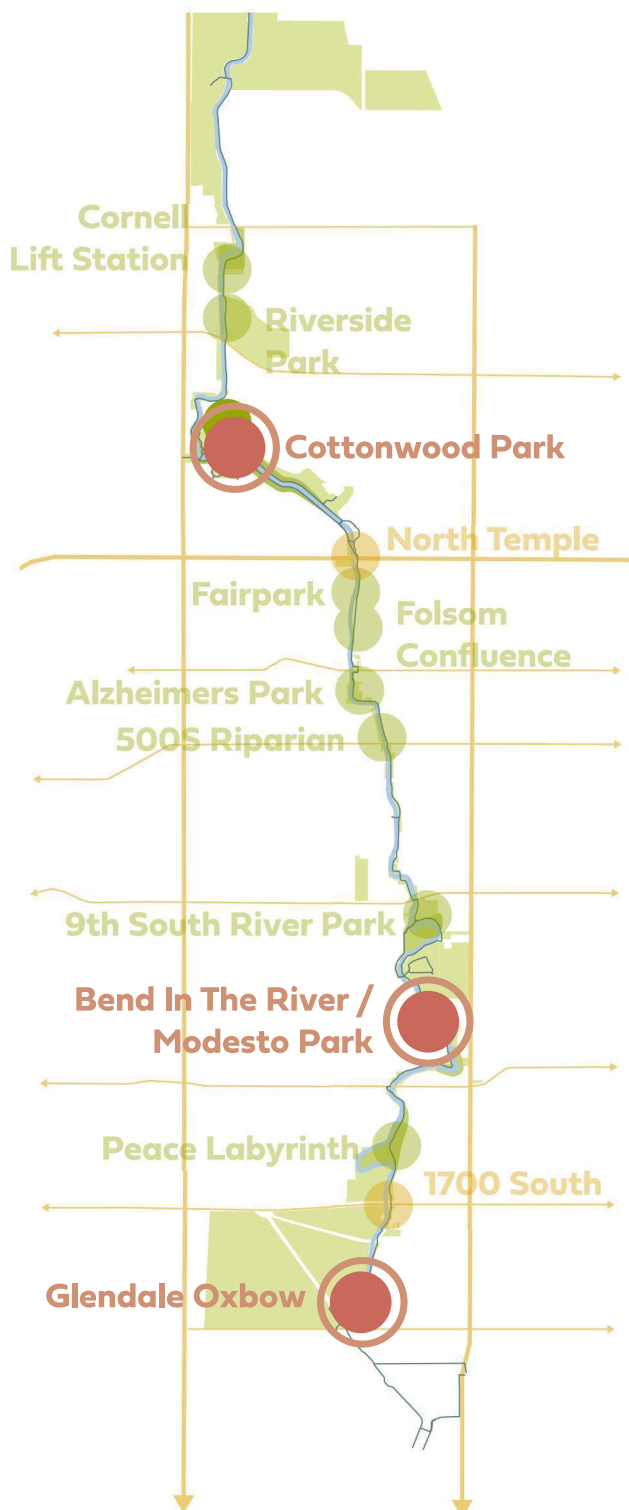
900 South Trail Intersection

\$50K

Improve the trail and improve signage so that trail users can easily navigate the Jordan River Trail.

Total Funding: \$1.5M
Bond Funding: \$1.5M

Priority Transformational Projects



Capital Investments

Bend in the River & Modesto Parks

\$3M (Bond) + \$1M (Addl CIP) = \$4M Total

A first phase here includes the 'community porch' along Modesto Avenue and enhancement of the existing wetland as well as regrading and restoration of the river's edge. See page 126 for details.

Cottonwood Park

\$3M (Bond) + \$1.5M (Addl CIP) = \$4.5M Total

A first phase here includes trail and greenway improvements closely tied to restoration efforts along both sides of the river to the east. This also includes improvements to the trailhead on Redwood Road. See page 140 for details. This work can likely be completed now without being removed by levee relocation in the future.

Glendale Oxbow

\$500K (Bond)

A first phase here includes invasive removal, native planting, regrading for new wetlands, and restoration of the existing spring. See page 118 for details.

Note: The Action Plan identifies the need for a feasibility study as the first step of the work ahead at Rose Park and therefore is not included in this round of capital improvements.

Total Funding: \$9M
Bond Funding: \$6.5M
Add'l Dedicated CIP Funding: \$2.5M

Planning for Care

The Emerald Ribbon's parks vary in their level of activation today. An estimate 60-70 acres of publicly-owned park spaces are designated by this plan as Highly Activated Spaces, which, based on precedents in and around the region, should target an annual spend of between \$50K-\$70K per acre. This does not need to be financed through public dollars alone: new governance models and increased partnership with the private sector offers the opportunity to open up new funding streams.

Relevant Goals

The following goals support the ongoing care of transformational projects by ensuring that new investments are matched with the continuous management and activation of those spaces.

1.4 Celebrate and support the culture of the Westside

Develop format agreements with local organizations to increase programming focused on local cultural representation.

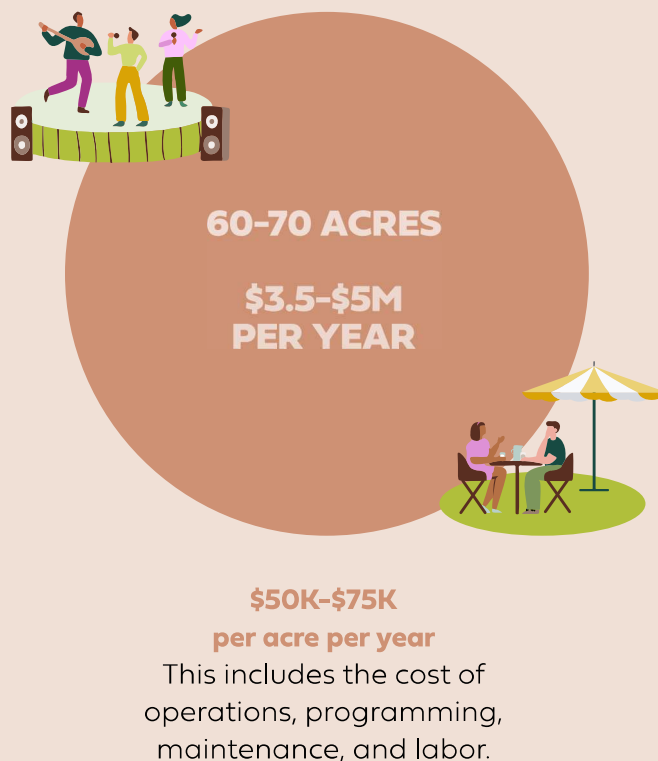
5.1 Bring programming to the water and the water's edge

Diversify programming on the water and pursue partners for water recreation, like a kayak share program. Develop Fisher Mansion as a public access node.

5.2 Support small businesses and commercial activation

Identify barriers to small business and commercial activation on the corridor today, and identify sites for short- and long-term commercial activation.

TARGET FUTURE OPERATING COSTS OF ACTIVATED SPACE IN PARKS

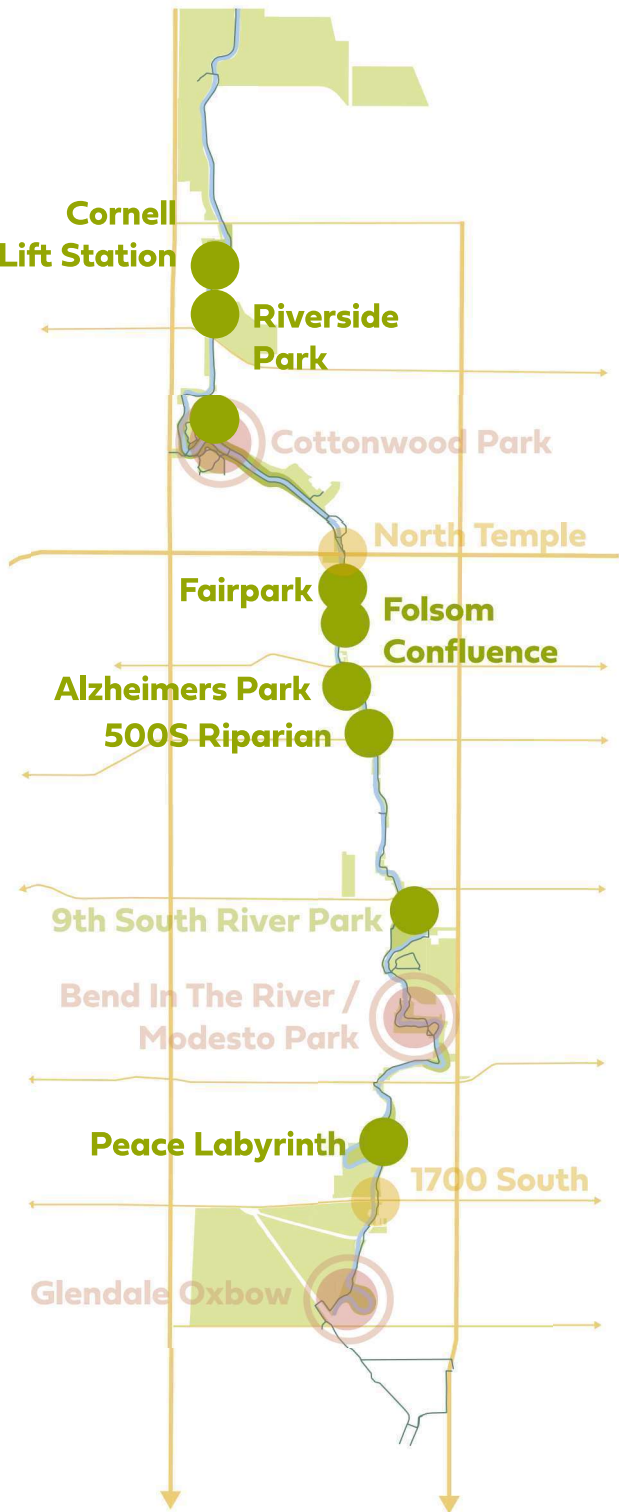


5.5 Create flexible event and gathering spaces

Dedicate some parks as Special Event Parks and develop community-scale event infrastructure in those places. Cottonwood Park is a potential site for such a designation. Investment should be coupled with contract agreement(s) with local organizations to run programming for new event spaces.

Note: Glendale Oxbow, while a priority transformational project, does not include heavily activated space in phase one. The majority of phase one work would be subject to natural lands care estimates on the following page.

Natural Lands & Restoration Projects



Capital Investments

Peace Labyrinth \$150K

Riparian planting, invasives removal, regrading for wetlands, and slope stabilization.

9th South River Park \$200K

Riparian planting and regrading for wetlands.

500 South Riparian \$150K

Bank stabilization, invasives removal, and riparian restoration.

Alzheimers Park \$100K

Establish and enhance riparian community. Tie into existing irrigation.

Riverside Park \$200K

Conversion of mowed area to riparian area and connection to existing irrigation.

Cornell Lift Station \$125K

Invasive removal, enhanced habitat, and expansion of the existing wetland.

Fairpark \$50K

Establish/enhance riparian community along trail. Install irrigation.

Folsom Trail \$25K

Establish/enhance riparian community along trail. Install irrigation.

Total Capital Funding: \$1M
Bond Funding: \$1M

Planning for Care

For the Emerald Ribbon to thrive as a primarily natural ecosystem, restoration projects must be coupled with new management practices and public storytelling. Success stories already exist on the corridor today, including Fyfe Wetlands, the Cornell Lift Station, and the growth of nature education and volunteer programs.

Relevant Goals

The following goals support the ongoing care of natural lands by ensuring their long-term health and evolution as well as effective public communication and engagement around those investments.

1.1 Focus on nature experiences

Create a comprehensive interpretation plan and promote citizen science on the corridor with particular focus on youth programming. Consider developing a 'Young Ranger' student program.

3.1 Establish a public narrative around "Keeping It Wild"

Streamline management areas and communicate the difference between natural lands and park lands to the public. Design visitor-centric restoration areas.

3.3 Develop an effective long-term care model for the corridor

Address overlapping jurisdictions related to care and maintenance and streamline ownership of tasks between departments.

3.4 Manage the sources of water pollution

Support Public Utilities in the development of green infrastructure and the evaluation

TARGET FUTURE OPERATING COSTS OF NATURAL LANDS



260-280 ACRES

**\$2.5M - \$3.5M
PER YEAR**

\$8K-\$12K

per acre per year

includes monitoring and ongoing management in line with the Guidelines identified by the **Operations & Management Plan***

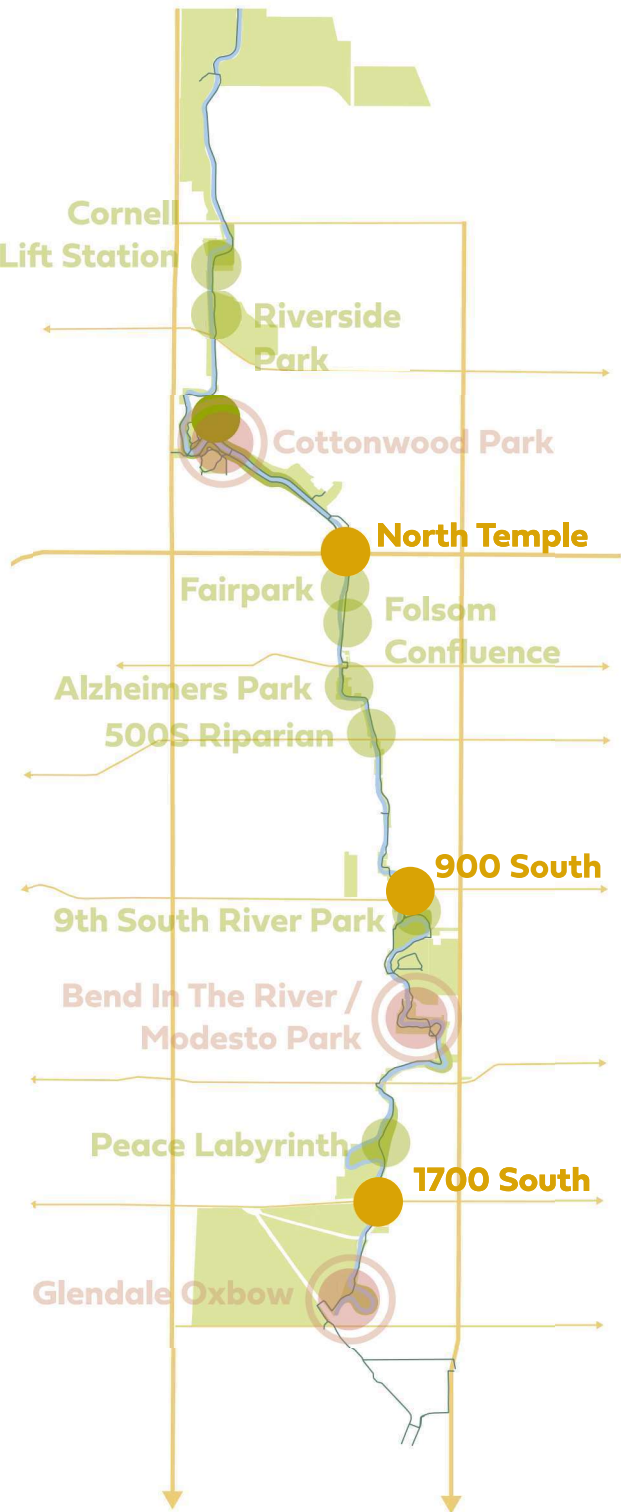
of waste systems along the river and its tributaries. Enforce waste reduction programs. Improving water quality is a primary concern for the community; many feel it is a prerequisite to transforming the river into a beloved natural asset.

4.4 Leverage policy to protect and enhance the river's ecological health

Require that new development meet high standards of environmental superiority, develop new eco-landscape requirements, and enforce existing riparian buffer zone regulations.

*The Operations & Management Plan is a separate document that details proposed management guidelines to support the goals of the Emerald Ribbon Action Plan

Trail & Safety Focused Projects



Capital Investments

Wayfinding Redesign \$700K
Create and implement a corridor-wide wayfinding system to address safety concerns and improve navigation.

North Temple Street Intersection and Trail \$700K
Develop community-driven plan for the North Temple Street intersection public realm to occur in conjunction with new development, enacting the recommendations of the plan regarding trail design and intersection visibility. Clarify Public Lands land ownership on the quarter mile trail segments north and south of North Temple Street to determine whether collaboration with a potential developer or an internal redesign should be pursued.

1700 South Trail Intersection \$50K
Increase intersection safety and visibility through activated crosswalk signals and paint to make the crossing more visible to drivers.

900 South Trail Intersection \$50K
Improve the trail and improve signage so that trail users can easily navigate the Jordan River Trail.

Total Capital Funding: \$1.5M
Bond Funding: \$1.5M

Planning for Care

Passive areas include the trail itself, adjacent greenway areas, and lightly programmed parkland. Care of these spaces should focus on ensuring the safety, connectivity, and accessibility of the Emerald Ribbon for all.

Relevant Goals

The following goals support the ongoing care of the trail and greenway, as well as passive areas in parks, to create a safe and welcoming environment on the Emerald Ribbon and to protect and enhance it as a mobility corridor.

2.3 Expand trail widths and separate riding and pedestrian paths where possible to reduce conflict

Assess existing trail system conditions and replace existing trail over the next 10 years to meet new standards. Develop new bridge standards and develop a plan for gradual replacement of very narrow bridges.

3.2 Partner with the community to steward the corridor

Create opportunities for ongoing stewardship with local organizations. Incentive native landscape management by private landowners, especially those that closely abut the river.

4.3 Introduce more visitors to natural areas and the river by connecting and expanding the Jordan River trail system

Expand the riparian protection ordinance to include consideration of the Jordan River Trail. Enhance collaboration with riverfront landowners and trail stewards.

TARGET FUTURE OPERATING COSTS OF TRAIL & GREENWAY



\$20K-\$30K
per acre per year

This includes the assessment and maintenance of trail and greenway areas adjacent to the trail throughout the corridor.

5.3 Develop multi-pronged approach to public safety on the corridor to address short-term and long-term goals

Balance a services-first approach with increased police patrols. Shift amenities into higher visibility areas and activate the street edges, even in passive areas. Improve methods to field complaints and concerns on the corridor.

5.4 Improve trail amenities

Add more high quality amenities, including benches, trash cans, and water fountains. Increased shaded rest stops for trail users. Create a lighting standard and fill gaps in lighting using nature-friendly approaches.



Public Lands



Agency
Landscape + Planning



2024

This page has intentionally been left blank

Emerald Ribbon Action Plan

OPERATIONS & MANAGEMENT GUIDELINES

October 2024

PREPARED FOR

Salt Lake City

PREPARED BY

Siglo Group

Agency Landscape + Planning



emeraldribbonplan.com

A scenic landscape photograph featuring a river or stream flowing through a lush green environment. The foreground is filled with tall, vibrant green grass and small white wildflowers. In the middle ground, a dense line of trees with bright green foliage borders the water. The background shows a sky with soft, white clouds. The word "CONTENTS" is overlaid in large, white, bold, sans-serif capital letters in the center of the image.

CONTENTS

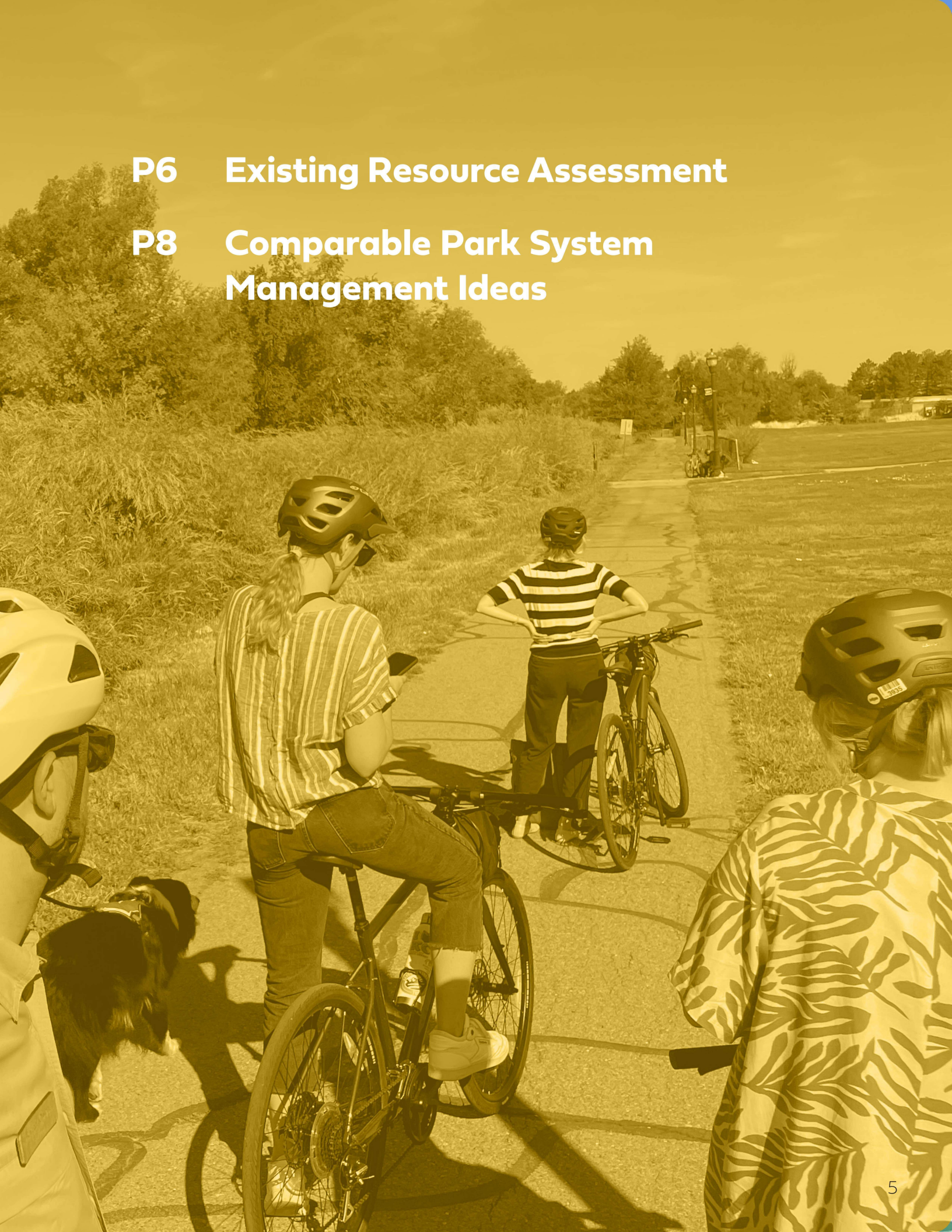
1. Benchmarking	4-9
2. Natural Area Management Guidelines	10-47
3. Towards Implementation	48-59
APPENDIX	60-61

1. Benchmarking



P6 Existing Resource Assessment

**P8 Comparable Park System
Management Ideas**



EXISTING RESOURCE ASSESSMENT

In the “Emerald Ribbon Action Plan Operations & Management Analysis” report, data from Salt Lake City’s asset tracking system, Cartegraph, was used to analyze existing resources and management practices within the Emerald Ribbon corridor. The report found that staffing and time spent on different management tasks vary widely between districts. It is also important to note that it is difficult to track management within the Emerald Ribbon corridor because six different management groups (Districts 1, 4, 5, 6, 8, and Golf) care for the study area but also care for other Public Lands in Salt Lake City. Despite these issues, data from Cartegraph gives us an idea of existing resource use in the corridor.

The table on the following page shows Fiscal Year 2023 data for all Districts (1, 4, 5, 6 and 8). Hours logged vary from 803 hours for District 6 to 5,330 hours for District 1. District 6 is the largest

district and it manages natural lands. District 1 is one of the smaller districts and manages formal park spaces. This disparity between natural lands management and formal park management is seen when looking at acres managed per employee (FTE). District 1 has 1 FTE per 27 acres while District 6 has 1 FTE per 271 acres. Overall, the corridor is represented by the work of 8.4 FTEs with 1 FTE per 52.6 acres.

Both the total corridor (Districts 1, 4, 5, 6, 8) and natural lands only (District 6) have fewer resources than comparable cities. In fiscal year 2023, Boise’s park system had 1 FTE per 12.5 acres and Denver’s park system had 1 FTE per 7 acres (data from correspondence with respective city staff). To meet the goals of the Emerald Ribbon Action Plan, Salt Lake City will need to increase investments in both formal park areas and natural lands.



Existing Management Resource Assessment (Fiscal Year 2023)

District*	Acres in the corridor	Total Hours Logged	FTE Estimate**	Acres per 1 FTE	Total Spending***
District 1 (Formal Parks - North)	72	5,330	2.7	27.0	\$253,830
District 4 (Formal Parks - South)	82	2,775	1.4	59.1	\$132,740
District 5**** (Green-belts and medians)	55	3,502	1.8	31.4	\$164,249
District 6 (Natural Lands)	109	803	.4	271.3	\$19,984
District 8 (RAC)	124	4,199	2.1	59.1	\$166,239
TOTAL	442	16,611	8.4	52.6	\$737,042

*Golf was not included in Cartegraph data. Golf counts for a significant amount of FTEs and spending within the corridor.

**FTE Estimate is based off of total hours logged divided by 2,000 hrs.

***Total spending includes Labor, Equipment, and Material costs

****District 5 acreage includes 12 acres of the 9-Line that was later removed from the study area.

Caveat: FTE Estimates and Total Spending are based on an analysis of Cartegraph data. This data gives us a general understanding of work tasks. Based on discussion with District Managers, Cartegraph data is likely undercounting total hours and there are likely inconsistencies in how it is being used from district to district.



PRECEDENT MANAGEMENT SYSTEMS

The following pages present successful park precedents that are relevant to the Emerald Ribbon corridor. These parks can be looked to for inspiration when considering improvements for the Emerald Ribbon.



Boise River

Boise, ID

Maintenance by **multi-jurisdiction partnerships** each managing their own trails

Adopt-the-Greenbelt program builds **community-centered care** for the corridor



Buffalo Bayou

Houston, TX

Buffalo Bayou Partnership creates and stewards parks, trails, and unique spaces, **connecting Houstonians in the city's natural waterway**

Boating has been made a central part of the waterways revitalization



Butler Hike & Bike Trail

Austin, TX

The Trail Conservancy, a non-profit, was formed in 2003 to enhance the trail.

TTC has **invested more than \$13 million** in various improvements

High Line Canal

Denver, CO

Water quality enhancements like **aesthetically pleasing connection points** for stormwater to enter the canal

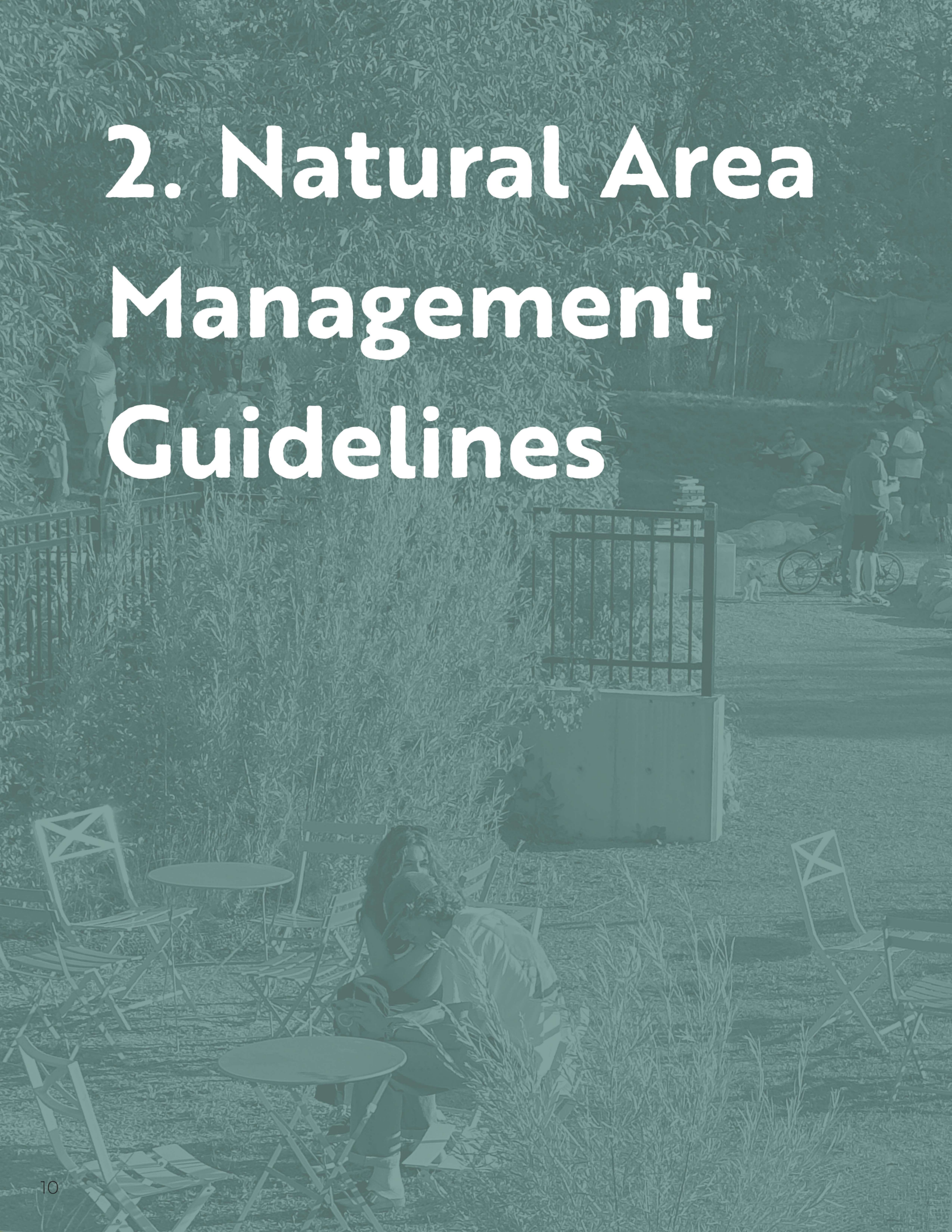


Denver Parks

Denver, CO

Green Corps was created to **provide employment and job skills** training opportunities to individuals who are new to the workforce or those seeking a career transition

2. Natural Area Management Guidelines

A teal-tinted photograph of a park scene. In the foreground, a woman is sitting on a folding chair, looking down at something in her hands. There are several other folding chairs and small round tables scattered around. In the middle ground, a black metal fence runs across the frame. Behind the fence, there are more people, some standing and some sitting. A bicycle is parked near one of the people. The background is filled with dense foliage and trees.

P12 A Focus on Nature

P13 Adaptive Management

P14 Using the Webmap

P15 Repairing Degredation & Restoring the Landscape

- Mitigation of Erosion Issues
- Reducing User Impacts
- Invasive Species Management
- Establishing Native Plants
- Green Stormwater Infrastructure
- Wildlife & Habitat Features

P38 Recommended Plant Communities

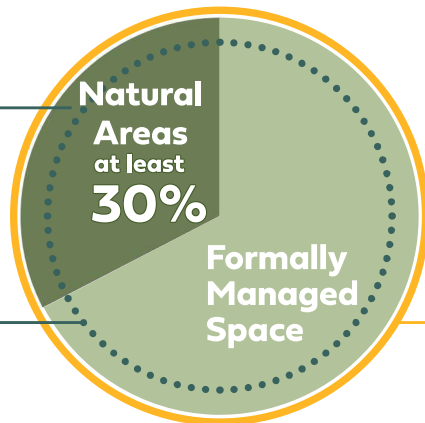
- Wetland
- Riparian
- Upland
- Formal Parks

A FOCUS ON NATURE

The Jordan River is a unique ecosystem within the Wasatch Front that supports hundreds of plant and animal species, serves as a vital ecological corridor, and contributes significantly to the Great Salt Lake. Community engagement for the Emerald Ribbon Action Plan identified restoring a vibrant natural ecosystem as the top priority. Currently, SLC Lands within the Emerald Ribbon Study Area are composed of 16% natural lands, including wetlands, riparian areas, and other managed open space. The Emerald Ribbon Action Plan, based on public input, aims to increase this to at least 30% by 2035. To achieve this, the Operation and Management Guidelines focus on restoring native species, creating room for the river, creating wetlands, restoring riparian and upland habitat, improving water quality, and providing nature experiences. This effort will also convert underutilized park and turf areas into natural lands, allowing formal parks staff to focus on priority tasks. The following pages outline a roadmap for these management actions

Proposed Natural Area Goal:

Natural Area Goal: The goal is that SLC Land will be composed of at least 30% healthy natural areas in the next 10+ years. 30% of 760 acres is 228 acres.

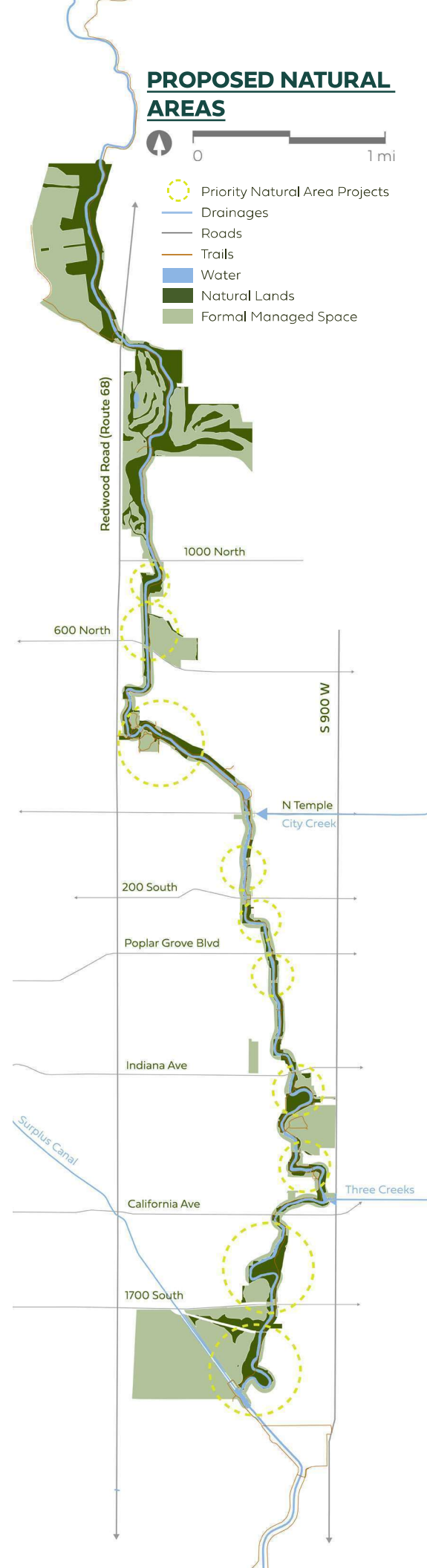


760 acres

SLC Land: SLC Land consists of all publicly-owned land managed by Salt Lake City Public Lands within the Emerald Ribbon Study Area. This designation is important for understanding the geographic extent that SLC Public Lands is directly responsible for within the corridor. **The Operations and Management Guidelines use this study area as a basis for all calculations moving forward, unless otherwise noted.**

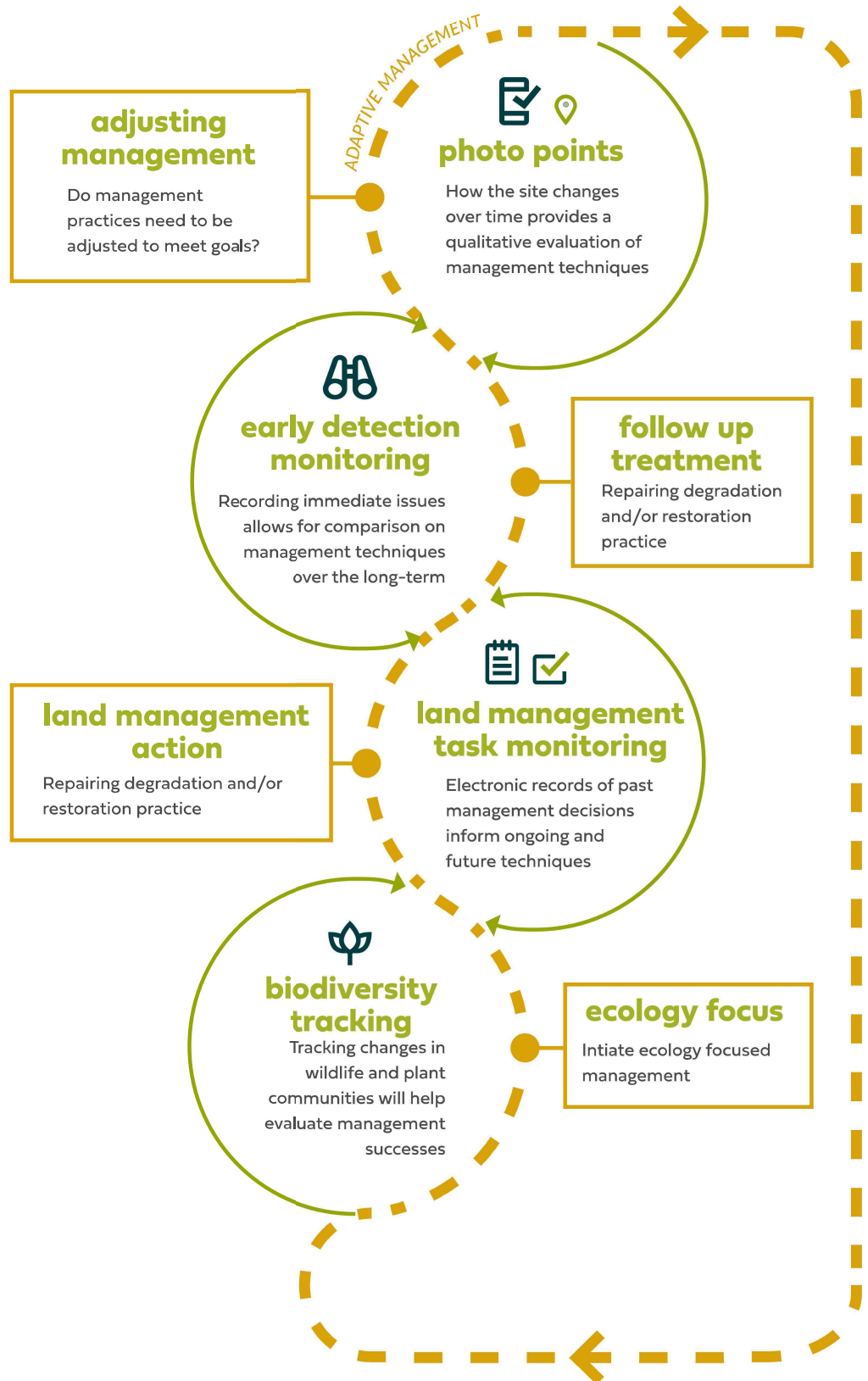
944 acres

Emerald Ribbon Study Area: The study area includes all SLC Land plus a 150 foot buffer from the shoreline of the Jordan River. This area was assessed in order to understand not only what the city owns but what adjacent opportunities and partnerships might be possible. Such opportunities include acquisition of the Rose Park driving range, partnering with SLCo to implement green infrastructure downslope of the Northwest Community Center, and riparian restoration in the Urban Core.



ADAPTIVE MANAGEMENT

Adaptive management is a process through which land stewards adjust their approach based on changing conditions and outcomes from previous management. Such adjustments are especially important in the face of potential climate change and prolonged drought. Adaptive management informs ongoing land management practices by assessing changes over time using photo points, observing new issues through early detection monitoring, reviewing successes through land management task monitoring, and tracking changes in plant and animal communities. This dynamic approach allows land managers to build off previous successes and use finite resources most efficiently to move towards long-term management goals. The "Towards Implementation" Chapter contains further guidance for adaptively managing the Emerald Ribbon corridor.



GIS MANAGEMENT TOOL: INTRO TO THE WEBMAP

[CLICK HERE](https://siglogroup.maps.arcgis.com/apps/mapviewer/index.html?webmap=bd0a66d6358b46648dd66486529e0def) to visit the webmap or copy and paste the address below:

<https://siglogroup.maps.arcgis.com/apps/mapviewer/index.html?webmap=bd0a66d6358b46648dd66486529e0def>

The ArcGIS Online webmap is a powerful tool that enables Salt Lake City Public Lands staff to explore various spatial layers more efficiently than traditional paper or digital maps. Most of the layers represent existing conditions. Understanding how they overlay within the study area and interact with other variables can empower staff to make informed decisions regarding the restoration of natural lands. Additionally, the Recommended Plant Communities layer outlines future conditions for the corridor, ensuring the city achieves its goal of maintaining 30% natural lands within the corridor. The “Nature Transition Schedule” section in the Towards Implementation chapter describes how to use the layer.

Webmap Overview:

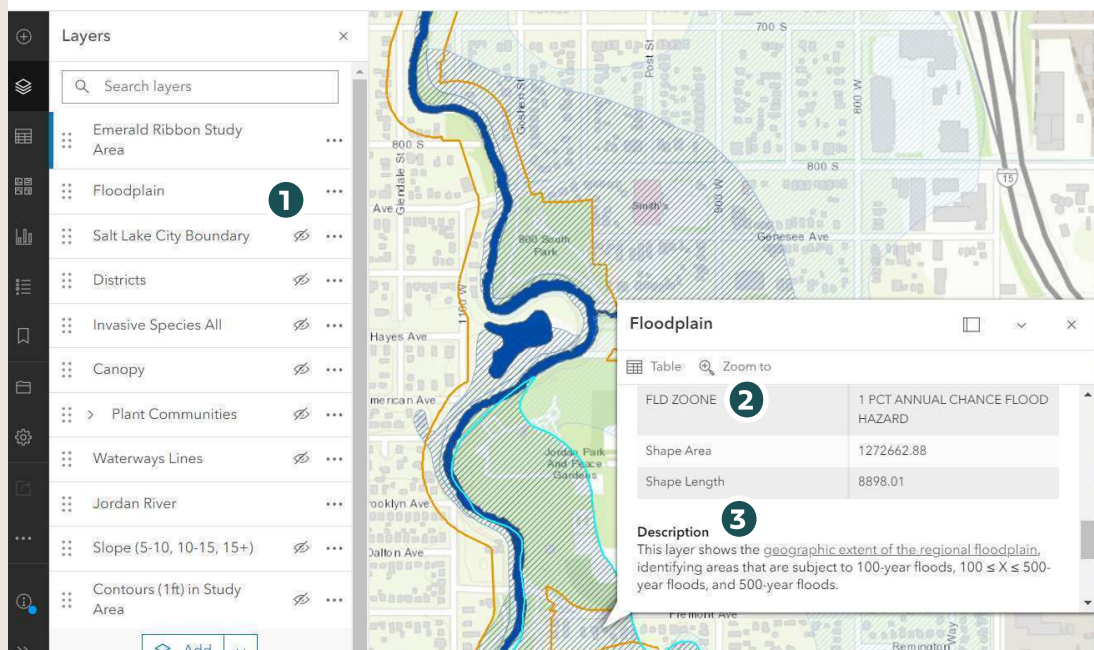
The list to the right describes important features of the webmap. SLC Public Lands staff should work with a GIS specialist on staff to understand the full utility of the tool and integrate it into their workflow. As staff become more familiar with the tool and data, it can be expanded to include ongoing management actions, helping to track and define future work in a way that supports the goals of the Action Plan.

1 Map viewer: Layers can be toggled on and off by clicking the eye icon to the right of the layer name. Use your mouse to zoom and pan through the map.

2 Layer Attributes: Discrete layer attributes can be viewed by clicking a shape, line or point in the map viewer. To see the attribute table for all shapes, lines or points within a layer, click the three dots to the right of the layer and then choose “Show Table”.

3 Metadata: There is metadata for each layer that includes a short description and source. The metadata can be accessed by clicking on the layer in the map viewer and scrolling to the bottom of the pop up window.

4 Data Maintenance: This map is intended to be maintained by SLC Public Lands. SLC Public Lands staff should ensure that layers are up to date on an annual basis. As new, relevant layers become available, they should be added to the webmap.



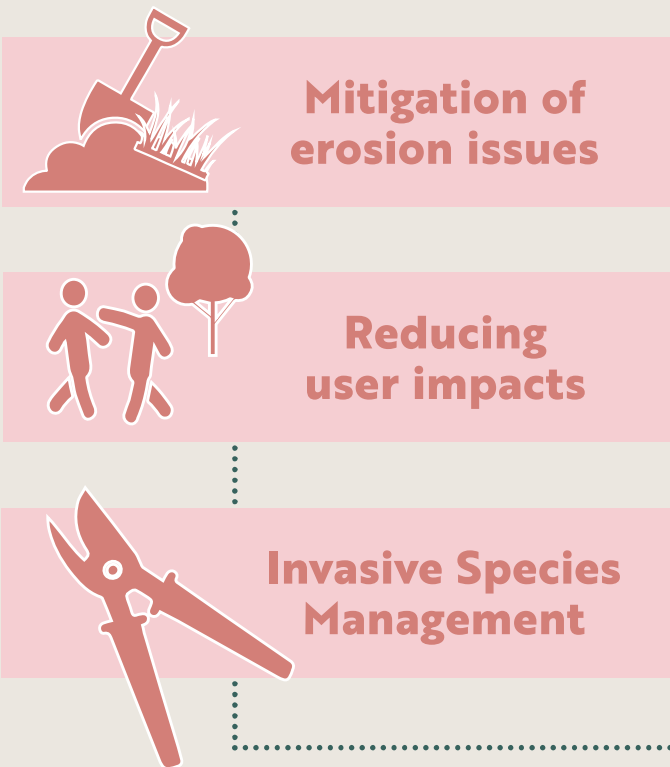
In the following sections, callouts in dotted red boxes will give further information about how to use different layers within the webmap!

REPAIRING DEGRADATION & RESTORING THE LANDSCAPE

Landscape management actions described here will move the corridor towards the goals outlined in the action plan. Major categories of actions include (1) Repairing Degradation – fixing something that is an issue – and (2) Ecological Restoration – increasing ecological health. Guidance for (1) Repairing Degradation and (2) Ecological Restoration are described in general on the following pages and can be applied to all (3) Recommended Plant Communities. Recommended Plant Community pages have information that is unique to each plant community.

(1) Repairing Degradation:

This section addresses the types of environmental degradation found within the Jordan River corridor. To restore ecological health, these issues must be addressed before or during restoration, or restoration efforts will be ineffective.



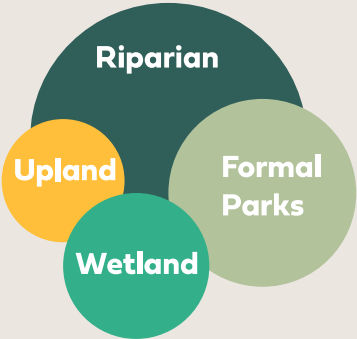
(2) Ecological Restoration:

Once degradation in an area has been addressed, native vegetation can be restored or enhanced to create healthy plant communities and habitat for wildlife, as well as a beautiful setting for human enjoyment. We provide basic guidelines for establishing and caring for native plants, increasing soil health, incorporating green infrastructure, and increasing wildlife habitat.



(3) Recommended Plant Communities:

The recommended plant community types describe the desired landscape character post restoration. These pages have information that is unique to each plant community type.





Mitigation of erosion issues

See the “Slope” layer in the webmap. Slopes that are consistently over 45-60% should be checked in the field for severe issues. The “Contours” layer can be used to understand high/low points and the movement of water over the landscape.

Human actions, infrastructure, and stormwater flows all impact the Emerald Ribbon’s ability to support stable, healthy soils. While restoration actions can reduce water flow, the localized effects of previous erosion must still be addressed. When erosion is detected, it is critical to establish stability and to limit the cause of erosion where feasible. Site inspections should occur after major snowmelt or storm events and should include monitoring of potential or known locations of sheet, rill, gully, and bank erosion.

Reduce sheet erosion

Sheet erosion is caused by a shallow layer of water that flows over the ground’s surface as a result of rainfall, irrigation, or runoff. It can be best addressed with mowing reduction, seeding, temporary fencing, jute netting, and/or straw wattles.

Reduce rill & gully erosion

Rill erosion is caused by water runoff that forms small channels in the soil as it flows down a slope. Gully erosion is a more serious form of rill erosion. These types of erosion may require regrading, strategic planting, and/or the installation of

flow barriers such as temporary (straw wattles), permanent (gabions), or flow dispersers. In some cases, erosion may be so significant that land management practices alone can not solve the issue. In these cases the incorporation of green stormwater infrastructure and potentially larger changes upstream from the site may be necessary.

Reduce Jordan River bank erosion

Minor bank erosion may be controllable with willow stakes and best management practices such as jute netting. Salt Lake County has also successfully used Christmas tree revetments for bank stabilization. The recommended actions for banks with extreme erosion along the Jordan River include soil lifts and regrading to a more gradual slope. When installing soil lifts, place them on the outside bend of the river which receives more erosive force when the flow is high. The inside bends can be graded to a 4:1 slope or an even more gradual slope. Inspect soil lifts after heavy snowmelt or rain events to ensure they are properly anchored or not damaged or undercut. The shoreline of the Jordan River is managed by Utah Forestry, Fire, and State Lands (FFSL), so all projects must be coordinated with this agency.



Bank erosion along the Jordan River



Reducing user impacts

Formalize Trails

Some informal trails can be formalized and added to the regular trail system. This process directs the flow of users to formal areas, decreases informal use, and allows for decommissioning and restoring other informal trails. For example, formalizing the informal trail on the southwest side of the river, just east of Cottonwood Park, will create a safer trail that is closely aligned with ecological goals.

Utilize Trail Design Principles

Trails must be carefully designed to accommodate the number of users, eliminate erosion, eliminate washing away of trail material, reduce impact to adjacent natural areas, and create an amazing user experience. Ecological considerations for the trails include:

- Stabilize trails within 50 ft of the water's edge.
- Stabilize trails with a downslope side of 15% or greater within 2 ft of the trail.
- Stabilize trails in low-lying or frequently flooded areas.
- Limit the number of trails running parallel to waterways that are within 50 ft of water's edge.

Formalize Water Access

Formalizing water access points is important in protecting the fragile ribbon of habitat along the water's edge. Ecological considerations for water access points include:

- Redirect traffic to formalized access points to reduce damage to the shoreline and prevent erosion.
- Consider flooding and stormwater runoff.
- Ensure access complements natural areas and allows them to thrive adjacent to the water's edge.



The "Jordan River Trail" layer in the webmap shows existing, formal trails.

Simple, knee high fencing can discourage off trail activity.

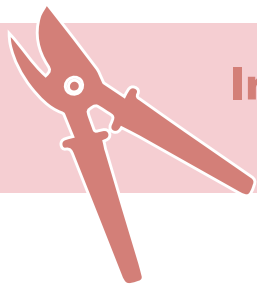
- Create robust water access points that extend perpendicular from the main trail to the water's edge, providing good access while protecting healthy riparian areas from trampling and informal use.

Utilize Signage & Fencing

All restoration projects should include a combination of knee-high fencing and signage to communicate that these native landscapes are desired and need space in order to thrive. Standardized signage and fencing materials should be used throughout the corridor. A positive public perception of natural areas is important to management and success.

Addressing Camping on the Corridor

As described in the Action Plan in Guiding Principle 5, Goal 3, Public Lands Advocates for a services-first approach paired with an increase in patrols. Supporting the unhoused population and alleviating its negative impacts on restoration activity will be key to fully realizing the objectives of the Action Plan. Activating the corridor (as described below), along with the use of fencing and signage, as well as restoration activities can all support the ecological restoration of the corridor. For instance, wetlands—an essential component of a healthy Jordan River—contribute to water quality, plant biodiversity, and wildlife habitat, but are less conducive to camping.



Invasive Species Management

The critical role of invasives management

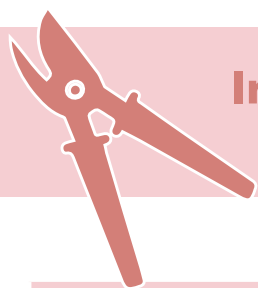
Managing invasive species is critical for maintaining and restoring the Emerald Ribbon's ecological function. Controlling invasive species is a long-term process that requires repeated treatments. The list on the following page shows 43 invasive species that have been identified within the corridor using SLC's tree database, iNaturalist observations, and field data from staff. This data is opportunistic and likely not complete, so each restoration project should be assessed for invasives on a case by case basis. Each of these species has a set of best management practices as recommended by the Salt Lake City Trails and Natural Lands Noxious and Invasive Weed Management Plan (2023).

The most recent version of the Invasive Weed Management Plan should always be used to inform invasive management methods within the Emerald Ribbon corridor.

The ideal defense against invasive species is robust native plant communities that prevent invasive species from establishing. Minimizing bare ground, decreasing soil disturbance, and increasing the number of native species reduces opportunities for invasive plants to take advantage of gaps. Therefore, open space created in a natural area by thinning, invasive species removal, or other management actions should be planted or seeded as soon as possible. Invasive species that require full sun can also be reduced by expanding woodlands that create more shaded conditions.

Recently removed Russian olive in the riparian area at the future Glendale Regional Park site.





Invasive Species Management

The "Invasive Species" layer in the webmap contains points for invasive species surveyed in the corridor. Data was collected from SLC's Tree Keeper as well as iNaturalist.

Scientific Name	Common Name	Invasive rank
Bromus tectorum	Cheatgrass	Invasive
Elaeagnus angustifolia	Russian olive	Noxious; Class 4
Hesperis matronalis	Dame's rocket	Noxious; Class 4
Aegilops cylindrica	Jointed goat grass	Noxious; Class 3
Cirsium arvense	Canada thistle	Noxious; Class 3
Conium maculatum	Poison hemlock	Noxious; Class 3
Convolvulus arvensis	Field bindweed	Noxious; Class 3
Elymus repens	Quack Grass	Noxious; Class 3
Lepidium draba	Tall Whitetop	Noxious; Class 3
Lepidium latifolium	Broadleaved pepperweed	Noxious; Class 3
Leuzea repens	Russian knapweed	Noxious; Class 3
Onopordum acanthium	Scotch thistle	Noxious; Class 3
Phragmites australis	Common reed	Noxious; Class 3
Tamarix ramosissima	Tamarisk	Noxious; Class 3
Tribulus terrestris	Puncture vine	Noxious; Class 3
Centaurea stoebe	Spotted knapweed	Noxious; Class 2
Isatis tinctoria	Dyer's woad	Noxious; Class 2
Polygonum cuspidatum	Japanese knotweed	Noxious; Class 1
Scorzonera laciniata	Cutleaf vipergrass	Noxious; Class 1
Ailanthus altissima	Tree-of-heaven	Non-listed Control Species
Ulmus pumila	Siberian elm	Non-listed Control Species
Alyssum simplex	Field Alison	Non-listed Control Species
Arctium minus	Lesser burdock	Non-listed Control Species
Asperugo procumbens	Madwort	Non-listed Control Species
Bassia scoparia	Summer-cypress	Non-listed Control Species
Cichorium intybus	Chicory	Non-listed Control Species
Cirsium vulgare	Bull Thistle	Non-listed Control Species
Dipsacus fullonum	Wild teasel	Non-listed Control Species
Iris pseudacorus	Yellow Iris	Non-listed Control Species
Juglans regia	Persian walnut	Non-listed Control Species
Lactuca serriola	Prickly lettuce	Non-listed Control Species
Medicago lupulina	Black Medick	Non-listed Control Species
Medicago sativa	Alfalfa	Non-listed Control Species
Melilotus officinalis	Yellow Sweetclover	Non-listed Control Species
Populus alba	White poplar	Non-listed Control Species
Rumex crispus	Curly dock	Non-listed Control Species
Salix fragilis	Crack willow	Non-listed Control Species
Salsola kali	Saltwort	Non-listed Control Species
Secale cereale	Rye	Non-listed Control Species
Solanum dulcamara	Bittersweet nightshade	Non-listed Control Species
Tragopogon dubius	Yellow Salsify	Non-listed Control Species
Vinca major	Greater periwinkle	Non-listed Control Species
Vinca minor	Lesser periwinkle	Non-listed Control Species

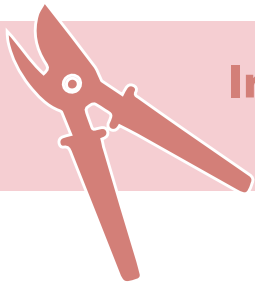
← **Highlighted species are most problematic in the corridor!**

"Invasive Rank" explained:

Invasive: Defined by the state of Utah and SLC as invasive.

Noxious, Class 2-4: Defined by the County and State of Utah as "Noxious". 4 is most problematic, 1 is least problematic.

Non-listed Control Species: A list managed by TNL of management concerns for SLC properties. Many of these species are ornamental, non-native, or weedy species that do not support TNL's goal of creating diverse, adaptable, and primarily native landscapes.



Invasive Species Management

Invasive removal priorities

Highly visible invasive issues within the corridor are **(1) Invasive trees**, specifically Siberian elm and Russian olive and **(2) Phragmites**, also known as Common Reed. Strategic approaches to removal of these species are outlined below.

Siberian elm



Russian olive



(1) INVASIVE TREES

Much of the shoreline is dominated by non-native or undesirable trees and shrubs including Russian olive, Siberian elm, tree of heaven, and tamarisk. While long-term we want to return much of the corridor to native trees to create native wildlife habitat and create a more ecologically healthy system, we also want to be judicious and recognize it takes many years for trees to mature and provide shade for trail users. To this end we recommend transitioning reaches of the river in a three phase approach:

- **Phase 1 (lasting 1 to 3 years):** Remove $\frac{1}{3}$ of invasive canopy, focusing on the removal of unhealthy trees first (if applicable). This will create pockets of light. Plant recommended canopy species in these open areas.
- **Phase 2 (lasting 1 to 3 years):** Remove an additional third of the canopy (again focusing on unhealthy trees if applicable). Plant recommended canopy species in the Phase 2 removal areas and plant understory species in the initial third.
- **Phase 3 (lasting 1 to 3 years):** Remove the remaining third, plant understory species in the second third, and seed out an herbaceous layer in the initial third. Alternatively - if the invasive trees being removed are Siberian elm, do not remove the remaining $\frac{1}{3}$ if trees are healthy and providing benefits such as bank stabilization and trail shade. Any remaining non-native trees can be removed after native canopy has been established. Regularly monitor for invasive saplings in the vicinity and treat as needed.





(2) PHRAGMITES

Phragmites is an invasive, reed-like grass that grows in wet areas along the banks of the Jordan River. As compared to other stretches of the river, Public Lands, and its partners have done a relatively good job managing it within the corridor. It however continues to be a persistent problem. It can be treated mechanically and chemically. Public Lands will likely have the best outcome with a multi-pronged approach that varies based on the specific location and circumstances.

Phragmites



- **Chemical Treatment:** Following Salt Lake City IPM practices, utilize a water-safe herbicide to treat above ground material in late Summer.
- **Mechanical Approach:** Can occur after herbicide treatment or instead of it. At minimum, remove above ground biomass about 30 days after herbicide has been applied. Where feasible, remove below ground biomass.
- **Flooding:** By changing the water levels within the corridor, Phragmites can lose its competitive edge during the summer growing season. Water depth greater than 12" will inhibit the lateral spread of phragmites through rhizomes and stolons.
- **Competition:** Establish bulrush and canopy trees to compete with Phragmites after treatment.
- **Changing Grade:** Consider areas dominated by Phragmites as potential wetland restoration zones. Utilize appropriate methods to lower the grade so that the water table is at or near the surface, and replant areas previously occupied by Phragmites with recommended wetland species.



Establishing Native Plants

Planting and seeding can speed repair of ecological damage by quickly stabilizing soils, increasing diversity, shading out invasive plants, and better defining the user experience. Factors to consider when deciding between planting and seeding include availability of irrigation, moisture in soils, visibility of the site, presence of invasive species (including in the seed bank), cost of labor and resources, and whether natural recovery is a realistic option. Planting approaches for trees, shrubs, and forbs range from larger container trees that need substantial irrigation and establishment support to small bare root seedlings that require fewer resources but will have a higher mortality rate. For woody species, in most cases, smaller container plants will be the most efficient use of resources. During the establishment period (approximately 3 years), access should be restricted from seeded/planted areas to protect the developing seedlings and saplings.

An initial list of recommended plants can be found in the following pages. This list was created based on healthy native plant communities in

Northern Utah. The plants on the list meet the following criteria:

- Native to Utah—historically occurring without introduction in Northern Utah, with plants found in surrounding ecoregions considered on a case-by-case basis;
- Plant material should be grown within 250 miles of the Emerald Ribbon;
- Available through the local nursery trade or Native Plant Society groups;
- Successfully used in restoration projects within Northern Utah;
- Add diversity to the Emerald Ribbon's current plant communities; and/or
- Recommended for this or similar projects by arborists, ecologists, or land management professionals.

As the SLC team implements further projects with a focus on the use of native plants, this list should be revised to reflect that experience. This should be considered a working list that changes over time.

A lovely mix of native wetland and upland plants at Fife Wetland





Establishing Native Plants

Prioritize soil health

Soils within the corridor have been altered for over 150 years. Addressing soil compaction, composition, and biota are critical to the long-term care of the corridor as well as the success of restoration projects. Addressing soil issues will result in increased plant health, water infiltration, water quality, and a more robust corridor. For all restoration projects, it is recommended to test soil compaction, chemistry, and biotics before planting with a focus on salinity and sodium levels that can both be issues in the corridor. Utah State University Analytical Laboratories is a great resource for running these tests and interpreting results. Depending on results, soil should be decompacted and amended before planting or seeding occurs.

For planting projects, the area immediately adjacent to the planted material should be decompacted and amended as needed to create mediums appropriate for good root growth and water infiltration. This can be done by utilizing a planting hole twice as large as the root ball and backfilling with a combination of compost and site soil. In addition, trenching between tree wells, can promote root growth throughout the area of planting and mimic connections between trees found in established woodlands. These trenches can be filled with the same combination of site soil and compost. Additional soils remaining can be used to create berms that hold or direct water to the tree wells.

For seeding projects, it is likely soil testing will suggest the need for decompaction and compost. Compost includes organic matter utilized by plants for growth, increases soil texture that supports better water infiltration,

and reduces issues with salinity. A combination of ripping the soil (likely 6 to 12" and potentially more depending on site and desired outcome), along with the addition of amendments into the first 4" of soil as a starting point for seeding projects can provide a fertile soil bed for germination and plant growth.

Optimize Irrigation

While irrigation increases costs and the ecological footprint of projects, it also increases survivability, and is often necessary in highly visible, highly used areas, but less necessary in more remote parts of the site. Irrigation can be critical during the first three years of establishment, especially during the dry summer months. Irrigation should be designed with a focus on water conservation to reduce the overall amount of irrigation, including reducing potable water use. However, in some cases, the cost of installing required irrigation may be prohibitive for a project.

Consult SLC irrigation specialists on all new irrigation projects and take advantage of the new smart watering system for SLC Public Lands. The following options can be considered in order to take advantage of resources available along the Jordan River:

- **Pumping from the river:** In some cases, low-flow, solar-powered systems can be utilized to irrigate sections of the corridor. These systems can help restore the hydrology of the corridor while reducing costs and waste associated with using potable water.
- **Grading ground plane to be closer to water table:** In places where wetland and riparian restoration are to occur, grading closer to the water table reduces the need for irrigation, while at the same time increasing floodplain volume, and wetter systems along the river that have been historically filled in.



Establishing Native Plants

Utilizing Container Plants

Live plantings help to stabilize soils, increase diversity, shade out invasive species, and better define the user experience. Live plantings can consist of trees, understory, groundcover, or any combination of the three. In all cases, the following guidelines are critical:

- **Prepare for success:** Prepare the area for planting by mitigating erosion issues, reducing user impacts, and managing invasives. The plant palette must be determined with careful consideration of the typical site conditions (i.e., soil moisture and light).
- **Establish oversight:** Planting should be overseen by a trained individual who will ensure that the plants are handled properly and that the right species and number of plants are installed using appropriate planting techniques.
- **Check plant quality:** Plants should be inspected when they are delivered to the site and again before going into the ground to ensure that they meet growth specifications, are healthy, and have no weeds growing in the pots.
- **Match plant material to use patterns:** Where new plantings occur along trails or other high-use areas, ensure that plantings are protected or can withstand expected use. Where formal access to the water's edge is planned, ensure plantings will discourage informal pathways. Tall growing bunchgrasses can both stabilize the shoreline edge and discourage individuals from trespassing.
- **Plant the right size:** Plants should be the smallest size suitable for the circumstances. Small caliper trees and smaller potted plants establish faster and are less expensive, while larger plants are ideal for areas where trampling or aesthetics are of immediate concern.
- **Plant in the right place:** The recommended plant list found in the following pages includes appropriate plant communities for each species. Take advantage of shade vs. sun, microtopography and high moisture areas to increase plant species diversity. Beyond the distinctions in the recommended plant list, an experienced professional should facilitate decisions about where particular plants are placed. This will be particularly true for any potential rain gardens, swales, or wetlands. Planting trees in clumps or mottes rather than evenly spaced creates a more natural aesthetic. Spacing between trunks can range in riparian and upland areas from 10 to 30 ft with smaller spacing recommended for smaller species.
- **Plant at the right time of year:** Planting should occur in early spring (April - May) or early fall (September - October) to allow plants to establish while the ground is more likely to be moist and temperatures are moderate.
- **Irrigation:** For restoration projects, creative solutions should be evaluated to reduce the overall costs of irrigation systems. In general, live plantings should be watered through establishment that can last up to three years. For smaller plant material, drip irrigation can be used, while large plant material can use bubblers.
- **Continue care:** Whether trees, understory, or groundcover, planting is only the first step. Long-term success requires that the new plants have sufficient water, are not being outcompeted by invasive species, are not impacted by erosion issues, and are protected from trail users.



Establishing Native Plants

Utilizing Seeding

Seeding can be used independently or to complement live plantings. Seeding is most effective in areas where trampling is unlikely, where the seed will not be washed away, and where live planting is impractical. Proper site preparation is crucial for seeding success; refer to the invasive species management, erosion control, soil preparation, and irrigation sections above for guidance. When implemented successfully, seeding is a cost-effective method to restore or enhance an area.

While restoring or increasing the diversity of plant species is encouraged across all plant communities within the Emerald Ribbon, seeding large areas may not always be feasible due to constraints like cost, labor, site access, or time. To reduce labor and cost, “seed islands” can be utilized. A seed island is a small, strategically planted or seeded area intended to promote the spread of vegetation into the surrounding landscape. These areas can be as small as 8 ft by 8 ft. Multiple seed islands can be used to create a patchwork over large areas. The seed island should be free of invasive species, have amended soil if necessary, and erosion control measures in place. This concept can be applied in any restoration zone, and all planting and seeding efforts should be designed to act as seed islands for adjacent areas.

Important factors for seeding include:

- **Seed Sources:** Seeds should come from a reputable seed distributor that specializes in native species. Ensure the seeds are tested for purity and are free of weeds.
- **Address Erosion and Invasive Species:** As mentioned earlier, controlling erosion and invasive species is critical before seeding to create a suitable environment for germination.
- **Prepare the Soil:** Prepare the soil to support good seed-to-soil contact and a healthy growing medium as described above.
- **Seed at the Right Time:** For best results seed in fall. This timing allows for winter stratification and takes advantage of winter precipitation.
- **Use Proper Seeding Rates:** Seeding rates will vary based on seed type and whether the seeding is adding diversity to an area with existing vegetation, complementing live plantings, or establishing vegetation in an area prepped specifically for seeding. Higher seeding rates can suppress undesirable species. While seeding rates can vary, a general guideline for budgeting is to start with 20 lbs per acre.
- **Spread the Seed:** Seed dispersal methods will depend on the site conditions. For relatively flat areas, a no-till drill or seed drill is recommended. In areas with steep slopes, hydromulching may be necessary. For sites that are difficult to access or have budget constraints, a push-behind or hand-operated broadcast spreader can be used in combination with a roller or other means to press the seed into the soil. Seed to soil contact is one of the main drivers of germination success and thus how the seed is dispersed is critical.
- **Determine Irrigation Needs:** Irrigation is essential to ensure that germinating seedlings remain hydrated and that soil moisture is maintained during establishment. This is particularly important in areas with high visibility or intensive use.



Establishing Native Plants

*Highly recommended species include species that have been observed doing well in similar landscapes and/or were recommended by SLC city staff, county watershed guidelines, and JRC

NATIVE PLANT LIST: FORBS (1 OF 3)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Achillea millefolium</i>	Yarrow	X		X	X
<i>Alkali mallow</i>	Malvella leprosa			X	
<i>Antennaria microphylla</i>	Common pussytoe			X	
<i>Apocynum androsaemifolium</i>	Spreading dogbane			X	
<i>Apocynum cannabinum</i>	Hemp dogbane	X		X	X
<i>Aquilegia chrysantha</i>	Golden columbine	X	X	X	
<i>Aquilegia coerulea</i>	Blue columbine			X	
<i>Aquilegia fomosa</i>	Western columbine			X	
<i>Argemone munita</i>	Flatbud pricklypoppy			X	
<i>Asclepias asperula</i>	Antelope horn milkweed			X	
<i>Asclepias fascicularis</i>	Mexican whorled milkweed	X	X	X	
<i>Asclepias incarnata</i>	Swamp milkweed	X	X		X
<i>Asclepias speciosa</i>	Showy milkweed	X	X	X	X
<i>Astragalus utahensis</i>	Utah milkvetch			X	
<i>Balsamorhiza sagittata</i>	Arrowleaf balsamroot			X	X
<i>Castilleja chromosa</i>	Desert paintbrush			X	X
<i>Chamaenerion angustifolium</i>	Fireweed			X	
<i>Cirsium undulatum</i>	Wavyleaf thistle	X		X	
<i>Cleome serrulata</i>	Rocky Mountain beeplant			X	
<i>Coreopsis lanceolata</i>	Lance-leaved coreopsis	X		X	
<i>Cymopterus longipes</i>	Longstalk springparsley			X	
<i>Dalea purpurea</i>	Purple prairie clover			X	
<i>Datura wrightii</i>	Sacred datura			X	X
<i>Descurainia pinnata</i>	Wetsern tansymustard				
<i>Dieteria canescens</i>	Hoary tansyaster			X	
<i>Epilobium brachycarpum</i>	Panicled willowherb	X	X	X	X
<i>Epilobium canum</i>	California fuschia			X	
<i>Epilobium ciliatum</i>	Fringed willowherb	X	X	X	
<i>Erigeron divergens</i>	Spreading fleabane			X	
<i>Erigeron formosissimus</i>	Beautiful fleabane			X	
<i>Erysimum capitatum</i>	Western wallflower			X	



Establishing Native Plants

NATIVE PLANT LIST: FORBS (2 OF 3)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Eschscholzia californica</i>	California poppy			X	
<i>Euthamia occidentalis</i>	Tall goldenrod	X	X	X	X
<i>Gaillardia aristata</i>	Blanket flower			X	X
<i>Gaillardia pinnatifida</i>	Hopi blanketflower			X	
<i>Gaillardia pulchella</i>	Indian blanket	X		X	X
<i>Glycyrrhiza lepidota</i>	American licorice	X	X		X
<i>Grindelia squarrosa</i>	Curlycup gumweed	X		X	
<i>Gutierrezia sarothrae</i>	Broom snakeweed			X	
<i>Hedysarum boreale</i>	Utah sweetvetch			X	X
<i>Helenium autumnale</i>	Sneezeweed	X	X	X	
<i>Helianthus nuttallii</i>	Nuttalls sunflower	X	X	X	X
<i>Helianthus petiolaris</i>	Prairie sunflower				X
<i>Heterotheca villosa</i>	Hairy false goldenaster			X	X
<i>Hydrophyllum capitatum</i>	Ballhead waterleaf			X	
<i>Linum lewisii</i>	Lewis flax			X	X
<i>Lomatium dissectum</i>	Fernleaf biscuitroot			X	
<i>Maianthemum racemosum</i>	Feathery false lily-of-the-valley	X	X	X	X
<i>Mentzelia laevicaulis</i>	Mentzelia laevicaulis			X	
<i>Mirabilis multiflora</i>	Desert four o'clock			X	X
<i>Oenothera caespitosa</i>	Tufted evening primrose			X	
<i>Oenothera elata</i>	Tall evening primrose	X	X	X	
<i>Oenothera macrocarpa</i>	Bigfruit evening primrose			X	X
<i>Oenothera pallida</i>	Pale evening primrose			X	
<i>Oenothera speciosa</i>	Pink evening primrose			X	X
<i>Osmorhiza occidentalis</i>	Western sweetroot			X	X
<i>Penstemon ambiguus</i>	Bush penstemon			X	
<i>Penstemon cyananthus</i>	Wasatch beardtongue			X	
<i>Penstemon eatonii</i>	Firecracker penstemon			X	X
<i>Penstemon palmeri</i>	Palmer's penstemon			X	X
<i>Penstemon rydbergii</i>	Rydberg's penstemon	X		X	
<i>Penstemon scarious v. albifluvis</i>	White River penstemon			X	



Establishing Native Plants

NATIVE PLANT LIST: FORBS (3 OF 3)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Penstemon strictus</i>	Rocky Mountain penstemon			X	
<i>Penstemon subglaber</i>	Great Basin penstemon			X	
<i>Phacelia linearis</i>	Threadleaf phacelia			X	
<i>Phlox hoodii</i>	Spiny phlox			X	
<i>Phlox longifolia</i>	Longleaf phlox			X	X
<i>Phlox subulata</i>	Moss phlox			X	
<i>Physalis longifolia</i>	Longleaf groundcherry			X	
<i>Potentilla gracilis</i>	Slender cinquefoil	X	X	X	
<i>Prunella vulgaris</i>	Common selfheal	X		X	
<i>Ranunculus occidentalis</i>	Western buttercup	X	X	X	
<i>Ratibida columnifera</i>	Upright prairie coneflower			X	
<i>Rubus parviflorus</i>	Thimbleberry	X	X		
<i>Rudbeckia hirta</i>	Black Eyed Susan	X		X	
<i>Solanum rostratum</i>	Buffalo-bur			X	
<i>Solidago canadensis</i>	Canada goldenrod			X	
<i>Solidago velutina</i>	Velvet goldenrod			X	X
<i>Sphaeralcea ambigua</i>	Desert globemallow			X	X
<i>Sphaeralcea coccinea</i>	Scarlet globemallow			X	X
<i>Sphaeralcea munroana</i>	Munro's orange globemallow			X	
<i>Sphaeralcea parvifolia</i>	small-leaf globemallow			X	
<i>Sphaeralcea grossulariaefolia</i>	Gooseberry globemallow			X	X
<i>Stephanomeria occulata</i>	Disguised waterlettuce			X	
<i>Symphyotrichum ascendens</i>	Everywhere Aster	X		X	X
<i>Symphyotrichum laeve</i>	Smooth blue aster			X	
<i>Verbena hastata</i>	Swamp verbena	X	X		
<i>Wyethia amplexicaulis</i>	Mule-ears	X	X	X	
<i>Wyethia scabra</i>	Badlands mule-ears			X	



Establishing Native Plants

NATIVE PLANT LIST: GRASSES AND SEDGES (1 OF 3)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Achnatherum hymenoides</i>	Indian ricegrass			X	X
<i>Aristida purpurea</i>	Purple threeawn			X	X
<i>Bolboschoenus maritimus</i>	Alkali bulrush		X		X
<i>Bouteloua gracilis</i>	Blue grama			X	X
<i>Bromus ciliatus</i>	Fringed brome	X	X	X	
<i>Buchloe dactyloides</i>	Buffalograss			X	X
<i>Calamagrostis canadensis</i>	Bluejoint	X	X		
<i>Carex aquatilis</i>	Water sedge		X		
<i>Carex atheroides</i>	Slough Sedge	X	X		X
<i>Carex nebrascensis</i>	Nebraska nutsedge		X		X
<i>Carex pellita</i>	Woolly sedge		X		X
<i>Carex praegracilis</i>	Clustered field sedge	X	X		X
<i>Carex stipata</i>	Awlfruited sedge		X		X
<i>Chasmanthium latifolium</i>	Northern sea oats	X	X	X	
<i>Cyperus erythrorhizos</i>	Redroot flatsedge		X		
<i>Cyperus squarrosus</i>	Bearded flatsedge		X		
<i>Deschampsia cespitosa</i>	Tufted hairgrass			X	
<i>Dichanthelium oligosanthos</i>	Heller's rosette grass	X		X	
<i>Distichlis spicata</i>	Saltgrass	X	X	X	X
<i>Distichlis stricta</i>	Desert saltgrass				X
<i>Eleocharis palustris</i>	Common spikerush		X	X	
<i>Elymus canadensis</i>	Canada wildrye	X	X		
<i>Elymus glaucus</i>	Blue wildrye	X		X	X
<i>Elymus lanceolatus ssp. psam-mophilus</i>	Streambank wheatgrass	X		X	X
<i>Elymus trachycaulus ssp. Tra-chycaulus</i>	Slender wheatgrass	X		X	X
<i>Elymus wawawaiensis</i>	Snake River wheatgrass	X		X	X
<i>Eragrostis hypnoides</i>	Teal lovegrass		X	X	
<i>Festuca arizonica</i>	Arizona fescue			X	
<i>Festuca idahoensis</i>	Idaho fescue	X		X	
<i>Festuca rubra</i>	Native red fescue	X	X	X	
<i>Glyceria striata</i>	Fowl mannagrass		X	X	
<i>Hesperostipa comata</i>	Needle and thread			X	
<i>Hordeum brachyantherum</i>	Meadow barley	X	X	X	



Establishing Native Plants

NATIVE PLANT LIST: GRASSES AND SEDGES (2 OF 3)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Hordeum pusillum</i>	Little barley	X		X	
<i>Juncus arcticus</i>	Arctic rush		X	X	X
<i>Juncus balticus</i>	Baltic rush	X	X		X
<i>Juncus bufonius</i>	Toad rush	X	X	X	
<i>Juncus tenuis</i>	Poverty rush	X	X		
<i>Juncus torreyi</i>	Torrey's rush	X	X		X
<i>Koeleria macrantha</i>	Prairie Junegrass			X	
<i>Leersia oryzoides</i>	Rice cutgrass	X	X		
<i>Leymus cinereus</i>	Great Basin wildrye	X	X		X
<i>Leymus salinus</i>	Salina wildrye			X	X
<i>Leymus triticoides</i>	Creeping wildrye	X	X	X	X
<i>Muhlenbergia asperifolia</i>	Scratchgrass	X	X	X	X
<i>Muhlenbergia rigens</i>	Deergrass	X	X		X
<i>Munroa squarrosa</i>	False buffalograss			X	
<i>Panicum virgatum</i>	Switchgrass	X	X	X	
<i>Pascopyrum smithii</i>	Western wheatgrass	X	X		
<i>Pleuraphis jamesii</i>	Galleta grass			X	X
<i>Poa secunda</i> ssp. <i>sandbergii</i>	Sandberg bluegrass			X	X
<i>Pseudoroegneria spicata</i>	Bluebunch wheatgrass			X	X
<i>Schizachyrium scoparium</i>	Little bluestem	X		X	X
<i>Schoenoplectus acutus</i>	Hardstem bulrush		X		X
<i>Schoenoplectus americanus</i>	American three-square bulrush		X		X
<i>Schoenoplectus pungens</i>	Common threesquare		X		
<i>Schoenoplectus tabernaemontani</i>	Softstem bulrush		X		
<i>Scirpus microcarpus</i>	Small-fruit bulrush		X		X
<i>Sparganium eurycarpum</i>	Broadfruit bur-reed		X		X
<i>Spartina gracilis</i>	Alkali cordgrass	X	X	X	X
<i>Spartina pectinata</i>	Prairie cordgrass		X		X
<i>Sporobolus airoides</i>	Alkali sacaton	X		X	X
<i>Sporobolus cryptandrus</i>	Sand dropseed	X		X	X
<i>Sporobolus wrightii</i>	Giant dropseed	X		X	
<i>Stipa hymenoides</i>	Indian ricegrass			X	X



Establishing Native Plants

NATIVE PLANT LIST: GROUNDCOVER

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Petrophytum caespitosum</i>	Rockmat			X	

NATIVE PLANT LIST: CACTUS AND SUCCULENTS

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Agave utahensis</i>	Utah agave			X	
<i>Echinocereus triglochidiatus</i>	Claret cup cactus			X	
<i>Opuntia basilaris</i>	Beavertail cactus			X	
<i>Opuntia diploursina</i>	Mojave pickly pear			X	
<i>Opuntia engelmannii</i>	Cactus apple			X	
<i>Opuntia fragilis</i>	Brittle prickly pear			X	
<i>Opuntia polyacantha</i>	Plains prickly pear			X	
<i>Opuntia polyacantha</i> var. <i>erinacea</i>	Grizzlybear prickly pear			X	
<i>Sesuvium verrucosum</i>	Western sea-purslane			X	
<i>Yucca baccata</i>	Banana yucca			X	
<i>Yucca harrimaniae</i>	Harriman's yucca			X	

NATIVE PLANT LIST: VINES

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Campsis radicans</i>	Trumpet creeper			X	
<i>Clematis ligusticifolia</i>	Western virgin's bower	X	X	X	X
<i>Cucurbita foetidissima</i>	Stinking gourd			X	
<i>Vitis labrusca</i>	Fox grape	X		X	



Establishing Native Plants

NATIVE PLANT LIST: SHRUBS (1 OF 2)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Amelanchier alnifolia</i>	Saskatoon	X		X	
<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	X		X	
<i>Amelanchier utahensis</i>	Utah serviceberry	X		X	
<i>Artemisia arbuscula</i>	Low sagebrush			X	
<i>Artemisia ludoviciana</i>	Wormwood sagebrush			X	X
<i>Artemisia tridentata</i> var. <i>tridentata</i>	Basin Big Sagebrush			X	
<i>Artemisia tridentata</i> var. <i>wyomingensis</i>	Big sagebrush			X	X
<i>Artemisia filifolia</i>	Sand sagebrush			X	
<i>Atriplex canescens</i>	Fourwing saltbrush			X	X
<i>Atriplex confertifolia</i>	Shadscale			X	X
<i>Berberis fendleri</i>	Fendler's barberry			X	
<i>Chamaebatiaria millefolium</i>	Fernbush			X	X
<i>Chrysothamnus viscidiflorus</i>	Yellow rabbitbrush			X	X
<i>Cornus sericea</i>	Redosier dogwood	X			X
<i>Cowania stansburyana</i>	Stansbury's cliffrose			X	X
<i>Crataegus douglasii</i>	Black hawthorn	X	X	X	
<i>Crataegus douglasii</i> var. <i>rivularis</i>	River hawthorn	X			X
<i>Dasiphora fruticosa</i>	Shrubby cinquefoil	X	X		X
<i>Ephedra viridis</i>	Mormon tea			X	
<i>Ericameria nauseosa</i>	Rubber rabbitbrush				X
<i>Eriogonum corymbosum</i>	Crispleaf buckwheat			X	
<i>Fallugia paradoxa</i>	Apache plume				X
<i>Forestiera neomexicana</i>	Stretchberry			X	
<i>Garrya flavescens</i>	Silktassel bush			X	
<i>Heliotropium curassavicum</i>	Salt heliotrope	X		X	
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper			X	
<i>Krascheninnikovia lanata</i>	Winterfat			X	X
<i>Mahonia repens</i>	Creeping Oregon grape			X	X
<i>Monardella odoratissima</i>	Fragrant monardella	X		X	
<i>Nolina microcarpa</i>	Beargrass			X	X



Establishing Native Plants

NATIVE PLANT LIST: SHRUBS (2 OF 2)

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Paxistima myrsinites</i>	Oregon boxwood	X		X	
<i>Pinus edulis</i>	Colorado pinyon			X	
<i>Prunus virginiana melanocarpa</i>	Common chokecherry			X	X
<i>Purshia glandulosa</i>	Mojave bitterbrush			X	
<i>Purshia mexicana</i>	Cliffrose			X	
<i>Purshia tridentata</i>	Antelope bitterbrush			X	X
<i>Quercus turbinella</i>	Turbinella oak			X	
<i>Rhus aromatica</i>	Fragrant sumac	X		X	X
<i>Rhus glabra</i>	Smooth sumac			X	X
<i>Rhus glabra cismontana</i>	Dwarf Smooth Sumac			X	X
<i>Rhus trilobata</i>	Oakleaf Sumac	X		X	
<i>Rhus typhina</i>	Staghorn sumac			X	
<i>Ribes aureum</i>	Golden currant	X	X	X	X
<i>Rosa woodsii</i>	Wood's rose	X		X	X
<i>Salix exigua</i>	coyote willow	X			
<i>Sarcobatus vermiculatus</i>	Black greasewood	X		X	X
<i>Shepherdia argentea</i>	Silver buffaloberry	X		X	X
<i>Symphoricarpos albus</i>	Common snowberry	X		X	X
<i>Symphoricarpos oreophilus</i>	Mountain snowberry	X		X	X
<i>Symphoricarpos rotundifolius</i>	Roundleaf snowberry	X		X	



Establishing Native Plants

NATIVE PLANT LIST: TREES

Scientific Name	Common Name	Riparian	Wetland	Upland	Highly Recommended
<i>Acer glabrum</i>	Rocky Mountain Maple	X		X	
<i>Acer grandidentatum</i>	Bigtooth maple	X		X	X
<i>Acer negundo</i>	Box elder	X	X	X	X
<i>Betula occidentalis</i>	Water birch	X	X		X
<i>Catalpa speciosa</i>	Northern catalpa	X		X	
<i>Celtis occidentalis</i>	Common hackberry	X		X	
<i>Celtis reticulata</i>	Netleaf hackberry	X		X	X
<i>Cercis occidentalis</i>	Western redbud			X	X
<i>Cercocarpus ledifolius</i>	Curleaf Mountain Mahogany			X	X
<i>Gleditsia triacanthos</i>	Honey locust			X	
<i>Juniperus communis</i>	Common juniper				
<i>Juniperus osteosperma</i>	Utah Juniper			X	X
<i>Platanus occidentalis</i>	American sycamore	X	X		
<i>Populus angustifolia</i>	Narrowleaf cottonwood	X	X		X
<i>Populus fremontii</i>	Fremont Cottonwood	X	X		
<i>Prunus virginiana</i>	Chokecherry	X			X
<i>Quercus gambelii</i>	Gambel oak			X	X
<i>Quercus macrocarpa</i>	Bur oak	X		X	
<i>Salix amygdaloides</i>	Peachleaf willow	X	X		X
<i>Salix bebbiana</i>	Bebbs Willow	X	X		X
<i>Salix exigua</i>	Narrowleaf Willow	X	X		
<i>Salix lasiandra</i>	Shinning willow	X	X		X



Green Stormwater Infrastructure

The “Storm Drain Outfall” layer in the webmap shows outfalls that would benefit from green infrastructure

Green stormwater infrastructure can address one of the major causes of water quality issues and erosion: fast-moving water often coming out of outfalls, off roads, parking lots, and buildings. Rain gardens, swales, berms, and grading changes can slow water flowing across a landscape. When water moves more slowly, it has longer to soak into the soil, reducing erosion, preventing sediment and pollutants from entering streams and springs, and increasing groundwater supplies. Green infrastructure offers other benefits, including increased river flow and wildlife habitat. In addition, a well-planned and designed green stormwater installation can heighten the aesthetics and quality of the user experience in these areas. The green infrastructure implemented in the corridor can serve as a model for similar work needed further upstream to address water quality issues throughout the Jordan River and its tributaries.

The stormwater wetlands at Cornell Lift Station are a good example of using stormwater to support unique vegetation while filtering urban runoff.

Where to Implement Green Infrastructure

The biggest opportunities for green infrastructure within the corridor occurs in conjunction with outfalls that release stormwater into the Jordan River. Areas along the Jordan River that are near an outfall and have sufficient space should be prioritized as areas to implement green infrastructure. The stormwater outfall layer in the webmap shows outfalls that meet this criteria. Wetland recommended plant communities in the webmap have been added to correspond to these prioritized storm drains.

Aside from outfalls, green infrastructure should be prioritized in areas experiencing erosion issues. These areas may have standing water after heavy rain, periodically carry large volumes of stormwater, are open with no active recreation, have significant water-related erosion, and/or are near impervious surfaces that create runoff.

It is recommended that with larger green infrastructure projects, an interpretive element is included. This element can depict the flow of stormwater through the city and the importance of filtering it before it enters the river.





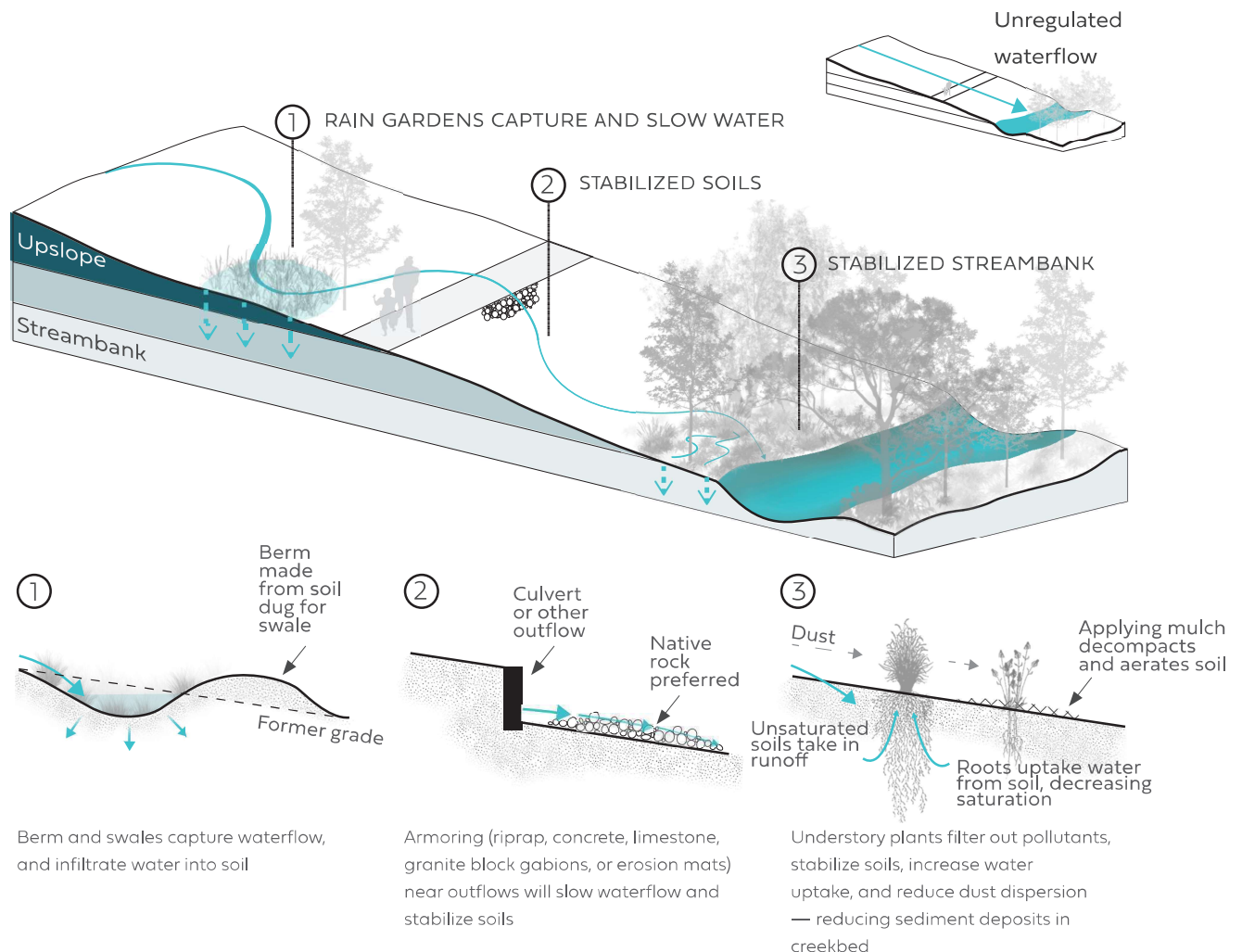
Green Stormwater Infrastructure

Integrating rain gardens, swales, & berms

A rain garden is a depression where water can pond after rain and soak in gradually. Swales are linear rain gardens, sometimes with water flowing through them. Berms are earthen mounds that reduce downslope travel of water and allow for infiltration. Swales and Berms are often used together to create an effective chain of rain gardens. Swales can be created

from existing erosion paths (unless the erosion is too severe) either by hardening the path and directing water to a depression, or by slowing and spreading water flow to allow it to soak in. Both rain gardens and swales work best over soils that absorb water quickly. They also require plants that can withstand repeated wet-dry cycles.

Green Infrastructure Methods



Wildlife & Habitat Features

The Emerald Ribbon serves as a refuge and a riparian corridor for wildlife in Salt Lake City's developed westside. The study area is home to over 255 bird species and more than 150 species of reptiles, amphibians, and mammals. By addressing degradation issues, changing land management practices, and restoring natural areas per the recommendations in this report, the wildlife habitat within the study area will increase substantially in size with an associated increase in food and shelter. Continued enhancement of the natural areas and creation of more resilient native plant communities, with an emphasis on

plants that provide wildlife food or habitat, will encourage a greater amount and diversity of wildlife to inhabit the study area.

Management and restoration efforts will play a direct role in the enhancement of wildlife habitat. Aquatic plants will provide valuable food and cover for invertebrates, fish, and other wildlife. Riparian trees will increase shade to help regulate temperature on hot summer days and provide important refuge for fish. Large woodland patches will provide more cover and food, improving habitat for numerous animals.

Common Muskrat
Ondatra zibethicus



Great Blue Heron
Ardea herodias



Red-winged Blackbird
Agelaius phoeniceus



Images from <https://tracyaviary.org/nature-center/about-pia-okwai/wildlife-of-the-jordan-river/>

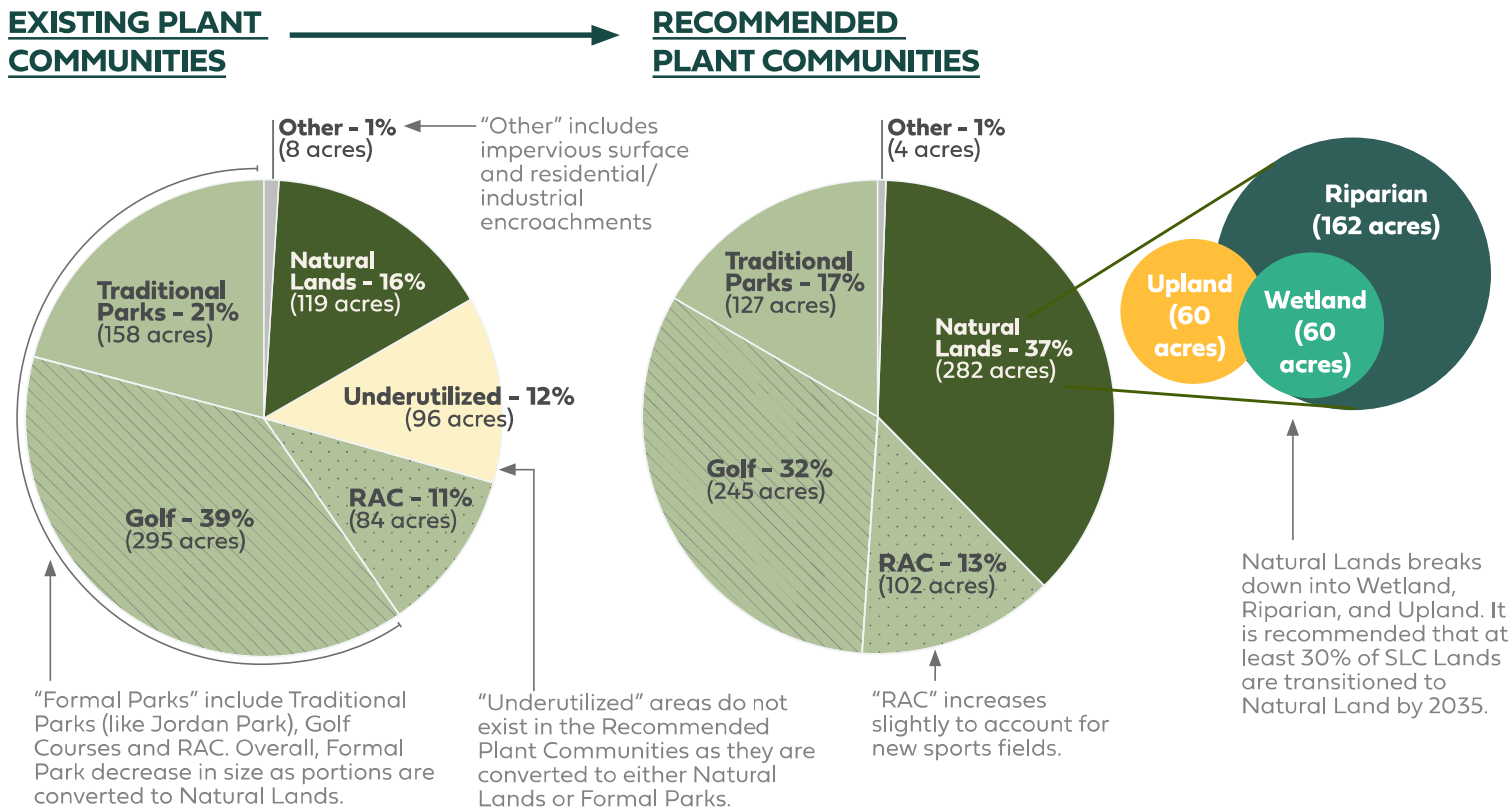
RECOMMENDED PLANT COMMUNITIES

Recommended Plant Communities were derived from the Existing Plant Communities described in the Existing Conditions Report, along with an evaluation of topography, soils, infrastructure constraints, proximity to water, management responses, restoration potential, and user needs. Recommended Plant Communities reflect a combination of what was historically present on the site, what is ecologically appropriate given current conditions, and what can enhance the user experience. The pie charts below and map on the following page show what has been mapped in the “Recommended Plant Communities” layer in the web map. This shows the opportunity for 37% of SLC Lands to be converted to Natural Land. At least 30% of SLC Lands should be converted to Natural Land by 2035.

The three plant communities that make up “Natural Lands” are **Wetland, Riparian, and Upland**. Wetlands will be created using existing low lying topography or by modifying the land to be conducive to a natural wet system.

Riparian areas will be expanded and enhanced with a focus on healthy, native canopy and understory. Upland areas will replace existing underutilized space with a mix of drought friendly shrubland and meadows with intermittent trees. Formal Parks are also included, as they offer opportunities for ecological enhancement. Ecological management practices, such as canopy enhancement and incorporation of pollinator habitat, are also recommended for formal park areas, recognizing that land use needs and recreational activities will influence management in these spaces.

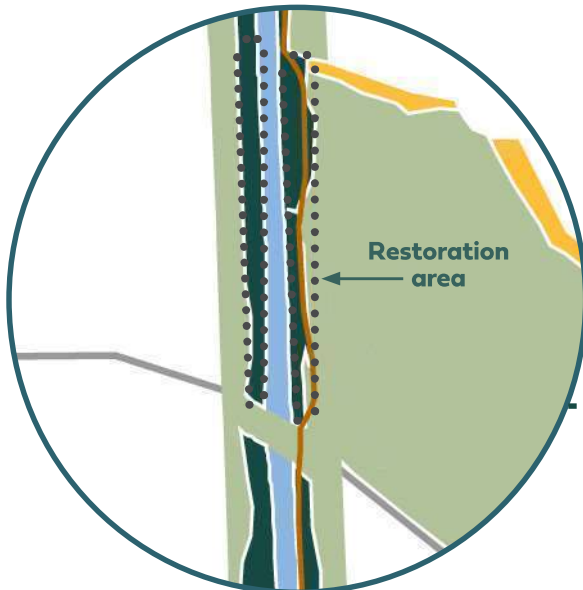
The following pages outline desired landscape characteristics, specific restoration considerations, and criteria to guide on-the-ground restoration for each Recommended Plant Community. Previous sections on mitigating erosion, reducing user impacts, invasive species management, improving soil health, establishing native plants, green stormwater infrastructure, and wildlife habitat features apply to all recommended plant communities.



RECOMMENDED PLANT COMMUNITIES



- Drainages
- Roads
- Trails
- Water
- Wetland
- Riparian
- Upland
- Formal Park & Other



Tying into existing irrigation to expand riparian area along the river at Riverside Park



Increases in wetland and riparian area near 900 S River Park

Regional Athletic Complex

Explore this layer in the webmap!
See more information on how to use it in the "Natural Area Transition" section



RECOMMENDED PLANT COMMUNITIES

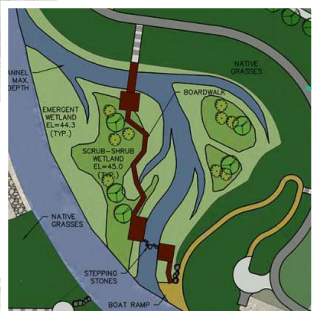
3.7x
increase!



Wetlands are critical to capturing sediment and pollutants, reducing flood damage, and providing habitat for wildlife. Wetlands can also be great sources of recreation like fishing or wildlife viewing. Creating and maintaining wetlands can benefit the Jordan River and the

neighboring communities. Existing wetlands cover approximately 13 acres of the corridor, most of them occurring as a result of restoration. We suggest increasing wetlands to cover 60 total acres, which is an approximately 370% increase.

While the study area was historically full of wetlands, few wetlands currently exist within the Emerald Ribbon corridor. Methods for creating new wetlands will differ based on existing topography and can be grouped into three different types:



- 1. Existing wetland opportunity:** These areas are lower benches or depressions on the water’s edge that may already be wet. Minor grading may be needed to allow greater water flow into the area, but these projects should remain relatively straightforward. **Example: wetland bench at 900 South Riverpark, SLC**
- 2. Grade change wetland:** These are generally larger areas that require significant grading to reconnect them to the floodplain and create wetland habitats. Grading may involve levee removal and lowering the ground plane. These areas are intended to replicate historic floodplains or the natural meander of the channel. **Example: Levee removal and channel creation at Centennial Park on the Portneuf River, ID.**
- 3. Stormwater wetland:** These areas are opportunities to capture and filter stormwater before it enters the Jordan River. Some are adjacent to SLC Public Utilities storm drains and some will take advantage of runoff from the adjacent landscapes and impervious cover. **Example: Cornell Wetlands, SLC**

The “Recommended Type 2” column in the Recommended Plant Communities layer sorts wetlands into these types

**Look for “Wetland” in the
“Recommended Type” field
in the Recommended Plant
Communities layer**

Relevant strategies for repairing degradation & ecological restoration

Restoration and creation of wetland areas should follow the guidance from the previous sections on repairing degradation and subsequent restoration. Specific guidelines for wetland areas are listed below.



Mitigation erosion issues: Grading to create wetland areas can address erosion issues by reducing slopes, and creating greater landscape integrity.



Reducing user impacts: Wetlands are less suitable for camping and walking when they hold water. Fencing will be necessary in some areas to reduce informal use.



Manage invasive species: The most threatening species within wetlands is phragmites. See the invasive management section for more details on effectively removing this species.



Establish native plants: Refer to the “Wetland” column in the native plant list for appropriate species. Utilize existing restoration areas as “nursery” plants for additional restored areas. Utilize willow, cottonwood, and chokecherry stakes in areas where canopy trees are desired. Ensure planting is connected to the water table or stormwater input and sized appropriately.



Green stormwater infrastructure: All wetlands act as green stormwater infrastructure by helping to slow down water and increase infiltration. Utilize wetlands at stormwater outflows to increase filtration and improve water quality.



Wildlife & habitat: Shallow ponds and marshy areas attract amphibians, fish, and aquatic birds. Wetland vegetation provides important hiding spots and cool areas for fish and other invertebrates.

RECOMMENDED CRITERIA FOR WETLAND RESTORATION

- Wetland restoration: 2 acres of wetland in year 1, 14 in year 3, 47 in year 10
- Biodiversity metric: 30 species per acre

RECOMMENDED PLANT COMMUNITIES

2.6x
increase!



Existing
riparian

45 acres

Recommended
riparian

162 acres

RIPARIAN

RECOMMENDED LANDSCAPE TYPE DESCRIPTION

Riparian areas along the Jordan River will feature a diverse mix of native trees, such as willows, box elder, and cottonwoods, which will provide essential shade and habitat for wildlife. The understory will be rich in shrubs, grasses, and forbs, supporting various bird and pollinator species and promoting soil stability. A healthy buffer zone of vegetation will filter runoff and prevent erosion, thereby enhancing water quality in the river. Additionally, these areas will include well-defined pathways, sight lines, and access points for visitors, allowing them to enjoy the scenic environment while minimizing disturbance to wildlife.

Some portions of the corridor already support a riparian canopy and understory. In those areas, restoration efforts will focus on supporting and enhancing the existing riparian components. This will typically be found in areas with substantial stands of willows, box elder, or cottonwoods. In areas dominated by non-native species like Siberian Elm or Russian Olive, or in locations where mowing extends to the river's edge, native riparian vegetation will be reintroduced through the methods outlined in these guidelines. The same steps will be applied in areas being enhanced, with attention to preserving healthy riparian components.

Riparian Motte Schematic

Plant understory & canopy in year 1



Canopy (trees) = 20 Plants
(10' on center)



Understory (shrubs) = 40
plants (5' on center)

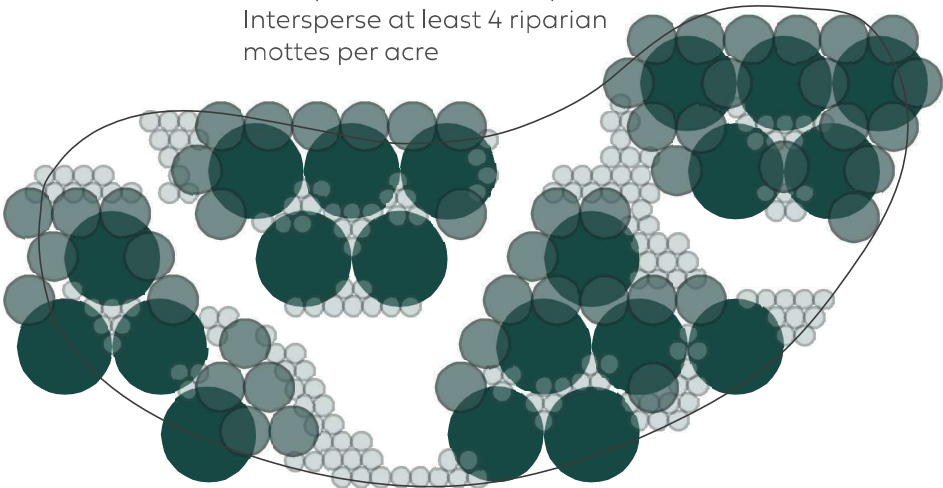
Plant herbaceous & seed in year 3



Herbaceous (grasses &
sedges, forbs, vines) = 100
plants (2' on center)

Seeding = entire area (1
lb / 1,000 sqft)

Example area = 3,000 sq ft;
Interperse at least 4 riparian
mottes per acre



**Look for “Riparian” in the
“Recommended Type” field
in the Recommended Plant
Communities layer**

Relevant strategies for repairing degradation & ecological restoration

Restoration and creation of riparian areas should follow the guidance from the previous sections on repairing degradation and subsequent restoration. Specific guidelines for riparian areas are listed below.



Mitigate erosion issues: The majority of erosion issues within the corridor are in riparian areas. Riparian restoration actions will mitigate bank stabilization and capture excess runoff. Where feasible, this should include laying back steep slopes that have eroded over time due to degradation of natural processes. These slopes will be less susceptible to erosion, are more conducive to native plants and wildlife, and allow for more user interaction with the water’s edge.



Reduce user impacts: Fencing, signage, and dense planting will be especially important to implement in riparian restoration areas, as these areas are the most conducive to camping and shortcuts for river access.



Manage invasive species: The biggest issues in riparian areas are invasive trees including Russian olive and Siberian elm. Invasives must be properly removed before riparian restoration occurs, otherwise unwanted species may continue to outcompete native plants. See the invasive species management recommendations for best practices in phasing out these species while maintaining the ecosystem services offered by a dense canopy.



Establish native plants: Refer to the “Riparian” column in the native plant list for appropriate species. In order to save resources, riparian areas can be planted in groupings or “mottes”. The idea is that native plants will fill the spaces between the mottes over time. See Riparian Motte Schematic on previous page. Must have irrigation for first 3 years or be within 5’ of the river and less than 2’ feet higher than the water line.



Green stormwater infrastructure: Healthy riparian areas function as green stormwater infrastructure by filtering and slowing down water before it enters the river.



Wildlife & habitat: Riparian vegetation provides important shelter and food for wildlife. Where feasible, snags and fallen logs will be left in place to provide habitat for insects, fungi, owls, bats, and other wildlife.

RECOMMENDED CRITERIA FOR RIPARIAN RESTORATION

- Riparian Restoration: 3 acres by year 1, 35 total acres by year 3, 116 total acres by year 10
- Riparian Canopy: Plant 20 trees per 3,000 sqft (80 trees per acre)
- Biodiversity: 5 tree species, 10 shrub species, 15 forb/grass/groundcover species per acre

RECOMMENDED PLANT COMMUNITIES

11x
increase!



UPLAND

Existing healthy
upland
<5 acres

Recommended
upland
60 acres




RECOMMENDED LANDSCAPE TYPE DESCRIPTION

The closest existing plant communities to “uplands” are managed natural areas, which in most cases are occasionally mowed grasslands. While there are currently 64 acres of these managed natural areas, some of this area is prioritized to transition to riparian or wetland areas when topography and adjacency to water allows. Areas that are prioritized to become upland plant communities are generally drier and further away from the river. The recommended upland acreage is 52 acres.

The recommended upland community should utilize native plants that can persist in semi-arid conditions and provide habitat value to pollinators, birds, and other wildlife. Upland plant communities will consist of grasses, scrub-shrub and small trees, using canopy trees in areas where shade is necessary.

Upland Motte Schematic

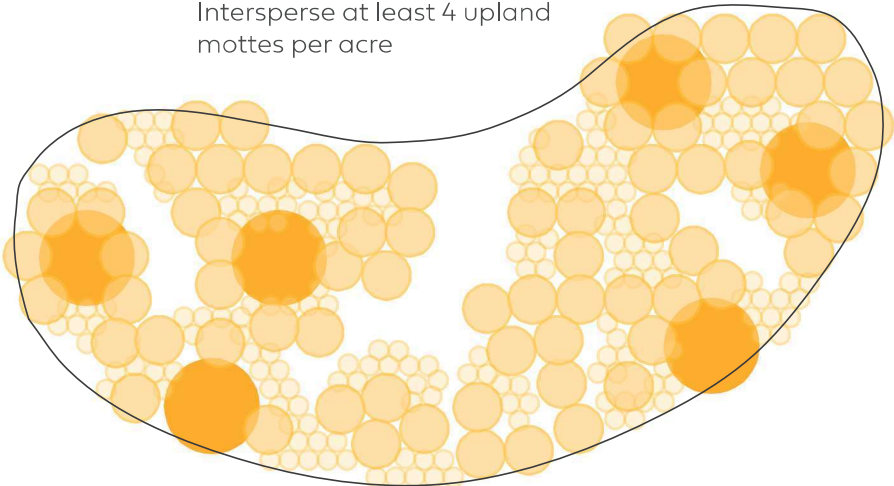
Plant understory, canopy, & herbaceous in year 1

-  Canopy (trees) = 6 Plants (at least 10' on center)
-  Understory (shrubs, cactus & succulents) = 80 plants (5' on center)
-  Herbaceous (grasses & sedges, forbs, groundcover, vines) = 120 plants (2' on center)

Seed in year 3

Seeding = entire area (1 lb / 1,000 sqft)

Example area = 3,000 sq ft;
Intersperse at least 4 upland
mottes per acre



**Look for “Upland” in the
“Recommended Type” field
in the Recommended Plant
Communities layer**

Relevant strategies for repairing degradation & ecological restoration

Restoration and creation of upland areas should follow the guidance from the previous sections on repairing degradation and subsequent restoration. Specific guidelines for upland areas are listed below.



Mitigate erosion issues: While erosion issues will be less likely in upland areas, care should be taken to understand where water flows and mitigate as necessary.



Reduce user impacts: The most likely user impacts will be desire paths between the Jordan River Trail and access to neighborhoods and roads. Formalizing some desire paths and clearly closing off others can help to reduce impacts.



Manage invasive species: Many of these areas currently suffer from infestations of invasive grasses and herbs like cheatgrass, whitetop, goathead, and thistle. Intensive removal efforts such as solarizing, or disking may be necessary before restoration.



Establishing native plants: Refer to the “Upland” column in the native plant list for appropriate species. Upland areas can be planted similar to the upland motte schematic on the previous page. This is similar to the riparian method but with a larger focus on shrublands. Trees should still be utilized but only in areas where they can be irrigated sufficiently and add to the user experience by creating shade and interest. Box elders and gamble oaks are recommended for these areas.



Green stormwater infrastructure: Implementing small swales or stormwater catchments along impervious surfaces may be necessary in areas where erosion could become problematic.



Wildlife & Habitat features: Upland areas should prioritize the use of pollinator and bird plants that will also appeal to visitors to the Emerald Ribbon. Many of the native species on the recommended plant lists are useful to multiple wildlife species.

RECOMMENDED CRITERIA FOR UPLAND RESTORATION

- Upland Restoration: 3 acres of upland area in year 1, 17 in year 3, 55 in year 10
- Upland canopy: Where upland restoration intersects trail, plant canopy trees every 25-35' on both sides of trail within 8' of trail
- Biodiversity metric: 3 tree species, 10 shrub species, 15 forb/grass/groundcover species per acre

RECOMMENDED PLANT COMMUNITIES

12% of Formal Parks transition to Natural Lands



Existing Formal Park Space

537 acres



Recommended Formal Park Space

474 acres

FORMAL PARKS

RECOMMENDED LANDSCAPE TYPE DESCRIPTION

Formal Parks include traditional parks such as Jordan Park, as well as golf courses and the RAC. Formal Parks serve as important spaces for people to gather and engage in both active and passive recreation. Typically, these parks feature turf areas, sports courts and fields, playgrounds, dog parks, and community gardens. In some cases, such as Three Creeks, native plantings have been integrated into the design and experience of the park. Public Lands staff have the expertise and protocols in place to manage these areas within the corridor. The

Action Plan aims to transition 12% of these spaces into natural areas over the next 10 years, restoring them to wetland, upland, and riparian vegetation.

As improvements are made in formal parks, there are opportunities to incorporate more native plants, increase native canopy cover, and implement green infrastructure. These enhancements will result from new capital improvement projects that will be SITES-certified, ensuring sustainable landscapes that emphasize native plants and efficient water use. Over time, these same improvements can be extended to other parks within the corridor.

Importantly, the districts managing these areas will be responsible for creating boundaries between natural and formal areas. This can be accomplished through the use of hardscape, mow lines, and interpretive elements, ensuring that as people move through the corridor, they understand that all areas are cared for—some with a focus on nature, and others with an emphasis on active recreation or traditional landscapes.

The additional staffing and resources recommended by the Action Plan, current practices, along with new capital improvements, will enhance the formal parks along the corridor and make them even stronger components of community identity.



Native Formal plantings at Three Creeks are a great example of using appropriate plants in a park setting within the corridor.

**Look for “Formal” in the
“Recommended Type” field
in the Recommended Plant
Communities layer**

NATIVE PLANTS:

As much as possible, formal park areas within the Emerald Ribbon should be planted with native plants (using plants from the native plants list in this document). The focus can be on aesthetics, ecological themes, and/or wildlife. Examples can include:

- Native milkweed-dominated beds for monarch butterflies
- Plants that attract migrating birds
- Hummingbird attracting plants
- Plants beneficial for native bees
- Plants beneficial for native butterflies

GREEN INFRASTRUCTURE:

Green infrastructure will reduce the impacts of impervious cover in formal parks to the river and surrounding natural areas. Additionally, increased water retention in the landscape will create opportunities for a more diverse range of native plantings.

CANOPY ENHANCEMENT:

Canopy enhancement adds shade trees in formal park areas where trees will not interfere with park use and improve the user experience. Canopy enhancement is recommended where additional tree cover will provide shade, improve water quality, and reduce the impacts of impervious cover on localized heating. It is recommended that 250 canopy trees are planted per year for the next 10 years in formal park spaces within the corridor to provide shade for people using the trail and recreating (this does not include natural area plantings). Canopy enhancement should use live native plantings whenever feasible with irrigation during establishment. Refer to trees in the native plant list for appropriate planting material. Where possible, trees should be planted at the same time as green stormwater infrastructure is installed, because the additional water in the soil will create healthier trees. By adding more shade trees, the Emerald Ribbon will increase in comfort, contribute to climate change mitigation and adaptation, and create a more naturalistic park aesthetic.

RECOMMENDED CRITERIA FOR INTEGRATING NATIVE PLANTS INTO FORMAL AREAS

- Shade: Where formal parks intersect trail, plant canopy trees every 25-35' on both sides of trail within 8' of trail
- Canopy: Plant 250 canopy trees per year
- Biodiversity: For SITES projects – 3 tree species, 5 shrub species, 10 forb/grass/groundcover species per acre

**See the “canopy” layer in the
webmap to assess areas that are in
need of additional canopy**

3. Toward Implementation



P50 Partnerships & Agreements

P52 Activating the Corridor

P53 Rethinking Management Areas

P54 Nature Transition

**P56 Documenting, Monitoring &
Community Science**

P59 Metrics

PARTNERSHIPS & AGREEMENTS

SLC Lands can't accomplish goals on their own and will need to collaborate closely with other entities to meet ecological goals for the Emerald Ribbon corridor. Potential partners will depend on location, type of project, available resources, etc. The following are potential partners that have been identified:

INTERAGENCY PARTNERSHIPS

FOREST, FIRE, & STATE LANDS

Work together on wetland restoration and invasive removal

- Boundaries: river channel up to high water mark
- Potential for cost & staff sharing. Likely can match funds.
- Gain understanding of items SLC needs to arrange, items SLC can do without coordination
- Create agreement* and timeline in which agreement needs to be revisited

UTAH DIVISION OF WATER RIGHTS

Understand how we can use water upstream and how adjusting flows (with Salt Lake County Flood Control) will effect downstream water flows

- Boundaries: water volume
- Water rights adjustments

US ARMY CORPS OF ENGINEERS

Coordinate beneficial levee upgrades

- Boundaries: areas protected by to levee and other flood control structures
- Potential for federal funding

SALT LAKE COUNTY

Work together on river channel restoration

- Boundaries: the river channel and a 20' buffer along the banks
- Potential for cost & staff sharing
- Gain understanding of items SLC needs to arrange, items SLC can do without coordination
- Create agreement* and timeline in which agreement needs to be revisited

Understand control of flood gate. Need to adjust flood gate operation for success of restoration.

- Find contact person
- Define ideal flood gate operations

UTAH STATE UNIVERSITY, HOGLE ZOO, TRACY AVIARY, JORDAN RIVER COMMISSION

Test restoration methods within Jordan River corridor

- Boundaries: coordinate needs with SLC Public Lands
- Test plots for Soils, Seeding, Plant selection, Habitat enhancement, Wildlife surveys, Invasive management

*See example agreement between FFSL & Utah County in Appendix 1

There are an additional 4 acres of wetland, 24 acres of riparian, and 2 acres of upland natural area potential within the study area outside of SLC Lands boundaries. These areas can be restored by coordinating with partners or considering acquisition. ***These areas can be found by selecting “No” in the “Within SLC” column in the “Recommended Plant Communities” in the webmap. Another helpful column in this layer is “Potential Partner” which identifies potential partners based on the location and type of restoration.***

INTERDEPARTMENTAL PARTNERSHIPS

SALT LAKE CITY PUBLIC UTILITIES

Work together to improve water quality that flows into and through the Jordan River

- Projects with shared goals
- Easy to get SLCPU funding
- Outfall stormwater wetland projects

SALT LAKE CITY FORESTRY

Define size, location and types of trees that should be taken care of by maintenance staff and which should be taken care of by forestry

OTHER

PRIVATE LAND OWNERS

Work with residential landowners to enhance riparian corridor

- Boundaries: residents within 150' of the river
- Create landscape and care guidelines specific to property's location along the river.

Work with industrial/commercial landowners to enhance riparian corridor

- Boundaries: landowners within 150' of the river
- Create landscape and care incentives
- Consider acquisition of underutilized parcels

NON-PROFITS

Expand and organize work with non-profits to enhance riparian corridor

- Boundaries: entire study area, dependent on non-profit model
- Coordinate on restoration projects, plantings, clean ups, pop-ups, funding
- Have database of non-profit ready projects for completion
- Non-profits should include but are not limited to: Tree Utah, Seven Canyons Trust, Friends of Fisher Mansion

ACTIVATING THE CORRIDOR

The Fisher Mansion Beer Garden activates the corridor every fall during Get to the River Fest.



The Emerald River Action Plan aspires to make the corridor a community connector for west side residents while increasing the ecological health of the river and facilitating human-nature interactions. To manifest these goals, care and management of the river must not only occur by the Public Lands personnel managing the landscapes, but also through city programming and citizen organizations. The pieces of a strategy exist today, and their efficient and effective use over time can meet the goals of the Action Plan. Daily activation of portions of the corridor that catalyze further engagement and address perceived and real safety concerns will increase use frequency and catalyze greater use. To this end, we encourage increased land management staff on the corridor daily, with the ideal being a district that is specific to the corridor, along with increased ranger presence. These efforts should be complemented by police presence in any area

where crime has been documented as a known issue, such as the corridor's intersection with North Temple.

Non-profit organizations will play key roles in this effort. As described in Goal #3 of the Action Plan to develop a long-term care model for the corridor, the development of a "Friends of" or conservancy focused on the implementation of the Emerald River Action Plan will result in additional personnel and volunteers focused on stewardship and public engagement throughout the corridor while supporting other organizations and community groups within the corridor to care for and activate portions of the corridor.

These activation efforts play a key role in ensuring work towards ecological restoration supports increased biodiversity, the creation of complete plant communities, and quality wildlife habitat throughout the corridor.

RETHINKING MANAGEMENT AREAS

Meeting the goals of the Emerald Ribbon Action Plan requires resource investment and a long-term transformation in management practices. Through the Operations and Management Analysis conducted as a part of this project, we found a high level of care and pride within Districts 1, 4, 5, 6, and RAC, as well as the Golf division, who currently maintain the corridor. Additionally, it was found that there are numerous groups taking action within the corridor with varying focuses and priorities. To streamline work toward the Emerald Ribbon Action Plan, we recommend considering three actions:

1. Providing further training for staff that focuses on natural area management, the use of native plants, and sustainable landscapes

One precedent to consider is Denver Parks and Recreation (See "Precedent Management Systems" in Chapter 1) which has offered college level courses on natural area management to their staff.

2. Expanding the team that manages natural areas to meet the recommended increase in natural lands

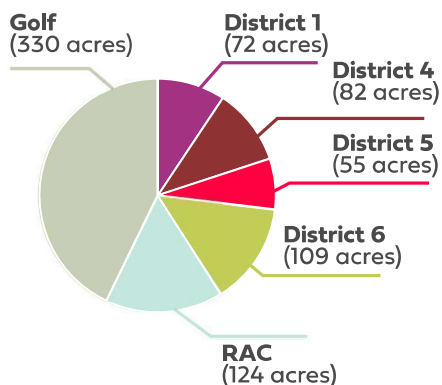
Based on FY23 data (page 6-7) the equivalent of 2.2 FTEs were working in the corridor across 164 acres. That is 1 FTE per 74.5 acres. To keep up with the increase in natural lands to at least 30%, SLC Public Lands should consider having at least 1 FTE per 20 acres dedicated to natural lands within the corridor.

3. Evaluating the consolidation of Districts working in the corridor or the creation of corridor-specific districts that care for this unique landscape within the Public Lands portfolio

SLC Public Lands is currently considering a city-wide restructuring of Districts.

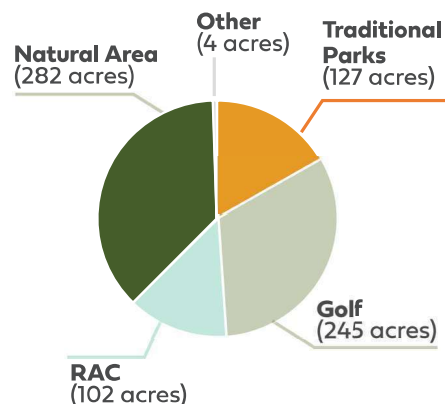
The results of these efforts will lead to more effective use of resources to meet the goals of the Emerald Ribbon Action Plan, greater satisfaction among Public Lands staff, and the creation of more effective human and land management hierarchies. The pie charts below show the acreage taken up by existing districts in the corridor compared to how the corridor could look if at least 30% of the area is composed of Natural Areas.

Existing Districts: Districts 1, 4, 5, and 6, as well as RAC & Golf



Future Status (example*):

Natural area, formal parks, RAC, and Golf



NATURE TRANSITION

A major component of the Emerald Ribbon Action Plan, driven by community input, is transitioning underutilized areas into natural lands through ecological restoration. This transition, which will occur over several years, will be guided by adaptive management that allows Public Lands staff to adjust resources to address issues on-the-ground, align projects with capacity, and take advantage of opportunities as they arise.

The Nature Transition timeline on the following page shows acreages to be restored over the next 10 years. The plan involves restoring 219 acres, including 48 acres of wetland, 55 acres of upland, and 116 acres of riparian vegetation. Along with the 63 acres of existing functioning natural lands, this will bring the total to 282 acres of natural lands (including wetland, riparian, and upland) within the Emerald Ribbon study area, which comprises 37% of SLC’s land within the corridor. Given this information it is recommended that a goal of at least 30% natural lands within SLC lands is met by Year 10.

The Nature Transition timeline is framed by milestones at year 1, 3, and 10+. In the first year, the focus will be on building internal capacity through hiring, training, and initiating successful projects that build staff effectiveness. By year three, the priority areas will be completed, and staff will be well-equipped with experience along the Jordan River. By year ten, the full 282 acres will be healthy natural lands, meeting key goals of the Emerald Ribbon Action Plan, with a trained staff ready to manage and improve the corridor for decades to come. Using a range of \$8,000 to \$12,000 per acre (as defined in the Action Plan), maintaining 282 acres of natural land will cost between \$2.26M and \$3.38M annually.

Within this acreage, 22.5 acres have been prioritized in the Action Plan for \$2M of bond funding allocation due to their high restoration potential, potential for success, and/or impact on the user experience. These projects will kickstart the 30% nature transition.

See the “Recommended Plant Communities” layer in the webmap

The “Recommended Plant Communities” layer is a powerful planning tool that shows existing versus recommended conditions. This layer should be used in order to select and prioritize work over the next 10 years. See below for details on contents.

Shape ID: Unique number for each shape. Can be used to track progress.

Existing Type: Existing plant community type. Use this field to gather baseline understanding of existing conditions and appropriate methods for restoration.

Recommended Type: One of 3 recommended plant community types (wetland, riparian, upland). Multiple shapes can be combined to create one project. Refer to the Natural Area Management chapter for detailed restoration methods.

Recommended Type 2: If a qualifier for a recommended plant community is relevant, it is listed here. i.e. “stormwater wetland”.

Priority: This column contains high and medium priority project labels. High priority projects were defined in the Action Plan. Medium priority projects were discussed with Public Lands staff but did not make it into the Action Plan.

Converted to Natural Land: 1 = Formal, formal native landscaping, impervious cover, industrial, or residential to be converted to wetland, riparian, or upland.

Restored Natural Land: 1 = Managed natural land or underutilized land to be converted to wetland, riparian, or upland.

Manage Natural Land: 1 = Wetland, riparian or upland is both existing and recommended type.

Within SLC Lands: “Yes” if land is within current SLC District boundaries. “No” if land is outside of SLC District boundaries.

District Number: If within SLC Lands, District number is in this column.

Potential Partner: If an ideal partner for this project is known, it will be listed. See “Partnerships & Agreements” section for more information on coordinating.

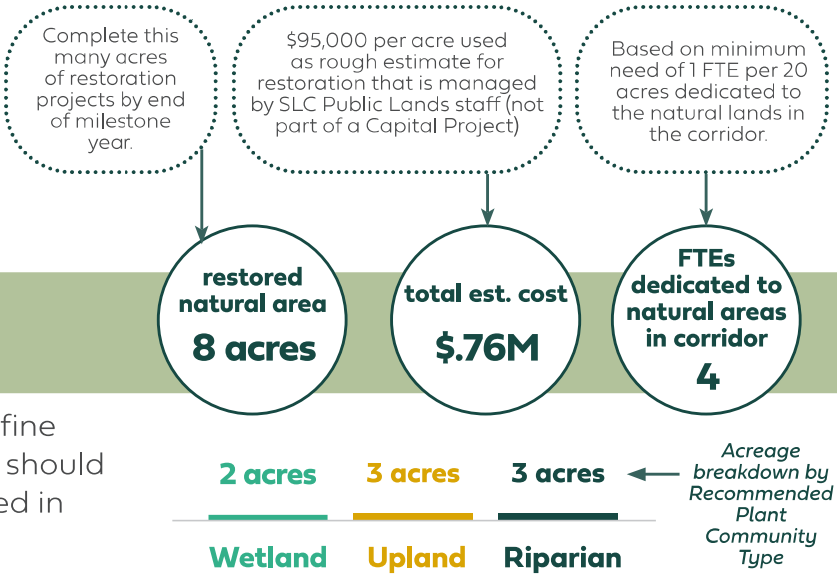
Completion Date: This field should be used by staff to track completion of projects.

NATURE TRANSITION TIMELINE

PILOT PROJECTS

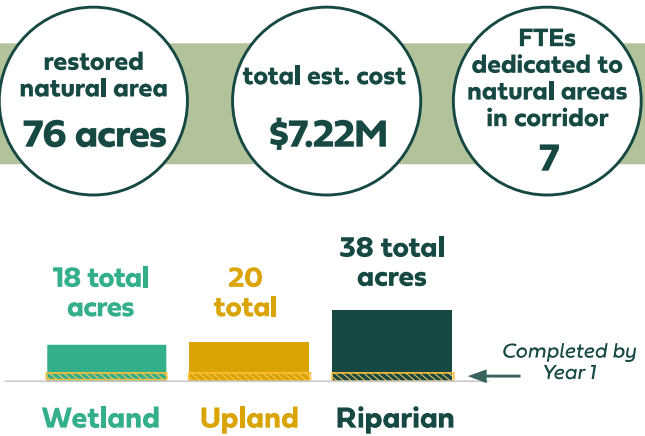
Year 1

Focus on small scope pilot projects to refine methods and build staff capacity. Year 1 should include the restoration projects prioritized in the Action Plan*.



Year 3

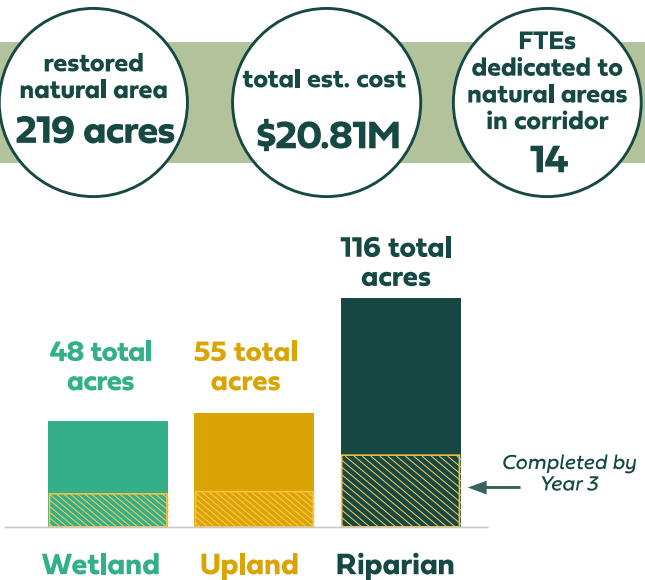
Larger and more complex projects benefit from the insights gained during Year 1. By year 3, a majority of the restoration projects prioritized in the Action Plan* should be complete.



RETURN TO NATURE

Year 10+

SLC Public Lands has acquired the staff capacity and skills to efficiently and effectively restore and manage the corridor. Restoring 219 acres of natural area will realize the goal of more than 30% natural area in the corridor.



*A subset of the restored natural area acreages here account for implementation of Phase 1 projects outlined in the Action Plan. Those projects will kickstart the 30% nature transition. Refer to the Action Plan for more details.

(Please note that estimates per milestone are additive - Year 10 estimates show the total)

DOCUMENTING, MONITORING & COMMUNITY SCIENCE

It is critical that all land management efforts are documented to gauge success, facilitate an adaptive management approach, and track change. This is best achieved when data is recorded as it is performed or shortly after. Ongoing documentation can facilitate coordination by ensuring all entities working in the area are aware of what has been done, what was effective, what remains to be done, and how best to allocate resources.

Monitoring of the study area is recommended through geographic, photographic, and narrative descriptions that include annual photo points, early detection monitoring, land management documentation and evaluation, and biodiversity observations. Records from this monitoring should be standardized and readily available. Over time these collective documents can drive future management practices and educate professionals and volunteers working in the study area.

To ensure fidelity of monitoring information, documentation should take place at the time of monitoring. It is recommended that all monitoring documentation be done through smartphone or tablet devices using a field data application such as Fulcrum or ArcGIS FieldMaps. Advantages of using such a program include immediate incorporation of the information into a database, reduced data

errors, location tracking, association of photos and voice recordings with specific locations, and customizable datasheets that can meet the needs of the Emerald Ribbon and Salt Lake City.

Photo points

Photo points are a relatively quick and easy way to perform qualitative monitoring. It is recommended that photopoints are established at least every quarter mile along the Jordan River trail and within adjacent park spaces. Photopoints can be located in areas that have been problematic, areas that have been recently restored, as well as passive areas. GPS points should be taken at each location so that they can easily be found and the photos/descriptions can be recorded annually. Taking photos and logging notes once a year at each of these points and comparing photos over time will provide a sense of how areas are changing and guide future management decisions.

Tracking biodiversity

Citizen science is a vital way to track biodiversity information, with numerous individuals in the Salt Lake City area actively recording biodiversity data through eBird, iNaturalist, and other online services. Individuals input data, which goes through a validation process that allows final users to understand the quality of the data.



Early detection monitoring

Early detection monitoring is not designed to assess the effectiveness of management actions but rather to detect new threats at an early stage so that they can be addressed quickly. This is considered a best management practice. It is not tied to a specific photo point or vegetation plot, but requires a staff member, professional, or trained volunteer to periodically walk the entire study area and observe new invasive threats, expanding invasive plant issues, areas being overused and denuded, new informal trails, and new erosion issues. Once new threats are identified, staff or volunteers can quickly take action and prevent a small problem from becoming a larger one that requires more time and resources to control in the future. To be effective, early detection monitoring requires a staff member, professional, or volunteer who is:

- Adept at identifying invasive plants, even obscure ones;
- Very familiar with the natural areas of the Emerald Ribbon and can accurately determine if change is occurring; and
- Willing to walk the grounds a minimum of twice per year, looking for new threats.

EARLY DETECTION field data should be recorded electronically with the following variables:

- **Date**
- **Recorder**
- **Type of threat** (species name, new invasive species, expanding invasive species, new or expanding erosion, new or expanding trampling, new or expanding informal trail, new or expanding stormwater flow)
- **Location** (including latitude and longitude, along with general identifiers)
- **Size of issue** (for invasive species should include patch size, percent cover, and if appropriate number of plants)
- **Narrative description** of the problem and potential cause

Land management task documentation

Salt Lake City Public Lands and numerous other organizations have been actively managing and improving the natural areas around the Emerald Ribbon through plantings, trash clean up, and invasive species control. However, piecing together a narrative of their efforts currently relies heavily on the institutional memory of key individuals. To facilitate ongoing record, it is recommended that once land management tasks are complete, field reports are recorded immediately. Additionally, once management has taken place in an area, the area should be placed on a list of areas to photograph annually along with the existing photo points.

LAND MANAGEMENT TASKS should be recorded electronically with the following variables:




- **Date**
- **Recorder**
- **General activity**
- **Area treated**
- **Location of area**
- **Size of area**
- **How it was treated**
- **Resources used (including labor)**
- **Photo documentation**








NATURAL AREA MONITORING & MANAGEMENT

The chart below shows an annual schedule for monitoring and management tasks related to natural areas – including Wetland, Riparian, and Upland plant communities. While elements should be monitored frequently (as described to the right), the dark green indicates the “best time” and light green is “acceptable time” for associated management actions. Use the icons next to each task to find detailed management guidelines in the Natural Areas Management chapter.

- **Newly Restored Natural Areas** should be monitored weekly for the first month after installation and then biweekly during growing season for 2 years unless otherwise noted below in **bold**. Three years after a restoration area has been constructed, reevaluate the success of the project and adapt as needed.
- **Established Natural Areas** are successful restoration projects that are at least 3 years old OR existing, healthy natural areas. All tasks should be monitored once a month during growing season unless otherwise noted below in **bold**.

ANNUAL MONITORING & MANAGEMENT SCHEDULE

 Best time
 Acceptable time
 Not recommended

Tasks	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Notes
 Invasive management													Timeline of invasive management will vary by species, throughout the growing season. When removing invasives in natural areas, be sure to allow native plants to fill in between plantings (know what you are removing!).
 Mulching													Make sure mulch is 4-6" inches thick, especially in early growing season, so it will repress invasives. Remove mulch from base of plants to prevent root rot. Replace/add mulch as needed while there is no snow on the ground.
 Replanting													Monitor for mortality. Spring and fall planting will provide ideal (wetter) conditions for replanting areas that have experienced mortality. If replanting is not desired, add 4-6" of mulch.
 Irrigation													Ensure irrigation system is working properly. This will be most important at the beginning of the growing season. If areas are receiving too much or too little water, fix accordingly. Irrigation should run during the entire establishment period (2-3 years/growing seasons).
 Trail maintenance													Evaluate trail conditions including informal trails, trampling, and other off trail use. Utilize fencing, brushing and other methods to close down undesirable activity. Pay special attention during the busiest seasons and in areas with the most traffic/use.
 Erosion/Pooling													If erosion occurs mitigate as soon as possible. If pooling of water is occurring in planted areas that last for more than 48 hours without additional rain, adjust grade to allow water to drain. Consider incorporating green stormwater infrastructure into problem areas. Monitor after large rain/runoff events.
 Soil Health													Test soil health annually at beginning of growing season and amend as necessary until soil results come back satisfactory.
Tree Pruning													Prune once in winter or early spring when trees are dormant. Consult with SLC arborist to ensure proper pruning methods are followed.
Evaluation by Arborist													Schedule an annual evaluation by SLC arborist in mid summer when trees are at their fullest. Also schedule an arborist to assess issues like signs of disease or damage as needed, preferably earlier in the growing season.

METRICS

The process of restoration and long-term care of the Emerald Ribbon’s natural areas will have successes and failures in the coming years, with an overall trend toward enhancing these natural areas. By following the recommendations presented in this document and employing an adaptive management approach, Salt Lake City will see measurable changes. To evaluate these changes, we recommend the metrics below as measures of success. For our purposes, a metric can be measured easily and indicates progress is being made toward the goals stated in the Action Plan.

These metrics suggest a path toward success and provide a quick articulation of some of the overall reasons for the land management practices laid out in these guidelines. They also provide a motivation for people to become more familiar with and committed to the study area. For instance, the metrics associated with increased species numbers will motivate restoration and habitat enhancement efforts, while at the same time motivating observations and record keeping. The objectives catalyze involvement and resource allocation while allowing for measurable, tangible outcomes.

LAND RESTORATION

Increase naturally managed areas by **66 ACRES** in **3 YEARS**



Decrease invasives in Glendale Regional Park to **LESS THAN 2% OF LANDCOVER**

Plant **3,000 RIPARIAN TREES** on the corridor in **5 YEARS**

BIODIVERSITY

15% increase in recorded community science wildlife species observations:


275 BIRDS

15 MAMMALS

10 REPTILES

5 AMPHIBIANS

within 4 years






RIVER RESTORATION

Work with SLCo and FFSL to create **2 POOL AND RIFFLE NATURAL STREAM CHANNEL** systems in the Jordan River within **3 YEARS**.

Create **15 ACRES OF WETLAND** habitat in the next **3 YEARS**

Incorporate ecologically functional riverbank in **15 PROJECTS** in the next **5 YEARS**

STAFF RESOURCES



AN ADDITIONAL 2 FULL TIME RANGERS dedicated to the corridor within **2 YEARS**

8 ADDITIONAL FTES managing natural areas in the corridor within **3 YEARS**

APPENDIX 1

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE STATE OF UTAH
DIVISION OF FORESTRY, FIRE, AND STATE LANDS
AND
UTAH COUNTY

This Memorandum of Understanding (“MOU”) is made and entered into this ____ day of _____, 2016, (the “Effective Date”) by and among the Utah Division of Forestry, Fire and State Lands (“FFSL”) and Utah County, regarding access to State Sovereign Lands for invasive species mitigation work. Each is individually referred to as a PARTY and collectively as the PARTIES.

RECITALS

WHEREAS, the State of Utah owns the bed of Utah Lake through the equal footing doctrine; and

WHEREAS, the bed of Utah Lake, below settled boundary lines, is considered sovereign land as that term is defined in Utah Code § 65A-1-1; and

WHEREAS, FFSL is the management authority for sovereign land pursuant to Utah Code § 65-A-1-4; and

WHEREAS, Utah County does invasive species mitigation work on land adjacent to sovereign land; and

WHEREAS, FFSL feels that it is beneficial for invasive species mitigation work to be performed on sovereign and adjacent land to prevent the spreading of invasive species.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and commitments set forth herein, the PARTIES agree as follows:

A. FFSL AGREES TO:

1. Allow Utah County, upon notification to and approval from FFSL, access to State Sovereign Lands for the purpose of invasive species mitigation.

B. Utah County AGREES TO:

1. Notify FFSL before undertaking a project to perform invasive species mitigation work on State

Sovereign Lands.

2. Provide information, in the form requested by FFSL and immediately after work has been completed, on the work performed including the number of acres treated, the treatment date and method, and target species treated.

C. THE PARTIES MUTUALLY AGREE:

1. The Recitals above are incorporated herein.
2. This MOU will remain active. At any time, this MOU may be modified or renewed by mutual agreement of the parties.
3. This MOU may be terminated by either party for any reason after 90 days written notice.
4. This MOU will become effective the date of the last signature of a party to this MOU.
5. Each party agree to accept liability for the party's own respective employees, agents, assigns, etc.,.

DIVISION OF FORESTRY, FIRE
AND STATE LANDS

UTAH COUNTY

BY: _____
Brian L. Cottam, Director

BY: _____
Larry Ellertson, Chairman
Utah County Board of Commissioners

DATE: _____

DATE: _____

APPROVED:

APPROVED AS TO FORM
JEFFREY R. BUHMAN
Utah County Attorney

BY: _____
Fredric J. Donaldson
Assistant Attorney General

BY: _____
Deputy County Attorney

This page has intentionally been left blank