

Warm Springs Preserve

City Council and Planning & Zoning
Joint Session

September 13, 2022



WOOD
RIVER
LAND
TRUST



SUPERBLOOM



AGENDA

1. The Process Overview
2. Review of Existing Commitments
3. Creek/Floodplain Restoration 101
4. Review of Project Principles & Goals
5. Share Public Feedback
6. Council & Commission Direction
7. Next Steps

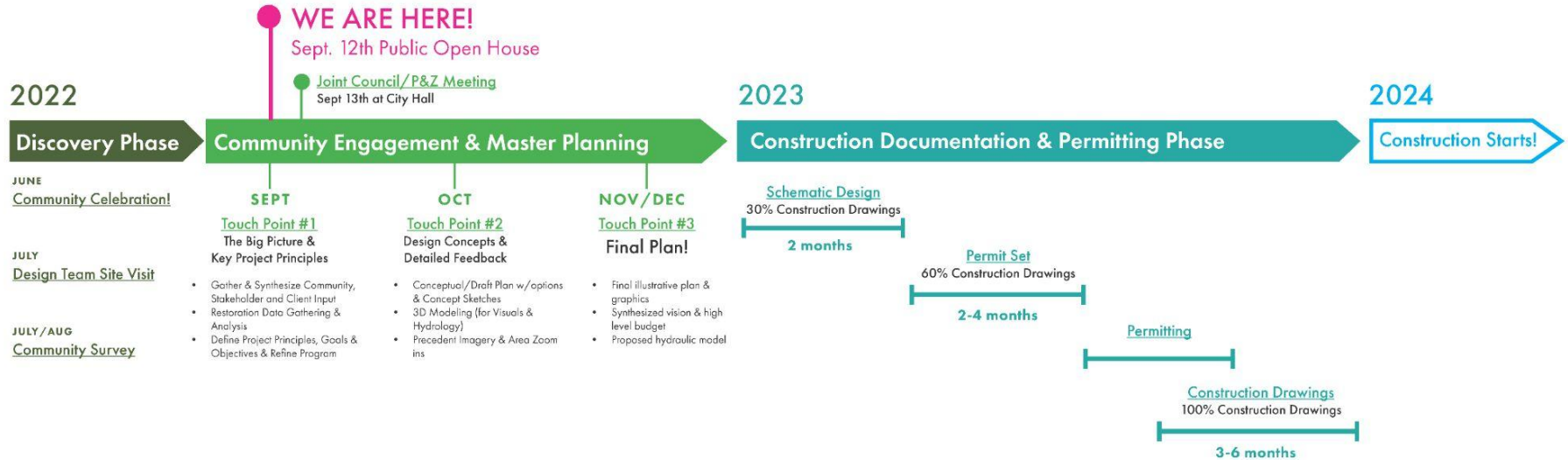
Process & Engagement

Vision

Public Meetings

Design + Planning

Action



Project Partners



City of Ketchum



Wood River Land Trust



Friends of Warm Springs Preserve Committee

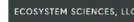
Design Team



Superbloom
Team Lead, Community Engagement,
Landscape Architecture



Rio Applied Science & Engineering
Engineering, Geomorphology, Hydrology



Ecosystem Sciences
Ecological Systems

Existing Project Commitments

Warranty Deed

(1) or more 10-ft w pedestrian trail for walking/skiing

(1) pump house

(1) public restroom

(1) storage building (1000sf max)

Floodplain restoration

(24) parking stalls

Community Commitments

New Irrigation System that reduces water use

Flood mitigation

Restoration of riparian zone & floodplain

Creek & Habitat Restoration

Passive park for Open Space in Perpetuity

Off-Leash Dog Access

Informal Activities (disc golf, dog walking, etc.)

Informal gathering space (picnic tables, etc.)

Nordic Trails

Public Restroom

Public Feedback & Comments

Public Meetings, Online Surveys, Website & Social Media, Stakeholder Meetings, Other Events

The City of Ketchum has received over 200 written comments and letters in the Discovery Phase, held two public events, conducted an online survey and held bi-weekly/monthly meetings with Friends of the Warm Springs Preserve Committee.

Key Findings

- Preserve open space and keep it as natural as possible
- Keep off-leash dog areas
- Enhance other activities like nordic skiing, frisbee golf and fly fishing
- Improve outdated irrigation and reduce water use
- Restore the creek and reconnect the floodplain
- Habitat restoration
- Improve ADA access and access generally
- Trail to connect southern property
- More seating, benches, picnic tables from durable materials
- Enhance the mix of landscape types including lawn, and more native grasses
- Improve the lower terrace area
- Include educational opportunities about the site history and ecology
- Provide amenities such as water fountains, restrooms and waste bins

What can be improved?



Summer Solstice Celebration! June 21st

WSP Areas



Opportunity Areas

- 1 Upper Fairway
- 2 Middle Terrace
- 3 Lower River Edge
- 4 Southern Floodplain
- 5 The Woods
- 6 The Creek
- ☆ Amenity Zone



Why Restoration?

An aerial photograph showing a winding river with multiple meanders through a lush green landscape. The river is surrounded by dense vegetation, including grasses and shrubs, which appears to be a restored riparian area. The water is a light brownish-grey color, and the surrounding land is a vibrant green.

Logistical

- Project Principles based on Stakeholder feedback
- Community commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- Improve riparian shade and aesthetics

Why Restoration?

Logistical

- **Project Principles based on Stakeholder feedback**
- Community commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- Improve riparian shade and aesthetics

Project Principles

- Create a preserve that is connected & accessible to all
- **Demonstrate leadership through regeneration of healthy ecosystems for people, plants & Animals**
- **Amplify natural systems**
- Design for success over time
- Support four-season multi-functional uses
- Celebrate & Educate about the past, present and future of the Preserve

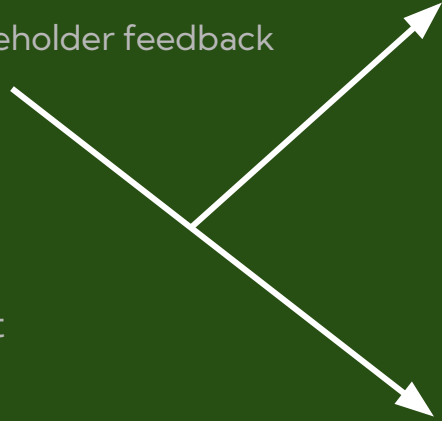
Why Restoration?

Logistical

- Project Principles based on Stakeholder feedback
- **Community commitments**
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- Improve riparian shade and aesthetics



Community Commitments

- **A passive park for open space in perpetuity**
- Off-leash dog access
- Informal activities (i.e., frisbee golf, dog walking)
- Informal gatherings (i.e., picnics)
- Nordic trail
- Public restroom
- New irrigation system to preserve water/reduce maintenance costs
- **Restoration of riparian zone and floodplain adjacent to Warm Springs Creek**

Why Restoration?

Logistical

- Project Principles based on Stakeholder feedback
- Community commitments
- **Improve funding opportunities**

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- Improve riparian shade and aesthetics

WOOD RIVER LAND TRUST

providing

**wild spaces +
happy places**

for our entire community.

“This is the last opportunity in the lower Warm Springs Creek for large-scale restoration.”

And

**Blaine County Land Water
& Wildlife Program**

“Conserve, restore, or maintain and otherwise provide for proper stewardship of lands and waters.”

Why Restoration?

Logistical

- Principles based on Stakeholder feedback
- Community commitments
- Improve funding opportunities

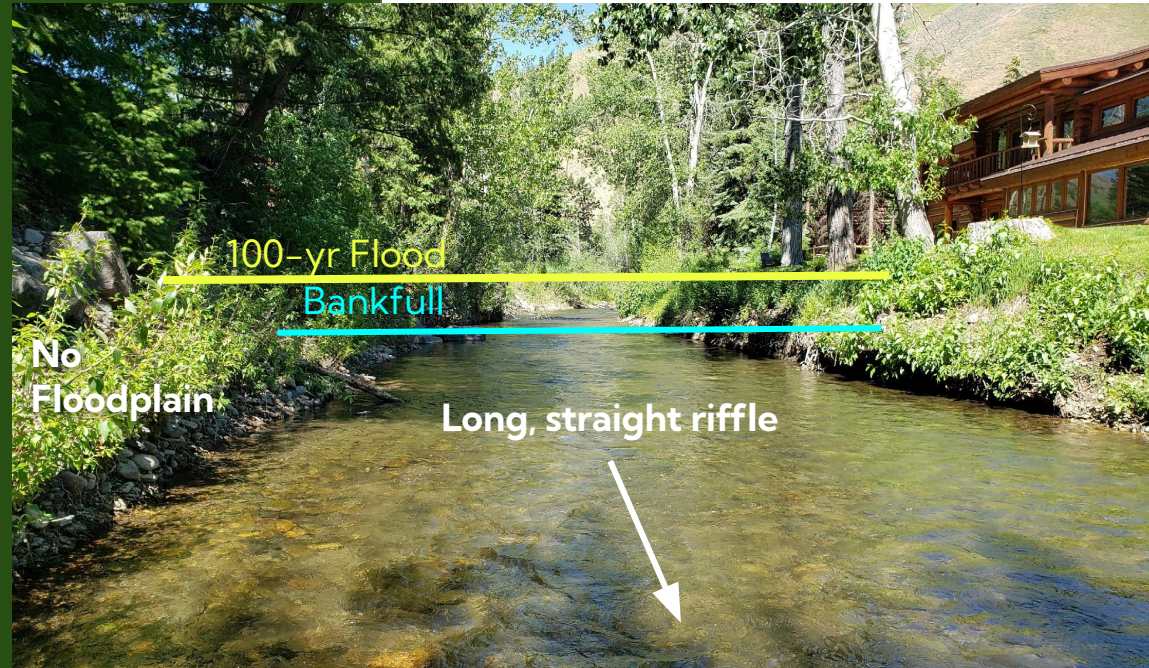
Ecological

- **Improve stream function**
- **Improve fish and wildlife habitat**
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- Improve riparian shade and aesthetics

“Efforts should be made to maintain and expand protected status, as well as restore channel processes in areas of prior channel occupation”

- Big Wood River Atlas Reach 5

**Simplified, incised channel
with few pools and no cover**



Big Wood River trout **densities are 8 to 10 times greater** in undisturbed reaches with cover.

- IDFG 1987 and 1990

Why Restoration?

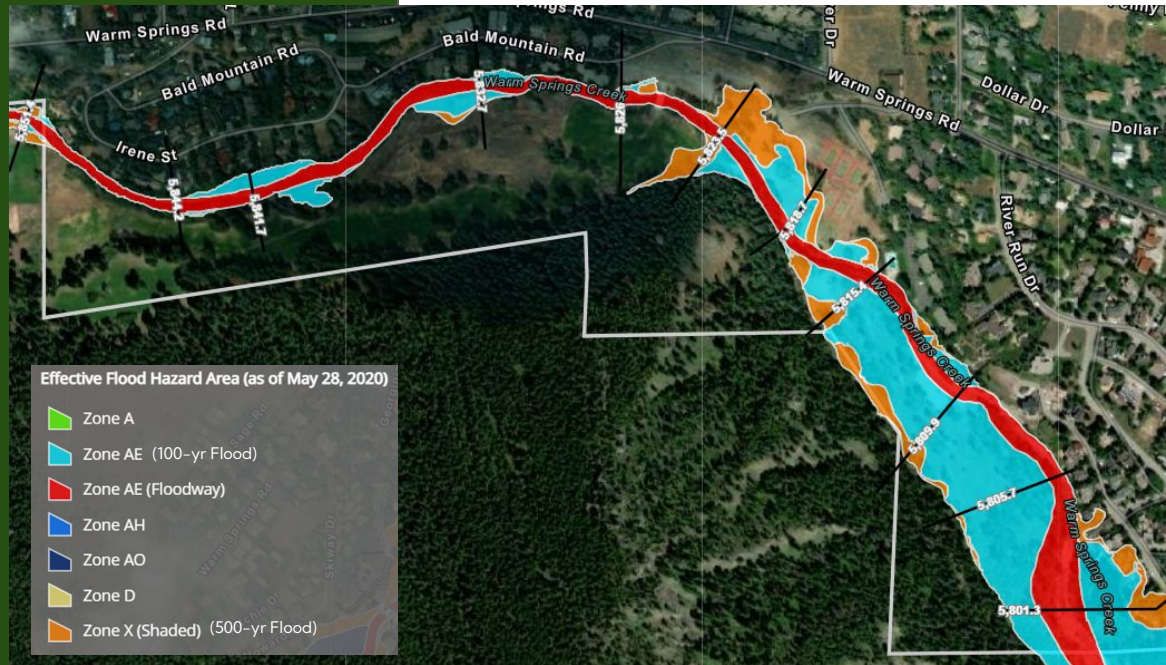
Logistical

- Principles based on Stakeholder feedback
- Community commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- **Dissipate flood risk**
- **Reduce stream energy**
- Potential water savings
- Improve riparian shade and aesthetics

FEMA Flood Map



Why Restoration?

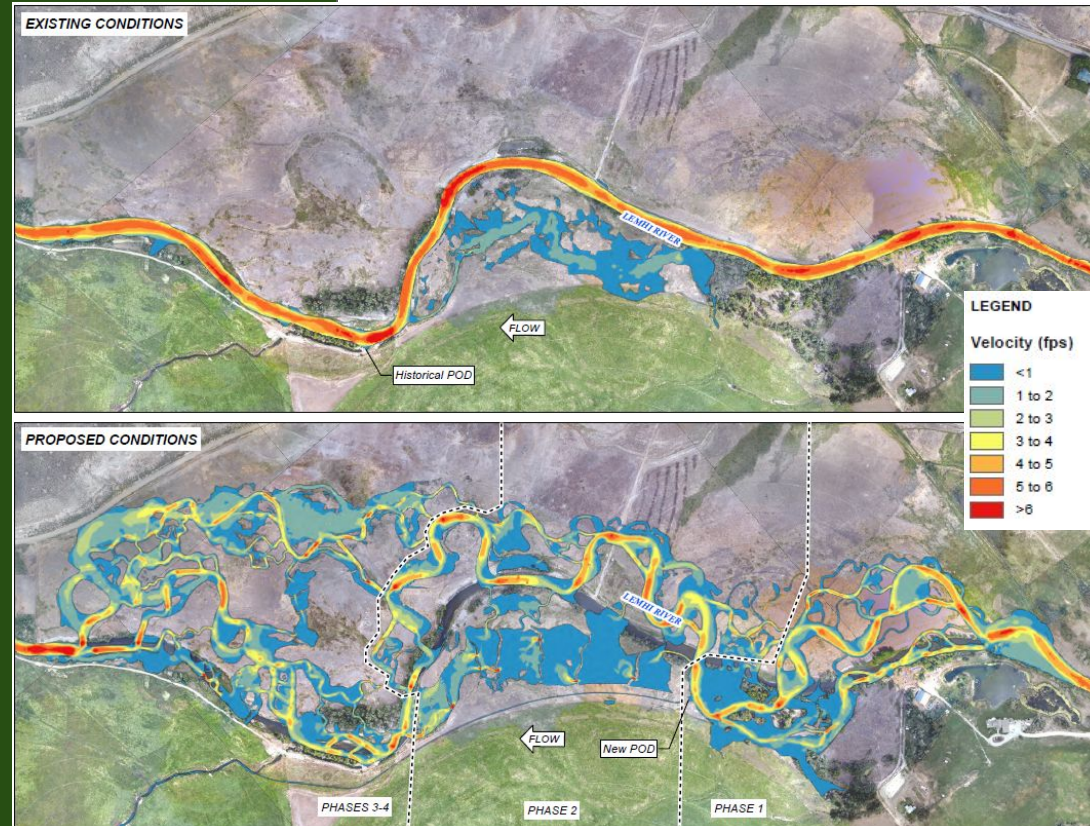
Logistical

- Principles based on Stakeholder feedback
- City of Ketchum commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- **Dissipate flood risk**
- **Reduce stream energy**
- Potential water savings
- Improve riparian shade and aesthetics

Example Hydraulic Model



Why Restoration?

Logistical

- Principles based on Stakeholder feedback
- City of Ketchum commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- **Potential water savings**
- Improve riparian shade and aesthetics



Existing irrigation = 10.5 acres; 2.4 – 2.6 million gallons (July).
Compare with Atkinson Park ballfields at 9.5 acres; 1.25 million gallons (July).



Why Restoration?

Logistical

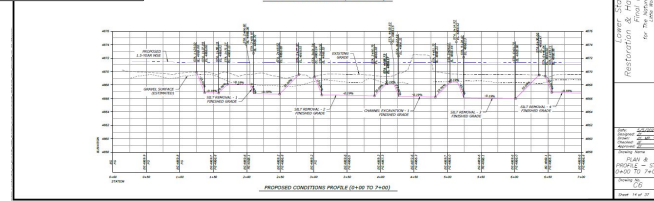
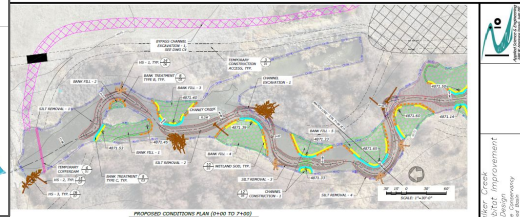
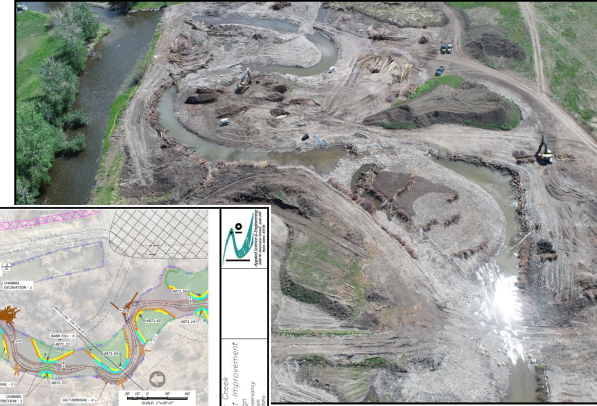
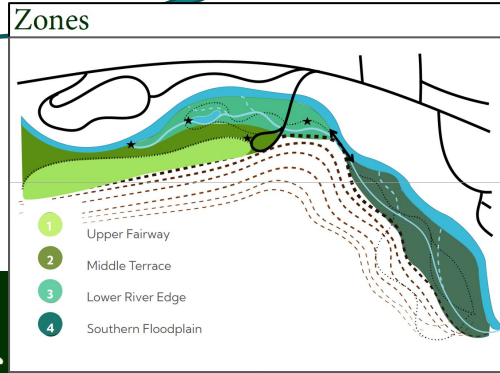
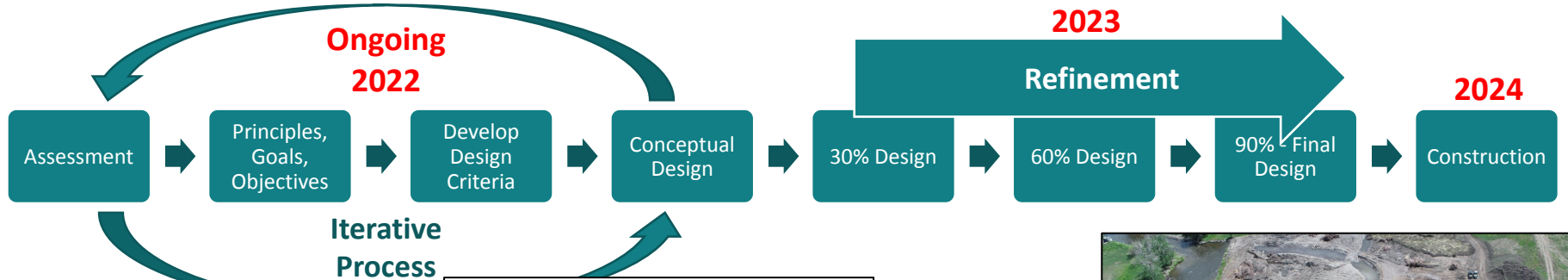
- Principles based on Stakeholder feedback
- City of Ketchum commitments
- Improve funding opportunities

Ecological

- Improve stream function
- Improve fish and wildlife habitat
- Dissipate flood risk
- Reduce stream energy
- Potential water savings
- **Improve riparian shade and aesthetics**



Restoration Process



What is the nature of Warm Springs Preserve?

Restoration Examples

Big Springs Creek (tributary to Lemhi River)

- During Construction



Restoration Examples

Big Springs Creek (tributary to Lemhi River)

- First Spring After Construction



Restoration Examples

Catherine Creek (tributary to Grande Ronde River)

- During Construction



Restoration Examples

Catherine Creek (tributary to Grande Ronde River)

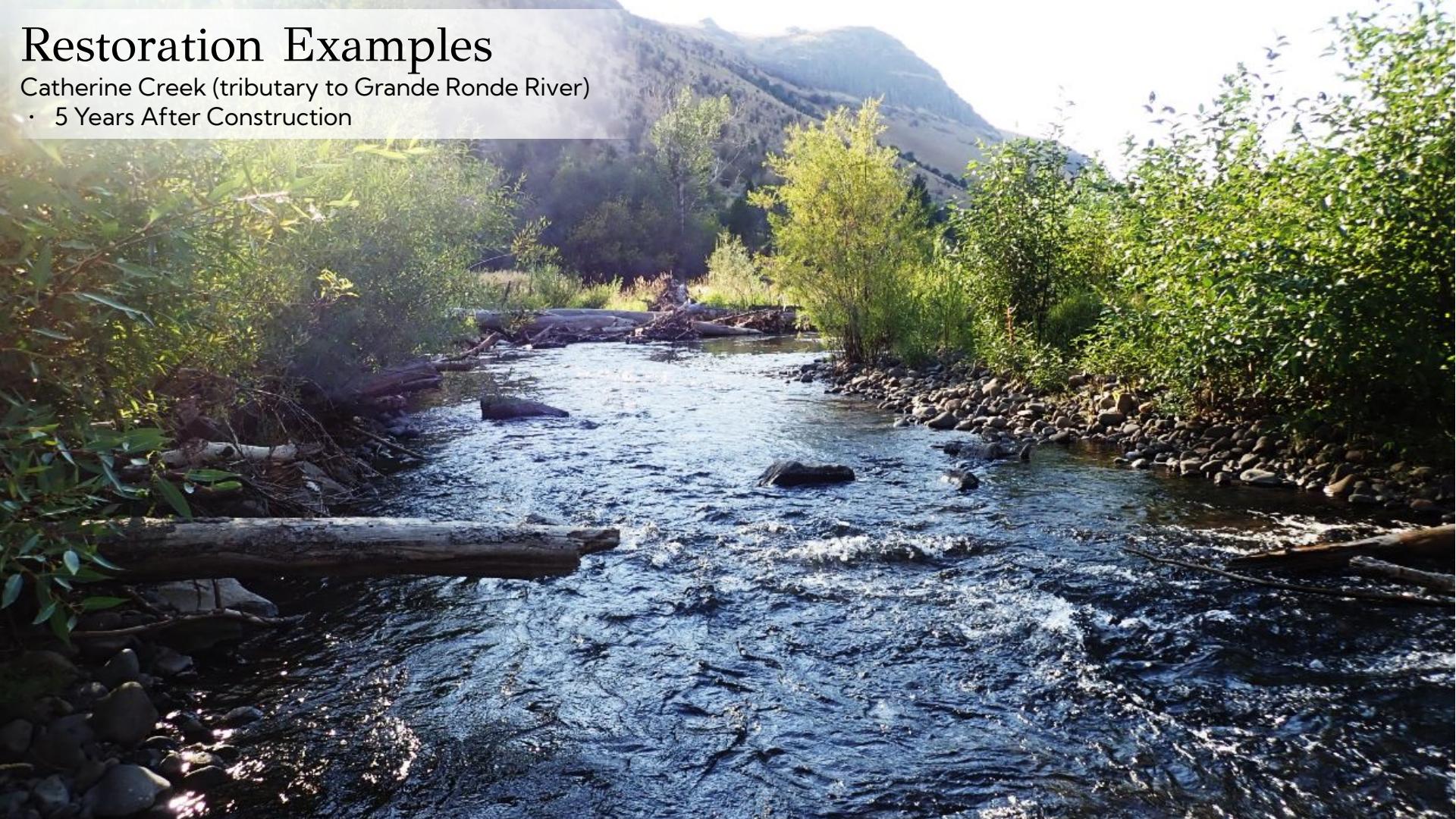
• 2 Years After Construction



Restoration Examples

Catherine Creek (tributary to Grande Ronde River)

- 5 Years After Construction



Human benefits/User Experience

- Better access to therapeutic natural resource
 - Variety of ways to experience water (healing, relaxing, etc.)
 - Varying depths of water allow for wider range of ages and animals, etc.
- Safer to access
- Places to rest/pause
- Increase shade
- Extend stay (facilities)
- Accessibility
- Aesthetics
- Open up to additional user types
- Downstream fishing improvement



What is the nature of
Warm Springs Preserve?

Opportunities

Connected & Accessible to All

Measurable Objectives & performance metrics

Hydrology & Floodplain Improvements

Habitat, Biodiversity & Wildlife

Interspecies Dynamics



Opportunities



Opportunity Areas

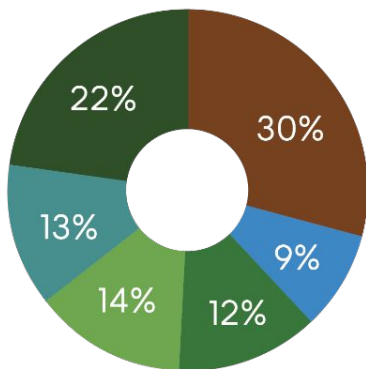
- 1 Upper Fairway
- 2 Middle Terrace
- 3 Lower River Edge
- 4 Southern Floodplain
- 5 The Woods
- 6 The Creek
- ☆ Amenity Zone

WSP by the Numbers



Opportunity Areas

- 1 Upper Fairway
- 2 Middle Terrace
- 3 Lower River Edge
- 4 Southern Floodplain
- 5 The Woods
- 6 The Creek
- ☆ Amenity Zone



Opportunity Areas

1 Upper Fairway



Example images



- Maintain upper terrace fairway
- Replace inefficient irrigation system
- Opportunities for benches & picnic tables
- Maintain lawn with some restored edges
- Potential for dog waste receptacles



Opportunity Areas

2

Middle Terrace

Example images

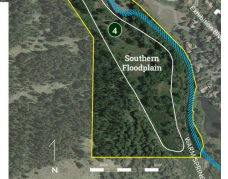
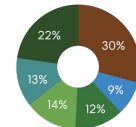


- Potential for seasonal native wildflower meadow
- Enhanced biodiversity & pollinator species
- Non-irrigated
- Mown pathways



Opportunity Areas

- 1 Upper Fairway
- 2 Middle Terrace
- 3 Lower River Edge
- 4 Southern Floodplain
- 5 The Woods
- 6 The Creek
- 7 Amenity Zone



Opportunity Areas

3 Lower Creek Edge



- Possibly extensive grading & earthworks
- 2-3 inlets connecting to creek
- Gravel islands and bars
- Low water crossings for ephemeral channels
- Small bridges for year-round flows
- Expanded tree canopy



Opportunity Areas

4 Southern Floodplain

Example images



- Light touch, surgical enhancements to Southern Floodplain
- Minor grading
- Pilot channel
- Soft surface pathways



Draft Project Principles

goals, primary values & major themes

1. Create a Preserve that is
Connected and Accessible to All.
2. Design for Success over Time
3. Support All-Season Multi-Functional Use
4. Demonstrate Leadership through regeneration
of Healthy Ecosystems for People, Plants & Animals
5. Restore the Creek and Floodplain
6. Celebrate & Educate about the Past, Present
and Future of the Preserve

How will we measure our success?

Options:

1. Water efficiency
Reduce managed water consumption (target reduction % or gal/acre)
2. Stream restoration
Increase acres of floodplain connectivity, #/size/depth of pools, observed species richness (wildlife + vegetation)
3. Hazard/flood safety
Reduce frequency and extent of flooding in residential areas; reduce in-stream flood velocity and bank erosion potential
4. Experiential success
Increase access, usage, and activity types (access for all)

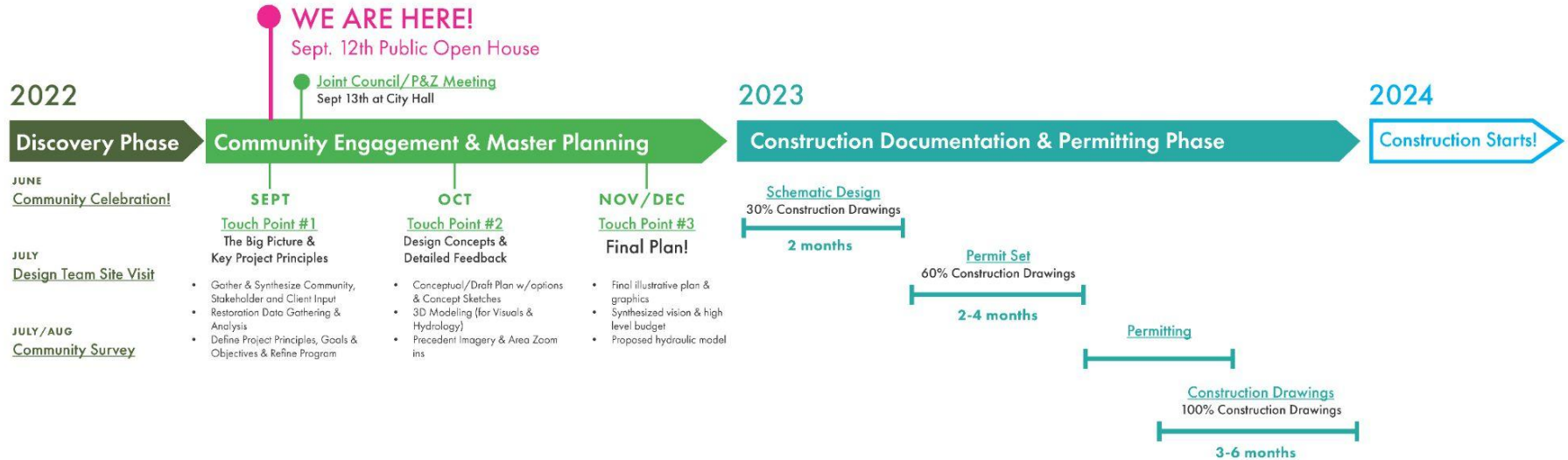
Process & Engagement

Vision

Public Meetings

Design + Planning

Action



Project Partners



City of Ketchum



Wood River Land Trust



Friends of Warm Springs Preserve Committee

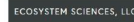
Design Team



Superbloom
Team Lead, Community Engagement,
Landscape Architecture



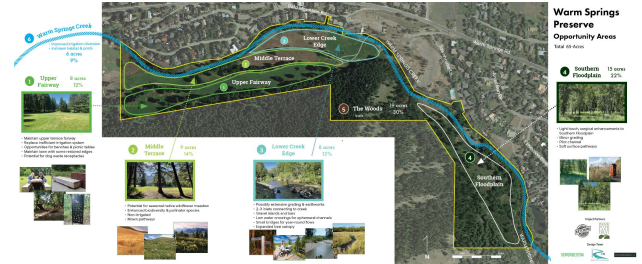
Rio Applied Science & Engineering
Engineering, Geomorphology, Hydrology



Ecosystem Sciences
Ecological Systems

Public Feedback & Comments

Public Open House - Monday, September 12th



Key Findings

- To come!

Council & Commission Direction