

# City of Ketchum

June 13, 2022

Mayor Bradshaw and City Councilors City of Ketchum Ketchum, Idaho

Mayor Bradshaw and City Councilors:

Recommendation to Approve Purchase Order #22107 with Superbloom Landscape Architects for Professional Services to Complete Warms Springs Preserve Master Plan

# **Recommendation and Summary**

Staff is recommending to contract with Superbloom Landscape Architects to complete the Warm Springs Preserve Master Plan. The city requested interested firms via a competitive RFP process. The evaluation committee consisted of two city staff members and two Wood River Land Trust staff members.

"I move to approve Purchase Order #22107 with Superbloom Landscape Architects."

The reasons for the recommendation are as follows:

- The city completed a competitive solicitation for proposals and Superbloom was the unanimous recommendation by the review committee.
- Superbloom has completed similar projects for other public entity clients in the west. Their partnering team (Rio Applied Science) has completed past water engineering work on the Warm Springs Preserve site and has significant experience in the Wood River area.

# Introduction & History

On April 14<sup>th</sup>, the city officially acquired the Warm Springs Preserve via private donations. The public was informed early in the fundraising process that the city would complete a detailed master planning process to guide future improvements to the property. The city recently received \$1 million from the Spur Foundation to fund the implementation of the master plan.

During the RFP process, the city sought to engage a professional firm or collection of resources (team) to (1) create a long-term master plan for the Warm Springs Preserve and (2) serve as architect of record in the development of construction drawings or bid documents to implement the master plan.

The master plan will address the location of the following passive green space amenities:

 Pedestrian connection points to adjacent neighborhood, River Run lodge and Warm Springs Village

- Walking trails
- Public restroom/maintenance facility /water bottle refill station
- Wayfinding signage
- o Donor recognition elements
  - History of the property/donor wall
  - Picnic tables
  - Benches

The plan will also address the following improvement areas:

- Re-vegetation of portions of property from water intensive grass to native grasses
- Warm Springs Creek habitat restoration and floodplain conveyance improvements
- o Replacement of irrigation system and recommission intake/holding pond area

Significant public engagement will occur throughout the process with the City Council as the final approval body of the plan. City staff will lead public outreach efforts in concert with the design team.

The following schedule and phased implementation approach has been established by the city:

- Summer 2022
  - o Complete master plan
  - o Conduct public engagement opportunities
- Implementation (funding dependent)
  - Phase I: Fall 2022 donor recognition elements (donor wall, signage, benches)
  - Phase II: 2023 public restroom/maintenance building, new irrigation system, and modest revegetation
  - o Phase III: TBD trail, flood/stream restoration

# **Sustainability Impact**

The master plan will address the following elements:

- New irrigation system to assist with water efficiency
- Revegetation of certain areas from water consumptive grasses to more native species
- Stream restoration for assistance with water quality and wildlife habitat
- Flood conveyance improvements

# Financial Requirement/Impact

The first task order is proposed to be a not-to-exceed amount of \$10,000. Sufficient funds exist in the Warm Springs Preserve Trust Account from donations.

# Attachments

Purchase Order #22107
Task Order #1 – Scope of Work
Superbloom/Rio Project Proposal

June 9, 2022

Project: WARM SPRINGS PRESERVE | Ketchum, ID

**Scope:** This proposal is intended as a preliminary discovery and scoping exercise between the client group (City of Ketchum, in partnership with Wood River Land Trust) - heretofore called "Client" or "Client Team" and the Consultant (Superbloom, with sub-consulting services from Rio ASE), heretofore called "Superbloom Team" or "Consultant Team." The scope of this proposal includes only those deliverables and meetings expressly listed herein. The primary intent of this proposal is to assist with scope definition of future phases such as but not limited to: master/vision planning, schematic design, construction documentation, permitting, construction administration and site monitoring.

# **00** PHASE 00 Pre-Design/Discovery Services

The Consultant Team will travel to the Warm Springs Preserve site for 1 day of work in Ketchum to gather site data and observations, develop high-level preliminary sketches and meet with the Client and any stakeholders as identified by the Client Team. It is anticipated the Client will make necessary arrangements to meet with stakeholders and obtain site access as needed and will develop an internal draft list of Goals, Objectives and Constraints prior to Consultant Team site visit.

# **Meetings/Site Visits**

1 Site Visit (1 working day)

# Proposed Schedule (Week of July 11, final date TBD):

**Day 1 pm** (1/2 day = 4 hours)

- Consultant Team on-site data collection and field observation
- Consultant Team to develop high-level concept sketches (hand drawn or similar)

**Day 2 am** (1/2 day = 4 hours)

 Meeting with Client Team & any desired stakeholders to refine goals/objectives and site constraints and review concept sketches

# **Deliverables (and format)**

- 1. Draft of Goals/Objectives and Site Constraints (Google Doc)
- 2. High Level Concept Sketches (PDF or JPG)
- Master Planning and/or Design Phase Proposal and Definition (scope, schedule and budget) (PDF)
- 4. High-level design budget range (soft cost estimate only) (PDF)

Total Fee (Phase 00)

\$10,000 NTE

**Budget/Fee** 

\$10,000

time & materials,

not-to-exceed

including expenses

This exhibit is attached to and made a part of the Client's master agreement dated
between the Client and Superbloom for the purposes of providing professional landscape services. Additiona
services or hours beyond above noted hours will be billed at the following rates only with prior approval from
Client:

# Standard Billing Rates, 2022

Team billing rates below, provided for reference only. Rates subject to change annually. Superbloom will notify Client of updates 30 days prior to change.

Superbloom		Rio ASE	
Principal/Landscape Architect	\$175.00/hr	Senior Principal Geomorphologist	\$150
Project Manager	\$125.00/hr	Principal Geomorphologist	\$145
Landscape or Graphic Designer	\$100.00/hr	Principal Engineer	\$145
Graphic Designer	\$100.00/hr	Staff Engineer II	\$115
Research Assistant	\$ 90.00/hr	Staff Engineer I	\$95-110
Intern	\$65.00/hr	Office Manager	\$85

# **Reimbursable Expenses**

Reimbursable expenses shall be billed at-cost and may include: airfare, accommodations, mileage, meals/per diem and/or vehicle rental, and printing expenses.

IN WITNESS WHEREOF, the Parties have executed this Agreement.	
Studio Superbloom, LLC	
By: Stacy Passmore or Diane Lipovsky, Principal	By:(signature)
	Printed Name/Title:

By signing, Client acknowledges that they have read and understand this proposal, any additional scope of work and material selections and all documents referenced therein, along with the terms and conditions attached hereto. Client agrees that upon signature this Proposal becomes the sole contract between Client and Superbloom. By signing, Client confirms that it is the owner or duly authorized representative of the owner, of the property where work is to be performed and has full, binding, legal authority to enter into this Agreement.





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LANDSCAPE ARCHITECTURE
COMMUNITY + REGIONAL PLANNING

23 LINCOLN STREET, SUITE 200 DENVER, CO 80203 214-288-1517 WWW.SUPERBLOOM.NET



SCIENCE + ENGINEERING
GEOMORPHOLOGY + HYDROLOGY

3380 W AMERICANA TERRACE STE 390 BOISE, ID 83706 208-559-4615 WWW.RIOASE.COM



Dear Ms. Swindly and the Selection Committee,

It is with great pleasure that Superbloom and Rio Applied Science & Engineering submit our credentials as potential collaborators in your effort to advance the Master Plan of Warm Springs Preserve. Our shared philosophy, complementary river restoration experience and commitment to crafting meaningful connections between people and the land make our team an ideal partner to bring a compelling vision to life.

## A Dynamic Process.

We are deeply compelled by the incredibly vibrant and sweeping preserve, its importance to local and regional habitats, its heritage and ingrained community narratives. It is the kind of complex and meaningful project we value most – a project for all people with diverse voices that is authentic to place, nature and community. We relish the opportunity to develop thoughtful and contextual designs for natural areas and open spaces while providing a powerful catalyst for regenerative living infrastructure and interactive engagement. The project needs to:

- Engage the Ketchum community in a creative and meaningful design process while establishing the ecological/restoration and recreational potential of the site
- Synthesize stakeholder input into an open space master plan that integrates with the existing context and future planning efforts
- Establish a landscape mosaic that connects natural areas with moments for pause and reflection, integrating recreational opportunities with ecosystem restoration
- · Enhance the hydrologic landscape, expand wildlife & pollinator habitat and native plantings
- · Develop accessible, recreational trails and spaces for year round and all-season activities
- · Imagine artful donor recognition elements that can celebrate community contributions

#### **Transformative Design**

Superbloom, based in Denver Colorado, works on projects across the Western U.S. We are an innovative landscape architecture and planning collaborative committed to dynamic design, environmental stewardship and deep research. We work with the elements and systems of landscape to cultivate transformative future conditions. Inspired by the dynamic landscapes of the American West, our design practices lay the groundwork for flourishing ecologies and resilient communities. We believe that our collective experiences, outlined in greater detail in the Qualifications section, will provide a richer, deeper and ultimately more meaningful design for the project.

## Local Expertise.

Rio ASE is a leading expert in river and floodplain ecosystem restoration with years of experience in Idaho, the Wood River Valley, and the Warm Springs Preserve project site. Superbloom brings their expertise designing parks and open spaces across the Rockies, and in other mountain communities like Ketchum, from Telluride to Crested Butte. We are excited to be able to continue these relationships through our work and passion for alpine communities and landscapes.

# Partners for the Future.

Our team is enthusiastic and ready to go! As partners in this next step for Warm Springs Preserve, we are thoroughly committed to giving this project our full attention in the effort to realize any community engagement, conceptual design alternatives and capable of delivering full-service design services.

It is with sincere enthusiasm that we submit the enclosed qualifications for this project. Stacy will be serving as primary contact, if there is any additional information that we can provide at this time, either about our team or experience, please do not hesitate to contact us directly. We would also love to meet with you in-person or virtually for an interview and further discussions.

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Regards,

Stacy Passmore & Diane Lipovsky Principals / Co-Founders, Superbloom Rob Richardson, PG, PMP Princpal Geomorphologist, Rio ASE





# Vision

Warm Springs Preserve provides an extraordinary opportunity to enhance a well-loved landscape and important ecosystem in the Ketchum community.

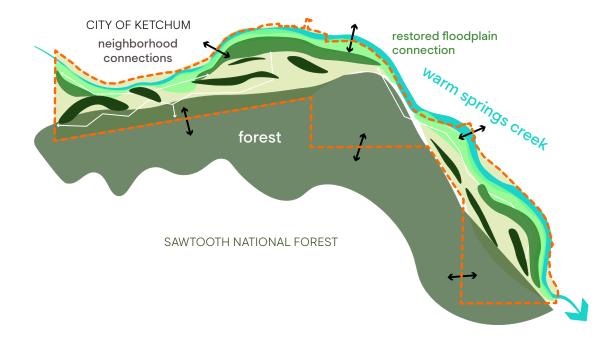
We are deeply compelled by the incredibly unique preserve, its importance to local and regional watersheds and habitats, and its ingrained community narratives. The unique aspects of this preserve are two fold:

- 1) It's a significant parcel within a heavily impacted floodplain that can be restored to provide improved natural riparian function and habitat.
- 2) The informal recreational elements of the property can be formally recognized, connected and enhanced.

An enhanced Preserve will enrich the community's experience of this magical landscape, regenerate the underlying natural hydrological and geomorphological systems and develop a range of experiences that will inspire people to fall madly in love with nature. We relish the opportunity to create designs that enhance both human and environmental aspects of the ecosystem while providing a powerful catalyst for sustainable, interactive collaboration and engagement. integration of improved recreational opportunity with functional ecosystem restoration.

# **Warm Springs Preserve**

Pre-design diagram of potential landscape mosaic and floodplain connectivity







# Approach

Our methods of design are based in a deep understanding of the connections between ecological systems and human communities.

We practice a research-based, collaborative approach to project development, designing and building. We work closely with individuals and communities to develop an authentic approach that can evolve as we learn through analysis and stakeholder outreach.

Reflecting our vision, we imagine approaching the project from two primary perspectives that will inform our concept and become merged into a final master plan:

- 1) A scientific analysis to determine what is appropriate for the site, and
  - 2) Stakeholder outreach to determine the community desires for the site.

# **Building on Existing Knowledge**

From our past work on this site, we know that Warm Springs Creek is highly confined, armored, and incised. Floodplain inundation is much more frequent within the lower portion of the project area, but even then doesn't broadly occur until nearly a 100-year event. The stream is also perched about 8-12 feet above the groundwater table necessitating special consideration when working in and around the stream bed but also when considering riparian and wetland restoration on the floodplain. Additionally, potential wildfire on the landscape can dramatically alter the hydrology of the watershed by creating hydrophobic soil conditions. Rio ASE staff evaluated post-fire hydrologic and hydraulic conditions associated with the Castle Rock fire in 2007, and we are prepared to develop a design for the Preserve that will be resilient to a similar, inevitable future disturbance while simultaneously reducing risk to neighboring infrastructure and property. And because we've already completed much of the legwork, our technical analysis will be significantly streamlined requiring only updates, project-specific refinement, and quality control. Our technical and site-specific experience uniquely qualifies us to anticipate and plan for natural disturbance, turning that potential risk into opportunity.







# **Develop Integrated Restoration and Recreational Concepts**

# 1. Science-Based Ecological Analysis

Our team will evaluate the geomorphic, hydrologic, hydraulic, and ecologic site conditions to identify appropriate physical and biological restoration targets. These targets can be optimized to meet preferred conditions for specific key species as desired (e.g. resident red-band rainbow trout). The optimized restoration targets can be used as a basis for developing appropriate recreational opportunities to create outcomes that are mutually beneficial to humans and the environment. For example, adding a side channel and/or flood conveyance on river right can provide valuable off-channel habitat for aquatic and wetland species while also providing floodwater conveyance to reduce local flood risk to infrastructure on river left. Rio ASE understands the flood risk and potential at this site stemming from past geomorphic, geotechnical, hydrologic, and hydraulic analyses our staff conducted for this site following the Castle Rock fire in 2007.

# 2. Community-Driven Design

In tandem with and informed by the site analysis process, we will deepen our understanding of the connections between ecological systems, local neighborhoods, and public infrastructure. First we will take time to be curious, to listen, discover, and understand. Immersed in a range of perspectives, histories, futures and possibilities, we will learn and research by getting our hands dirty on site and through creative storytelling. We will support the City of Ketchum with diagrams, maps and graphics needed to receive feedback from the community and stakeholders. Next, we will work with the team and stakeholders to explore design ideas from the roots to the tip – soil to sky, we will synthesize environmental and cultural narratives into visionary design concepts. With an eye for the details and the process of creation, we work with the material elements of landscape, live matter, life cycle and labor. We work closely with individuals and communities to develop authentic approaches for each project, and designs that can grow from concept to implementation.

# **Funding + Cost Estimation**

Our team has the ability to prepare rough order of magnitude cost estimates for design budgeting and fundraising purposes. We will work closely with the City of Ketchum and the Wood River Land Trust to evaluate the cost of proposed improvements and amenities during the master planning process. We also love working with organizations to prepare visual materials for fundraising and grant writing efforts necessary to implement the project if desired.

# **Master Plan Vision Book**

The thoughtful merger of these science-based and community-driven processes will be compiled in a digital Vision Plan Book (PDF + Print) and we can collaborate to develop additional materials, digital materials or websites as desired to share the results of the process and final master plan design with internal and external stakeholders.

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# **Donor Recognition**

To recognize and honor all donors for the Warm Springs Preserve project we will artfully weave donor recognition elements into the landscape design. A combination of recognition sculptural and art pieces, furnishings, architectural features, and plant donations will allow for various levels of donor recognition throughout the space.

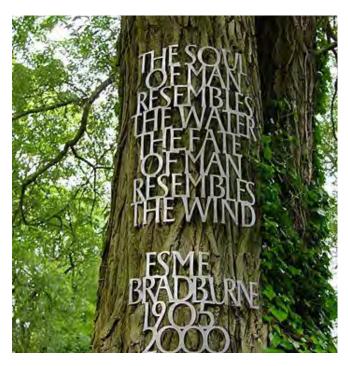














# **Detailed Scope**

# We practice a research-based, collaborative approach to designing and building.

We work closely with individuals and communities to develop authentic approaches for each project, and designs and strategic processes that can grow from concept to implementation. To do so requires that this be a thoughtful project that draws from the great work already conducted.

Like the vision we imagine approaching the project from two primary perspectives, that will become merged into a final master plan 1) a scientific analysis to determine what is appropriate for the site, and 2) stakeholder outreach to determine the community desires for the site.

# Phase A JuneAugust

# **Site Analysis + Community Engagement**

This phase will initiate with the compilation and review of relevant existing studies, data, and research that exists for the site in both the environmental and social areas. These data will include reports already provided by the City of Ketchum for this proposal as well as other data identified during our research including past hydrologic, hydraulic, and geotechnical reports prepared by Rio ASE staff for a past development project on this site. At the same time, our team will engage with the City of Ketchum and the Wood River Land Trust in an in-person kickoff meeting to discuss the vision and goals, as well as history and existing conditions of the site.

The kickoff meeting will be followed by a site visit to examine the landscape, current amenity conditions, parking and circulation. Part of the site visit will include data collection informing our technical analysis to identify what is scientifically/technically appropriate for the site. Close coordination with the City of Ketchum, Wood River Land Trust and key stakeholders will be necessary to answer questions and engage in discussion during the course of the research and site studies. Close collaboration throughout the life of the project will ensure effective and efficient two-way transfer of knowledge while also establishing and managing expectations. This paired scientific and social understanding will be used to identify a conceptual design ensuring the outcome is geomorphically and ecologically appropriate, technically feasible/responsible, all the while meeting community expectations, needs, and desires to the extent practicable.

Our technical analysis will identify what is scientifically/technically appropriate for the site (a suite of tools in a toolbox so to speak), then our collaborative engagement with the City of Ketchum, Wood River Land Trust, and stakeholders will provide opportunities for learning and listening (both ways). This enhanced understanding of the human need/desire for the site can be used to select which tools from the toolbox will be incorporated into the conceptual design..

# **Detailed Task Outline**

# **Data Acquisition**

- Obtain and review existing background information
- Review and analyze existing survey, existing grading studies
- Precedent studies and design research (including, but not limited to: park programming, wayfinding, accessibility, alpine ecology, park operations and maintenance)

# **Site Visit**

- Site Walk / Visual Conditions Analysis
- Document and Analyze existing site conditions (such as: existing infrastructure, equipment, hydrology, vegetation, solar aspect, wind patterns, adjacent conditions, etc.)

# **Technical Analysis**

- Refine site hydrology and hydraulics (as needed for planning)
- Refine geomorphic and ecological understanding of site conditions
- Identify appropriate restoration target conditions and suit of associated treatments

# **Social Analysis**

- Community/Stakeholder Identification Analysis
- Programming analysis
- Define Client, Community, and Stakeholder Goals, Objectives, Constraints, and Opportunities
- Establish design principles
- Review Budgets and Financial Goals
- Review of Ketchum Parks Operations & Maintenance Strategies

# **Phase A Meetings**

Meeting preparation including: develop graphics, surveys and engagement materials in coordination with Client

- 1 Kickoff Meeting and Site Walk(in-person)
- 3-4 Virtual Calls with Client, as needed
- On-site public comment meeting at Grand Opening (June 12, 2022)
- 1 Stakeholder Meeting supporting Client (virtual)

# **Deliverables**

## **Technical Deliverables:**

- Technical summary focusing on appropriate geomorphic, hydrologic, hydraulic, and ecological targets
- Develop suite of potential treatments

# **Design & Community Deliverables**

- · Summarize community & stakeholder goals, objectives, constraints and opportunities
- Summarize key design principles
- Visual description of site opportunities and constraints
- Visual illustration of scientifically appropriate treatments that meet stakeholder expectations
- Hand sketch or similar diagrams & mappings to convey questions and/or general understanding of site programmatic, environmental and social conditions
- Precedent research visuals, to gain an understanding of desired level of design scope.
  - Framework and Ideas for Donor Recognition Elements
  - Consolidated List of Stakeholders
  - Written or visual analysis of existing park operations and budgets
  - Graphics and engagement materials for 1-2 community and stakeholder meetings

# Phase B August- Fall

# **Master Plan Concept Design**

This phase will integrate information and results from the Site Analysis & Community Engagement phase. Using the restoration design as the foundation (what is scientifically/ technically appropriate for the site from the Phase A) we will interweave the human/recreational components based on the social analysis part of the previous phase. Details evaluated during concept synthesis will include: appropriate restoration actions and planting areas overlain by associated programs and amenities, structures, donor recognition elements, circulation, accessibility routes, outdoor activity spaces, trails, exterior lighting, and other key components identified during the previous analysis phase. In conjunction with this effort, we will determine relative range of upfront implementation costs as well as ongoing operations and maintenance costs for project components to further inform concept development.

Our team will compile appropriate treatments into three draft concepts covering a broad range of the continuum of technically appropriate and socially desirable outcomes. Our team will present these three draft concepts (i.e. suites of possible treatments/actions) to the Client and previously identified key stakeholders in a virtual presentation to discuss the merits of each. Based on feedback from this collaboration, we will work with the client to select a single preferred concept from the three drafts to create a hybridized singular concept.

Building on the selected concept, our team will develop conceptual level design drawings outlining: program amenities zones, hardscape materials, furnishings and layout, planted zones and descriptions, paths, additional trees and shrub locations, and conceptual grading. These drawings can be used to develop high level budgets (developed by Superbloom and Rio with the Client)

# **Detailed Task Outline**

- Data/Analysis Integration
- Develop appropriate restoration actions
- Overlay appropriate social components
- Develop 2-3 Draft Concepts
- Compile suites of appropriate actions into three concepts
- Present results to Client and key stakeholders
- Develop Preferred Concept
- Prepare refined single concept based on draft concept feedback

# **Phase B Meetings**

- 2-3 Virtual and/or Conference Calls with Client (Virtual) to coordinate draft concept development
- As requested, meetings with Friends of Warm Springs Preserve
- 1 Draft Concept Client and Key Stakeholders Meeting (Virtual)
- 1 Draft Concept Meeting to Planning & Zoning Commission
- 1 Draft Concept to City Council (In Person)

# **Anticipated Deliverables**

- 2-3 hand-sketch concept plans with drawings and images to convey design ideas
- Consolidated, illustrative Final Conceptual Master Plan including scientific basis for the restoration design (rendered)
- Park Land Use & Amenities diagrams
- Annotated hardscape and landscape plan(s)
- Circulation diagram
- 3D Model and Lumion Visualization for new Open Space
- 3-4 Illustrative Renderings and/or Vignettes to be used for fundraising
- Conceptual Design for Donor Recognition Elements
- Phasing Plan

# Phase C August/ September

# Finalize Master Plan + Donor Recognition

The preferred concept and supporting information developed in the previous phases will be refined and compiled into a PDF or web-ready manual. I that we will share with the client to provide a clear organization and refinement of the information developed in Phases A and B. This Master Plan document can be printed or retained as a digital tool for ongoing reference as you move through the process of executing your Master Plan. Samples of similar booklets and websites created for previous clients available upon request.

In conjunction with the finalization of the Master Plan Document, the Design Team will include documentation that will facilitate the implementation of the Phase 1 Donor Recognition Elements such as schematic design drawings and plans indicating their locations.

# **Meetings**

1 Presentation of the Final Master Plan to City Council (In Person )

# **Anticipated Deliverables**

Final Master Plan Document, PDF and digital

# **Optional Add Ons at Client Request**

Construction Documents for Donor Recognition Elements
Additional Digital illustrative renderings
Grant Writing and/or Funding Applications
Permitting Assistance
Schematic Design, Design Development or Construction Documents
Irrigation Design
Detailed existing and proposed hydraulic modeling.

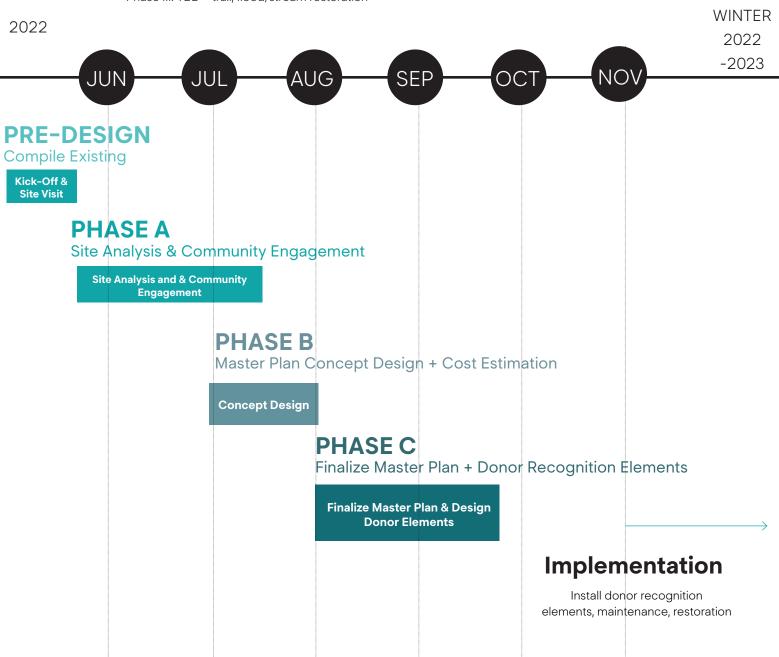
# Schedule

We will work with you to create a specific schedule that addresses time constraints and public meeting deadlines.

May 2022 – retain design team for Master Plan
June 2022 – public launch event at Warm Springs Preserve
June/July 2022 – site analysis and community engagement
July/Aug 2022 – Master Plan Concept Design + Cost Estimation
Aug/Sept 2022 – Finalize Master Plan

Implement the Master Plan in phases (funding dependent; sequencing to be informed by final Master Plan)

- Phase I: Fall 2022 donor recognition elements
- Phase II: 2023 bathroom/maintenance building, irrigation and modest revegetation
- · Phase III: TBD trail, flood/stream restoration



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# **Team**

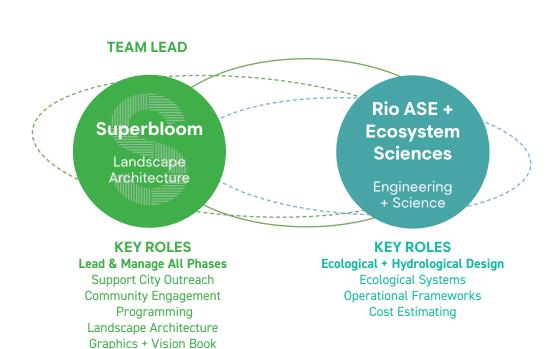
For this truly inspiring project, Superbloom and Rio ASE have joined forces to create a comprehensive team of designers, scientists and experts in natural resources design, open space master planning, park design, landscape architecture, hydrology & geomorphology, ecosystem restoration ecology, environmental education, cost estimating, graphic design and community engagement. Our combined partnership will bring together both the human and ecological component of the project equally to inform the master plan and design process.

# What makes our team unique?

**Superbloom** brings years of experience working on award-winning and influential projects such as nature centers, museums, and park systems across the Rocky Mountains. We specialize in collaborations with non-profits, educators, cultural institutions, and mountain towns. Our process is shaped with the client and community to test, research, and engage sites, aiming to translate a cohesive vision into physical space in a way that is accessible, interactive and inclusive throughout the design process.

**Rio ASE's** expertise will incorporate river and floodplain restoration as an foundational part of the Preserve. Our technical philosophy is founded in sustainability. We believe that river and floodplain engineering must be based on geomorphic principles that work with the river rather than fighting it to ensure effective, long-term solutions that benefit nature and the public. Additionally, we believe the ecosystem evolved with the river, and improving river process will inherently improve all connected ecosystem functions. Humans are an undeniable part of every ecosystem, and we strive to design projects that focus on features beneficial to both humans and the natural environment.

As a supporting project partner, **Ecosystem Sciences** will bring to our team their broad experience in stream and habitat restoration, scientific data analysis and evaluation, as well as community engagement. They are experts in ecosystem processes as well as evaluating large quantities of complex data, boiling down the critical components, and thoughtfully delivering that refined understanding to technical and non-technical audiences. They will augment our team with their local and ecological experience, added conceptual design perspective, and additional capacity.



# City of Ketchum, Wood River Trust, Warm Springs

**TEAM LEAD** 

# **SUPERBLOOM**



STACY PASSMORE, AICP

PRINCIPAL-IN-CHARGE

Primary Project Contact and Project Director



DIANE LIPOVSKY, RLA

CONSULTING PRINCIPAL

Technical Director



**DOMONIQUE RAYMOND** 

PROJECT MANAGER

Recreation design specialist, Will oversee document review, drawing coordination between disciplines, and QC,



HELEN DAVIDOSKI

DESIGNER

Will support site analysis and concept design development, specializes in urban ecology and storm water



**ARIEL KISKIRAS** 

**GRAPHIC DESIGNER** 

Support with graphics, engagement materials and wayfinding design



## **RIO APPLIED SCIENCE & ENGINEERING**



ROB RICHARDSON, PG, PMP

PRINCIPAL GEOMORPHOLOGIST

Will lead technical site analysis and conceptual design; stakeholder technical liaison.



JEFF FEALKO, PE

PRINCIPAL ENGINEER

Will lead hydrology and hydraulic modeling; lead engineer for restoration conceptual design



# TIM HANRAHAN, PHD

PRINCIPAL GEOMORPHOLOGIST

Will develop siteappropriate geomorphic restoration targets. Provide technical QC



## **ECOSYSTEM SCIENCES, LLC**

**DEREK RISSO** - SENIOR SCIENTIST, WETLAND AND RIPARIAN ECOLOGIST

ZACHARY HILL- ENVIRONMENTAL PLANNING AND DESIGN TIM MAGUIRE - SENIOR SCIENTIST, GIS ANALYSIS





# 1881 Farm Park

# Aurora, CO

# **DATES**

Ongoing

# **TYPE**

Park

# SIZE

15.3 acres

## **CLIENT**

Windler Public Improvement District

# **ROLE**

Landscape Architect (Lead)

## **CONTRIBUTORS**

Shape Architecture, DB Ink, Olsson Engineering, Hydrosystems KDI, Cullen Lighting Design Studio, Ketti Consulting, Altius Farms, Esoterra Culinary The 1881 Farm Park will be an iconic agricultural exploratorium for the Windler community, the City of Aurora and the Denver Metropolitan region at large. The design imagines a regenerative landscape that incorporates restored prairie grasslands and pasture, agriculture, food production, greenhouses and permaculture.

As a new center for communal and collaborative life, the community will experience history and nature through a direct connection to their food. They can see, taste and even participate in growing and harvesting an abundance of foods that are uniquely adapted to Colorado's climate and seasons. The rich experience and deep connection with food production and the land becomes a lifestyle at Windler. The farm will serve as a living seed library, expanding access to diverse and exciting heritage varieties; an on-site market and farm-to-fork restaurant offer seasonally rotating produce, meats, cheeses and flowers. The park in turn will be a catalytic center for the new walkable and bikable neighborhoods at Windler.

To ensure success of the farm park, water and soil conservation are essential. The design team continues to research additional ways to design site-appropriate sustainable resource systems for flexible, dynamic and porous spaces and surfaces that amplify the availability of especially water resources. The designs will synthesize closed-loop, water-optimized systems and rotational planting strategies based in best practices for dryland land management. See more about this project here.

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# **Nature Collective Fields of the Future**

# Encinitas, CA

**DATES** 

2022

**TYPE** 

Competition/Nature Center SIZE

8 acres

**CLIENT** 

Nature Collective

**ROLE** 

Landscape Architect
CONTRIBUTORS

Atlas Labs, DB Ink

The Nature Collective Fields of the Future aims to inspire people to fall madly in love with nature. This extraordinary opportunity to reconnect people with nature is nestled in the San Elijo Lagoon in Cardiff, California The collective spirit of the San Elijo Ecological Reserve has accomplished an ample amount of preservation among the greater reserve.

In an effort to preserve the way the local community interacts with the site, the historic use of working coastal agricultural lands will be maintained. The learning labs will serve as a center for collaboration and engagement, as students and teachers alike can utilize the environment as their classroom. The trail system will provide circulation through naturally influenced sculptures, some in impressive scale – designed by a plethora of sculptural artisans.

Located near Sunny San Diego, this project is intended to get a lot of use from the academic population nearby. The designs of the improvements will be fresh yet sustainable, and overall sensitive to the importance of local and regional habitat fabrics that need careful consideration. As naturalist heroine Jane Goodall has said, "to reconnect with nature is key if we want to save the planet." which is exactly what this site aims to be a part of. See more about this project here. Superbloom was recognized as a finalist and was awarded second place in this national design competition.

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# **Wild Bear Nature Center**

# Nederland, CO

# **DATES**

2020 - Ongoing

#### TYPE

**Environmental Education** 

# SIZE

5 acres

#### CLIENT

Wild Bear Nature Center

# **ROLE**

Landscape Architect (Lead)

## **CONTRIBUTORS**

Arch 11, Civitas, Branch Pattern, Studio Tectonic, Wild Bear Nature Center immerses visitors in the experience of education, discovery and wonder. Integrated with the Mud Lake Open Space in Nederland, Colorado at 9,000 above sea level, the design for the new Nature Center is inclusive and welcoming for all people year-round, expanding Wild Bear's central role in the community and as a regional destination for environmental education.

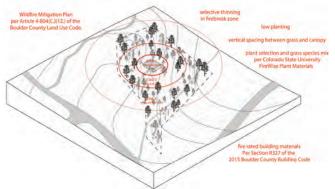
The Nature Center building, design by Arch11 is a gateway and threshold to the wilderness and will be carbon emission-free utilizing passive energy efficient design strategies. Metal, wood and stone are used to create a site-specific architecture that functions as a living organism and is seamlessly aligned with both interior and exterior learning environments.

A nature playscape weaves its way through the forest and around the building, inspired by the surrounding geology and forest. Highly crafted, the playscape incorporates a central sculptural "play wall" that represents the Continental Divide and hybridizes educational and play elements to support Wild Bear's programming. An outdoor amphitheater is a flexible and hybrid space to be used for outdoor classrooms, and small to large community gatherings adjacent to the Nature Center.

Connected by trails, a constellation of "observation stations" can be discovered across the larger site. These distributed landscape moments are self-guided, and show visitors how the forest is multidimensional, evoking all our senses – from the secrets of the soil and roots to the panorama of the canopy and sky. A range of activities are integrated with a discovery program that includes scent stations, rubbings, wildlife tracking, wilderness survival, bird observation, orienteering, sensory experiences, education about natural forest processes and climate change impacts.













# **Cache Le Poudre Wetlands Regeneration**

# Greeley, CO

# **DATES**

2018-2020

#### TYPE

Open Space

# SIZE

250 Acres

# CLIENT

City of Greeley

#### ROLE

Landscape Architect (Lead)

# **CONTRIBUTORS**

Aecom

Poudre Ponds is adjacent to the Cache La Poudre River in Greeley, Colorado. The approximately 250 acre site currently includes several reclaimed gravel pits and was opened to the public for recreation in 2011 with funding from the "Fishing is Fun" program by Colorado Parks and Wildlife and the Federal Sport Fishing Restoration Program. The complex includes four parcels that are in various stages of recreation, active mining and reclamation. In 2019 work began on parcels A and B to create a new slurry wall and to complete the remediation of Parcel B as a water storage pond. This document describes planning and design work done in 2019-2020 for the overall landscape for the site in conjunction with the Master Plan and site engineering with Aecom.

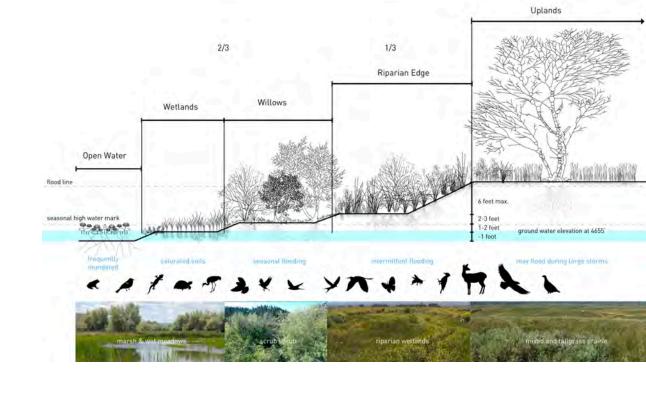
The Poudre Pond Open Space is currently part of the Eastern Plains section of the Colorado Birding Trail, which links outdoor recreation sites that offer wildlife viewing opportunities. The Ponds are also an important destination for recreation fishing in the community and offer non-motorized boating only.

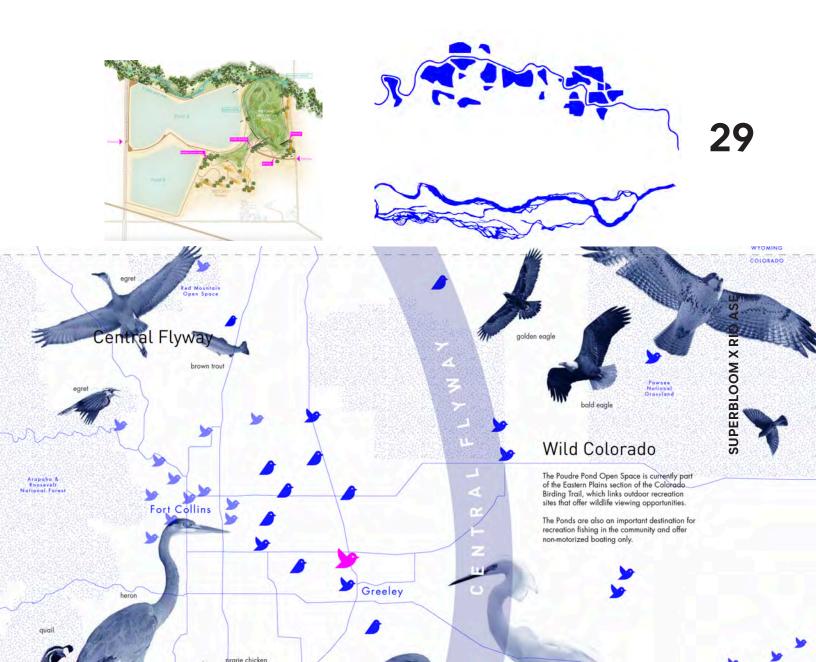
Geographically, the river water carries rock and sediment from the mountains and across the prairie. The action of the river has over time sorted rock and gravel, the largest material is deposited in the mountains, while the smaller gravel and sediment is carried across the plains. This process created gravel beds in the alluvial floodway of the meandering river and is the reason sites like this became gravel extraction mining sites.

\* Stacy Passmore served as Project Leader and Project Manager for the design team while employed as a landscape architect at Civitas.









# **High Prairie Park**

# Aurora, CO

# **DATES**

2016-2020

Envisioned as an anchor to the community of Aurora, High Prairie Park is a love song to the prairie landscape and to the adventurous spirit of the people who have moved to live here over hundreds and thousands of years.

# **TYPE**

Park

# **SIZE**

30+ acres

CLIENT Alberta

# **ROLE**

Landscape Architect (Lead)

# **CONTRIBUTORS**

CVL Consultants, Hydrosystems, Beanstalk Builders Biodiverse and drought tolerant gardens weave artfully with targeted gathering lawns and shade trees to negotiate grade changes from the promenade to the planted stormwater channel below, providing a cohesive community resource that is sensitive to our climate, and offering numerous circuits for strolling and refuge for prairie fauna.

Completed in 2020, High Prairie Park has already attracted new populations of native birds, butterflies and prairie frogs to mingle with residents and park visitors. Revealing its wild prairie context, the park design honors the challenges and patterns of cultivation in the prairie while creating a new form of community open space.

\*Work completed at Civitas, Inc. Diane Lipovsky served as Lead Designer and Project

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# WARM SPRINGS PRESERVE

# **SUPERBLOOM**

# Mt Crested Butte Town Park

# Mt Crested Butte, CO

**DATES** 

2020

TYPE

Park

SIZE 8 acres

**CLIENT** 

Town of Mt. Crested Butte

**ROLE** 

Landscape Architect (Lead)

Mt. Crested Butte Town Park and Wedding Garden is nestled in between the mountains just north of Crested Butte, surrounded by alpine views and vistas. Leveraging the intense grade of the existing park, the updated plan for the Town Park prioritizes accessibility, diverse experience, year-round activity, and elevated ecosystems.

A network of ADA compliant trails and pathways weaves through the park to ensure access for all. Updated play structures and natural play features including fallen logs, stumps, and rocks provide opportunities for both prescriptive and exploratory play. A series of varied mountain bike loops activates the steep hillside behind the updated tennis courts. Updated plantings and tree canopy provide wildlife habitat and an elevated walking experience.



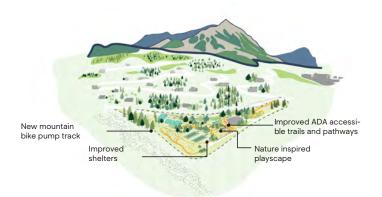


#### **Existing Conditions**

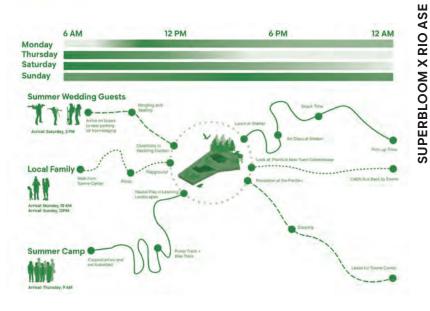
Mt. Crested Butte Town Park & Wedding Garden is an Essential Community Public Space for both Locals & Visitors

The space currently includes two municipal buildings, Park Department and ft. Crosses Butter Town Half & Police station. Existing parking near buildings, ead to a waiking path throughout the core of the park. A pavilion sits adjacent to a dist lot used for overflow parking and fit park outfitted with vicerrate an existence. A listence and this parks is undestinated by the Tarks to the the Cart.











### **Tamkaliks Side Channel Design**

### Wallowa, OR

#### **PROJECT TYPE**

Channel restoration
Floodplain reconnection
Habitat improvement
Side channel creation
Wetland creation
Riparian restoration
Construction observation

#### **HIGHLIGHTS**

Hydraulic modeling
Complex grading design
Main stem and side channel design
Large wood design
Fish habitat design
Compressed schedule

#### **STAKEHOLDERS**

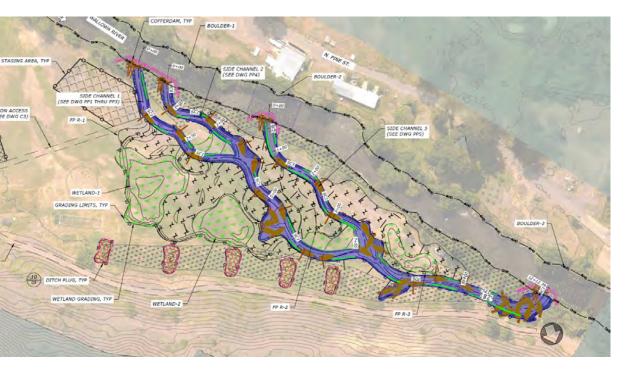
Nez Perce Tribe Bonneville Power Administration Oregon Department of Fish and Wildlife

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#### **CONTRACT DATES & VALUE**

March 2020 – August 2021 Design & construction observation The Tamkaliks Side Channel Design project is located on the Nez Perce Tribe's Homeland site in Wallowa, Oregon, approximately 2.5 miles downstream from the confluence of the Lostine and Wallowa Rivers. Historically, this area has seen extensive agricultural disturbance, road and railroad construction, floodplain encroachment, invasive weed proliferation, and residential development that have contributed to simplification and severe alteration of the stream course and drainage patterns. The resulting confined and incised channel created increased stream velocities and limited the river's ability for natural wood recruitment, sediment transport, and creating localized, slow-moving water and channel-adjacent wetland communities. The channel lacked habitat complexity and, as a result, contained limited spawning and rearing habitat for ESA-listed steelhead, Chinook salmon, coho, and lamprey.

Rio ASE took the project over from BPA when it was roughly at a 60% design. After geotechnical explorations revealed shallow bedrock, Rio altered the design to be more realistic in overall function and to increase the amount of habitat created while accommodating bedrock constraints. The final project design consisted of the development of a side channel complex adjacent to the main stem Wallowa River, including multiple inlets, wetland complexes, and robust live willow staking for revegetation efforts. The project was focused on floodplain connectivity, instream habitat complexity, and overall hydraulic diversity to increase summer and overwinter rearing habitat for juvenile salmonids. A secondary benefit of the project is the increased floodwater conveyance reducing flood risk to neighboring properties.



Final Design
Overview – Project
includes side
channel with
multiple inlets,
large woody
debris hydraulic
and habitat
structures, multiple
wetland cells,
fill/plug existing
ditch, and riparian
revegetation.



Side channel outlet, wood structure, and constructed riffle immediately after construction.

Below: Side channel and wetland complex immediately after construction; riparian vegetation not yet planted.





Oblique view of project area immediately after construction. Side channels and wetland/floodplain areas are activated.



### Lemhi River and Big Springs Creek Restoration, Lemhi County, Idaho

#### **PROJECT TYPE**

Channel restoration
Floodplain reconnection
Habitat improvement
Riparian restoration
Wetland creation
Construction observation

#### **HIGHLIGHTS**

Hydrology and hydraulic modeling
Main stem, side channels and large
wood design
Fish habitat restoration
Riparian and wetland revegetation
Shade and temperature modeling

#### **STAKEHOLDERS**

Lemhi Regional Land Trust Intermountain Aquatics Idaho Office of Species Conservation Idaho Department of Fish and Game Trout Unlimited

#### CONTRACT

September 2017 – Ongoing \$250,000

#### CONSTRUCTION

2017 and 2019 \$1.2M (estimated) The project initiated with a geomorphic assessment to evaluate channel evolution, character, and the potential for improved riparian and fisheries habitat. Systemic cause-and-effect relationships and recommendations to improve the physical habitat were identified. Recommendations were prioritized based on tiers of habitat conditions ranging from Functioning to Impaired to Recovering. Rio ASE worked with the LRLT and project partners to identify and develop three priority projects within the assessment area (design completion Phase I and II 4/2017; Phase III 4/2018).

Rio ASE managed the design team and participated as lead geomorphologist and lead design engineer for all three phases. The goal of each phase included improving in-stream and off-channel habitat for threatened Chinook salmon and steelhead by restoring appropriate channel form/geometry and improving natural channel processes. For all three phases, Rio provided geomorphic and engineering design services (hydrology, hydraulics, stream design, riparian planting zones, and engineered log jam design) from conceptual through final design. The projects relocated the channel(s) to existing areas of robust riparian vegetation, increased channel sinuosity, narrowed the channel width, increased flow depth, placed in-stream structure (woody debris), created channel constrictions to form and maintain pools, increased velocity variability, reconnected the floodplain, and established a robust riparian community.

Two project areas (Fayle Phase I and Big Springs Phase II) were constructed in 2017, and construction was completed in 2019 for a third project area (Confluence Project Phase III). Rio ASE is continuing to coordinate with the LRLT to identify and develop several additional projects within the overall assessment area. Additionally, Rio ASE has developed and is preparing to initiate a 5-year monitoring plan to evaluate project effectiveness.



#### Confluence Project, Phase III

Two years after construction, note the freestone gravel bed, multi-threaded planform, in-stream wood structure/cover, and developing riparian vegetation.



#### Confluence Project – Lemhi River Phase III

Existing condition hydraulic depth model illustrating lack of pools and shallow uniform depth at the 1.25year flow.



Proposed condition hydraulic depth model illustrating narrower width, many side channels, increased number of pools (dark blue areas) and overall increased depth variability at the 1.25-year flow.

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# **Big Springs Phase II**One year after construction of narrower channel with new banks, islands, and riparian vegetation.





# Silver Creek Assessment & Restoration Design

#### **PROJECT TYPE**

Watershed assessment Reach assessment Restoration concept development Restoration design

#### **HIGHLIGHTS**

Reach prioritization
Hydraulic modeling
Geomorphology and
biology integration
Fish habitat restoration
Stakeholder coordination
Riparian and wetland
revegetation
Shade and temperature
reduction

#### **STAKEHOLDERS**

Silver Creek Alliance The Nature Conservancy Ecosystem Sciences

#### CONTRACT

July 2019 – December 2019 \$77,000 value

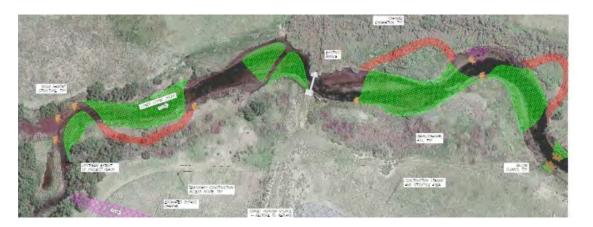
#### CONSTRUCTION

Fall/Winter 2021/2022 \$500,000 value (estimated) Rio ASE partnered with Ecosystem Sciences to evaluate geomorphic and habitat conditions in the Silver Creek watershed to provide an assessment that would divide the watershed into prioritized reaches, identify appropriate restoration actions, and develop conceptual designs for the two highest priority areas. The goal of the project as developed by a multidisciplinary team included creating habitat conditions suitable for a sustainable, resilient, wild-trout spring-creek fishery.

Initially a watershed-scale assessment was completed that divided the stream and its tributaries into reaches based on geomorphic and biological character. The reaches were evaluated at a high level using readily available remote data and past reports to understand basic issues, potential restoration targets, and recommended treatments to address those targets. Additionally, fish use potential, restoration feasibility, and habitat uplift potential were evaluated to prioritize each reach for more refined analysis at the reach-scale.

Two reaches were selected for refined analysis at the reach-scale. Refined analysis included bathymetric survey, hydraulic modeling, sediment transport analysis, identification of geomorphic target conditions, and development of appropriate treatment examples to address the identified targets. Next, specific conceptual restoration designs were developed from the synthesis of available data and analysis through collaboration with the project team understanding the goals and constraints within the targeted project reaches.

After receiving feedback from a diverse stakeholder group, one of the two conceptual designs was selected to advance to final design and ultimately construction. The design goals included increasing channel sinuosity, improving off-channel habitat, reducing the over-widened width-to-depth ratio, adding in-stream structure, and planting riparian vegetation. The project was constructed during the fall/winter of 2021/2022.



Excerpt from conceptual design. Green areas represent bank to fill to address overwidened channel conditions while red areas represent excavations to increase sinuosity and redirect flow into existing mature riparian vegetation.





Photo examples of existing, over-widened channel lacking riparian vegetation, in-stream structure, and habitat (upper image) versus reference target conditions example illustrating narrow channel with robust riparian vegetation providing hydraulic roughness, complexity, and cover with diverse habitat (lower image.)





### Lemhi River, Eagle Valley Ranch Subreaches 1, 3, & 4

Salmon, ID

#### **PROJECT TYPE**

Large wood habitat structures
Channel restoration
Floodplain reconnection
Wetland creation
Construction observation

#### **HIGHLIGHTS**

Assessment & design
Concept development to final
design
Instream large wood complexity
Floodplain reconnection

#### **STAKEHOLDERS**

Client Brian Drake, USBR
Client Jeff Diluccia, IDFG
Quadrant Consulting
Idaho Office of Species
Conservation
Bonneville Power Administration

#### **CONTRACT**

July 2017 to present
Design & construction observation
to-date ~\$500K
Subreach 3 2018-2019, \$1.5M
Subreach 4 2019, \$80K
Subreach 1 2021-2024, \$8M

In 2017, Rio ASE began working with the Idaho Department of Fish and Game (IDFG) on their restoration strategy for the Eagle Valley Ranch property along the Lemhi River near Salmon, Idaho. Work has progressed from adjacent side channel projects to full-scale channel relocation and reconstruction. The primary goal of the multi-phase project is to provide rearing and refugia habitat to juvenile spring Chinook salmon, steelhead, and bull trout by restoring natural or historical channel forms and processes. Secondary project goals include floodplain connectivity while minimizing risk to private infrastructure and property from flooding and erosion.

Constructed from 2018-19, Subreach 3 included ~1 mile of new perennial side channel, 0.8 miles of improved habitat in the mainstem Lemhi River, 31 new engineered log jam (ELJ) structures, and 8 mainstem constructed riffles. Subreach 4 Phase I, constructed in 2019, included an excavated alcove and levee setback to stabilize ~150 linear feet of eroded streambank by recontouring the bank and incorporating 9 ELJ structures. Subreach 4 Phase II is currently in the design process and will consist of ~1,000 linear feet of mainstem channel realignment, ~2,000 linear feet of new side channel, and 50 ELJ structures. Subreach 1, which is ongoing, includes floodplain grading, relocation of irrigation diversions, ~2 miles of mainstem channel realignment, ~3 miles of new side channel, and over 150 ELJ structures. Subreach 1 is the largest and most aggressive design and will be constructed over a four-year period due to its scale.

Tasks performed by Rio ASE include completing conceptual to final designs (plans, specifications, and cost estimates), stakeholder outreach and presentations (Idaho Transportation Department and Lemhi County), 2D hydraulic modeling, aquatic habitat suitability modeling, permitting support, bid support, and construction observation.



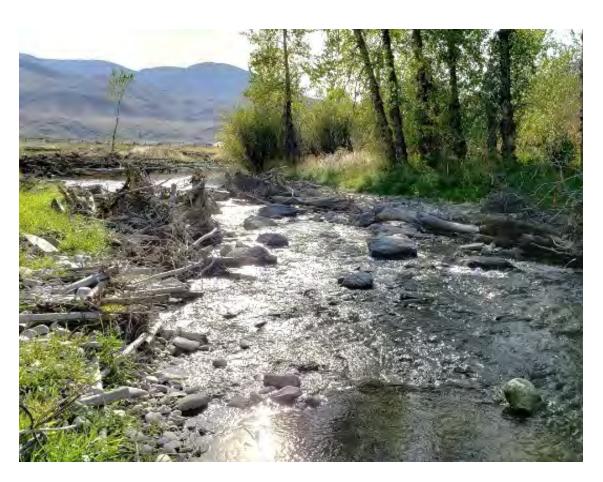
Subreach 1 Phase 1 under construction with mainstem recently activated.



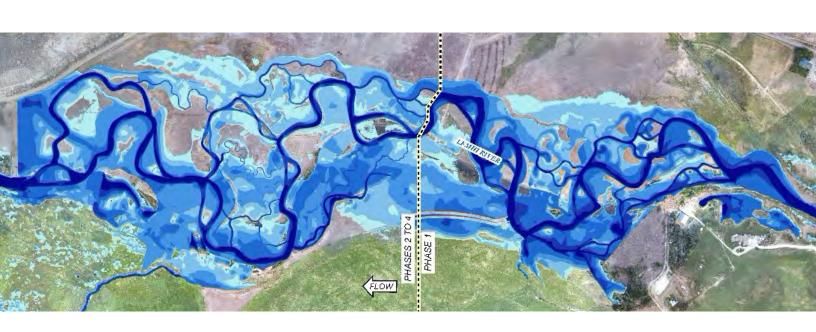
Constructed side channel in Subreach 3 one year after construction completion.

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Constructed riffle in Subreach 3 one year after construction completion.



2D hydraulic model output (depth) of SR1 proposed conditions at the 25 year design flow. Channel plan form is an anabranching multichannel network to increase complexity and available habitat for juvenile salmonids



### Big Wood River Flood Atlas – Assessment and Planning Strategies

Big Wood River, Blaine County, Idaho

### ECOSYSTEM SCIENCES LLC

#### **STAKEHOLDERS**

Blaine County, City of Sun Valley, City of Ketchum, City of Hailey, City of Bellevue In the wake of significant and prolonged flooding in the Big Wood River valley, the community recognized the need to better understand river behavior and to develop river management policies and priorities. Development in the floodplain has altered historic channel behavior and led to unintended consequences. Typical flood mitigation techniques are not 100% effective or sustainable, thus challenging the Wood River communities to explore additional ways to mitigate, or reduce, risk and impacts.

The Atlas evaluates river, habitat, floodplain encroachment, geomorphic and flood characteristics for 42 river miles. The primary focus areas of the Atlas, developed in coordination with project stakeholders, include: identifying areas and resources at risk of flooding and severe erosion; identifying and describing areas of lost or degraded riverine habitat; prioritizing areas and project types for flood risk management and ecosystem restoration; discussing alternatives for balancing flood and erosion risk mitigation with ecosystem enhancement and restoration goals and objectives; and, developing best management practices for flood risk reduction, ecosystem restoration projects and community development.

The Big Wood River Atlas represents a collaborative, multi-year process as a response to major river flooding and channel erosion. The flooding is dramatically affecting the resilience of the communities and the future sustainability of the landscape and ecology of the Wood River Valley. Recent floods have been extreme in both magnitude and duration, and the river channel response is exacerbated by high sediment load contributions from major fires, and floodplain encroachment over the past century of development.

See the Atlas visually engaging document with attractive graphics, design and layout here.







### **Wood River Valley Forest Enhancements**

Wood River Valley - ID

#### **ECOSYSTEM SCIENCES LLC**

#### **STAKEHOLDERS**

City of Sun Valley, City of Ketchum, City of Hailey, City of Bellevue, Blaine County and Idaho Department of Lands The Wood River Valley (WRV) Forest Enhancement Assessment provides high-resolution data (land cover, urban tree canopy and priority tree planting locations) that assists Blaine County and the cities of Ketchum and Sun Valley in the identification and prioritization of land management and land use planning decisions within the project area. The data created through this project provides information related to emergency preparedness and disaster planning, forest treatments in the Wildland Urban Interface (WUI), river/stream restoration, stormwater management, street tree planting and management (to enhance various aspects of communities including economic development), and forest health treatments. Although the focus of the project relates to forests (within the cities and county lands), non-forested (streets, buildings, bare ground etc.) areas are mapped as well. Similar data has been created for cities and counties throughout Idaho. Such data has been integral to informed and effective decision making for municipalities within these regions.

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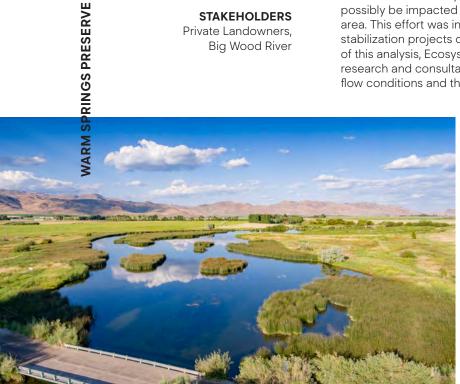
### Stream Alteration, Ordinary High-**Water Mark and Mapping**

Big Wood River-ID

#### **ECOSYSTEM SCIENCES LLC**

#### **STAKEHOLDERS**

Private Landowners, Big Wood River Ecosystem Sciences performed baseline investigation was to identify the Ordinary High Water Mark, low-flow channel, floodplain analyses and features that may fall under federal jurisdiction and could possibly be impacted by bank stabilization activities at the project area. This effort was intended to aid in the permitting for riverbank stabilization projects on the Big Wood River near Ketchum. As a part of this analysis, Ecosystem Sciences conducted on-site field surveys, research and consultation to map the Ordinary High Water Mark at low flow conditions and the approximate future Ordinary High Water Mark.







### South Valley Groundwater District Management Plan

Wood River Valley - ID

### ECOSYSTEM SCIENCES LLC

STAKEHOLDERS
South Valley
Groundwater District

Ecosystem Sciences is tasked to design and conduct a long term, science-based, data-driven groundwater management plan to improve groundwater monitoring and management within the District. Tasks include: development of GIS database to store, sort and analyze data related to SVGWD's water use, locations, planning and development; installation of well-water flow monitoring array; installation of well transducers at select wells; consultation with SVGWD's lead hydrologist, engineers and Advisory Board.



# **Big Wood River Groundwater Water Area Management Plan**

Wood River Valley - ID

### ECOSYSTEM SCIENCES LLC

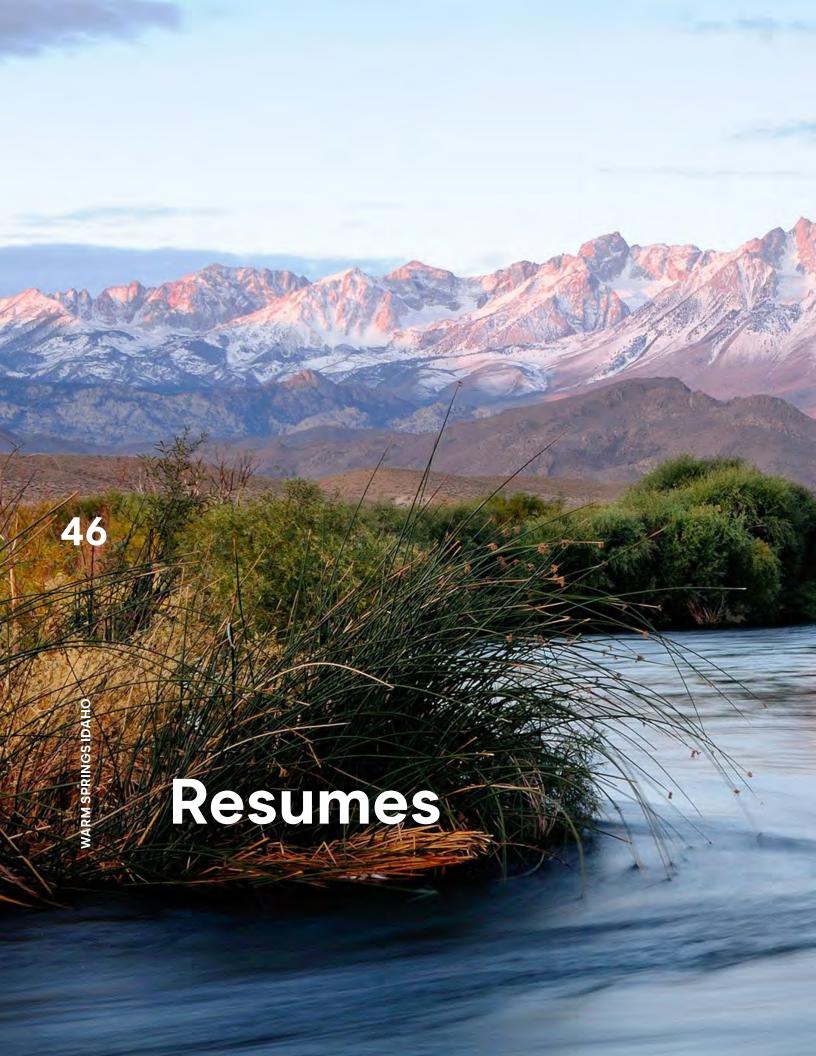
#### **STAKEHOLDERS**

South Valley Groundwater District, Galena Groundwater District Ecosystem Sciences provided expert testimony for groundwater management hearings on the Big Wood River basin, Idaho. In 1991, IDWR designated a GWMA for the Big Wood River Basin after ground water monitoring wells showed that ground water levels were declining in the basin. In recent years, landowners with senior surface water rights in the Big Wood River and Little Wood River have alleged that ground water pumping in the upper Wood River and Silver Creek drainages was depleting flows in the rivers and reducing river flows diverted for irrigation. This dispute resulted in attempted litigation and the submittal of several draft plans to IDWR to address the controversy. Hearings were conducted to determine impact and injury for water users in the Basin.











#### STACY PASSMORE AICP, LEED AP | Principal & Co-Founder



Stacy Passmore is a landscape designer and urban planner with 15 years of experience working with communities to initiate innovative designs through public engagement. She has 7-years of experience working in mountain towns on the Western Slope where she worked as planning and design coordinator for a small architectural firm in Telluride Colorado. In this role she navigated complex community approval processes involving boards such as the Historic Architecture and Landmark Commission. She has also worked extensively with environmental nonprofits including, the Solar Living Institute in Mendocino County, The Clearwater Sloop, The Chife Foundation and the San Miguel County Green Building Task Force. Stacy also led the landscape design of a sustainable agricultural community design in West Africa, including a fish farm, earth brick factory, and extensive market fields that hybrid ecology and local economies. She is currently co-leading the design of a Sustainable Future Farm Park in Aurora, CO.

#### **EDUCATION**

CERTIFICATIONS	2018	Harvard University Graduate School of Design Master in Landscape Architecture, with Distinction	
& AFFILIATIONS	2010	University of British Columbia School of Community & Regional Planning	
Certified Planner (AICP)		Master in Community & Regional Planning	
LEED AP (GBGC)	2003	New York University, Gallatin School Bachelors of Arts, Urban Studies	
Small Business Enterprise (SBE) and Woman-Owned	PROFESSIONAL POSITIONS		
Business (WBE) (CDOT, City & County of Denver)	2020-	Superbloom - Principal	
American Society of Landscape Architects	2018-2020	Civitas Inc Landscape Designer	
(ASLA)	2018	Agency Landscape & Planning - Landscape Designer	
Colorado Women in Design	2012-2016	New York City Department of City Planning - Special Projects Planner	
RECOGNITION /	2010-2012	The Chife Foundation - Lead Urban Designer	
LEADERSHIP	2003-2008	Tommy Hein Architects - Project Coordinator & Studio Manager	
2022 Jeff Harnar Award for	SELECTED P	PROJECTS	

	SELECTED PI	ROJECTS		
2022 Jeff Harnar Award for Contemporary Architecture, 1881 Farm Park	2021-ongoing	1881 Farm Park, Aurora, CO		
	2019-ongoing	Wild Bear Nature Center, Nederland, CO		
2019 Artist Residency Telluride Art & Architecture	2021-ongoing	Cloud Bosque Park, Castle Rock, CO		
2010	2021-ongoing	Populus Living Roof, Denver, CO		
2019 Landscape with Beavers, Places Journal	2021	Mt Crested Butte Town Park Vision Plan, Mt. Crested Butte, CO		
2019 Artist Residency,	2021-ongoing	West Meadows Ranch Residence, San Miguel County, CO		
Nature Art & Habitat - Italy	2021-ongoing	Wilson Mesa Ranch Residence, San Miguel County, CO		
2018 Charles Eliot Traveling	2021-ongoing	Regenerative Meadow Orchard, Englewood, CO		
Fellowship - Harvard	2020 - 2021	Wetland Restoration, Fort Morgan, CO		
University	2019-2020	Cache la Poudre Wetland Restoration, Greeley, CO *		
2017 Penny White Project Fund Award - Harvard	2018-2020	Flex Park at Virginia Key, Miami, FL *		
University	2018-2020	Nature Playscape, Central Park, Denver CO *		
		* Work Completed as a Landscape Designer at Civitas		

work Completed as a Landscape Designer at Civitas

#### **DIANE LIPOVSKY PLA | Principal & Co-Founder**



Diane Lipovsky is a landscape architect, artist and co-founding principal of Superbloom in Denver, CO. With over 12 years of experience designing public-interest landscapes, Diane's work explores the intersections of art and design, nature, culture, public health, technology and resilience. Her work has received numerous awards including the American Architecture Award from the Chicago Athenaeum as well as recognition from ASLA Colorado and North Carolina and the American Planning Association. In her previous work at Civitas in Denver, Diane was the lead designer for the North Carolina Museum of Art's acclaimed 34-acre Ann and Jim Goodnight Museum Park. The park design engages art with nature, elevating public health and broadening the definition of the traditional interior gallery. Diane is currently co-leading the design of a sustainable farm park in Aurora, CO.

#### **CERTIFICATIONS & AFFILIATIONS**

#### **EDUCATION**

2005

Professional Landscape Architect

(CO #LA.0001431; MA #3018)

Small Business Enterprise (SBE) and Woman-Owned Business (WBE) (CDOT, City & County of Denver)

American Society of Landscape Architects (ASLA)

Colorado Women in Design

2010 Harvard University Graduate School of Design

Master in Landscape Architecture

University of Southern California, School of Cinema-Television Bachelor of Arts in Cinema-TV Critical Studies, magna cum laude

#### **PROFESSIONAL POSITIONS**

2020-Superbloom - Principal

2013-2020 Civitas Inc. - Landscape Architect

2010-2013 Crosby | Schlessinger | Smallridge - Landscape Architect

1881 Farm Park, Aurora, CO

#### **RECOGNITION / LEADERSHIP**

#### **SELECTED PROJECTS**

Jeff Harnar Award for Contemporary Architecture, 1881 Farm Park, 2022.	2019-ongoing	Wild Bear Nature Cent
	2021-ongoing	Cloud Bosque Park, Ca
American Planning Association's	2020-ongoing	Populus Living Roof, D
Great Places in America, Great	2021	Mt Crested Butte Town
Public Space. Neponset River Greenway. 2019.	2018-2020	Flex Park at Virginia Ke

2021-ongoing

Chicago Athenaeum American Architecture Award, Ann & Jim Goodnight (NCMA) Museum Park.

2018.

Raleigh Environmental Award, NCMA Museum Park. 2018.

Sir Walter Raleigh Award for Community Appearance, NCMA Museum Park. 2018

> Colorado ASLA Merit Award, NCMA Museum Park. 2018.

ULI York Award of Excellence (Triangle Chapter), NCMA Museum Park. 2017.

iter, Nederland, CO Castle Rock, CO Denver, CO n Park Vision Plan, Mt. Crested Butte, CO čey, Miami, FL \* 2017-2020 Prairie Retreat Park at High Line Canal, Aurora, CO \* 2016-2020 High Prairie Park at Painted Prairie, Aurora, CO \* Ann & Jim Goodnight Museum Park, NCMA, Raleigh, NC \* 2013-2016 2016-2020 Painted Prairie Pocket Parks & Green Courts Design, Aurora, CO \* 2016-2020 Painted Prairie Town Center Streetscape Design, Aurora, CO \* 2016-2020 Painted Prairie, New Urbanist Neighborhood Plan, Aurora, CO \* 2018-2020 Prairie Retreat Park Concept Design at High Line Canal, Aurora, CO 2011-2012 Walden Pond River Reservation Master Plan, Concord, MA + 2010-2013 Cuyahoga River Restoration/Towpath Trail, Cleveland, OH + 2010-2013 Neponset River Greenway, Boston + Milton, MA +

\* Work Completed as Projectc Leader / Landscape Architect at Civitas

+ Work Completed as a Landscape Designer at Crosby/Schlessinger/Smallridge

### **DOMINIQUE RAYMOND | Landscape Project Manager**



Dominique Raymond is a landscape designer with 5 years of experience working with planning departments and private developers through public engagement to create mindful, safe places that service the community & local ecology. She has worked in and around the Denver Metropolitan area and is expanding her plant knowledge by working on more mountain projects at Superbloom. As a trauma-sensitive designer, she is dedicated to creating safe, accessible spaces. Her use of native, drought tolerant flora to build pollinator habitat is emblematic of her commitment to sustainability. She has an eye for detail and is mindful of how aesthetics and function work together.

#### **CERTIFICATIONS**

#### **EDUCATION**

2021

Design for Early Childhood
Outdoor Learning
Environments
Certificate by North Carolina
State University

2016 The Ohio State University, Knowlton School of Architecture Bachelor of Science in Landscape Architecture

West Meadows Residence, Telluride, CO

#### **PROFESSIONAL POSITIONS**

	2021-	Superbloom - Landscape Designer/Project Manager
	2021-2021	Norris Design - Associate
	2018-2021	Norris Design - Project Manager
	2016-2018	Norris Design - Landscape Designer
-	2014-2016	The Ohio State University, Planning, Architecture and Real Estate, Facility Information Technology Services - Building Information Modeling Assistant

Superbloom - Landscape Designer/Project Manager

2020-Present Jane Silverstein Ries Foundation President

**RECOGNITION /LEADERSHIP** 

2019 ASLA CO-WY Continuing Education Committee

2019 ASLA CO-WY Volunteer of the Year Award

2016 Knowlton School of Architecture Landscape Architecture Service Award

#### **SELECTED PROJECTS**

2021-ongoing

2021-ongoing	Aldasoro Residence, Telluride, CO
2021-ongoing	Cloud Bosque Park, Castle Rock, CO
2021-ongoing	Populus Living Roof, Denver, CO
2021-ongoing	Regenerative Meadow Orchard, Englewood, CO
2020-2021	Anthem Community Park Anthem, CO*
2019-2021	Harvard Gulch Trail Improvements and Neighborhood Park Denver, CO*
2018-2021	Margaret W. Carpenter Rec Center Expansion Thornton, CO*
2017-2020	Founders Plaza, Brighton, CO*
2017-2019	Brighton Japanese American Association Park Brighton, CO*
2016-2021	Inspiration Community Park & Neighborhood Parks Aurora, CO*

<sup>\*</sup> Work Completed as a Landscape Designer at Norris Design



#### **HELEN DAVIDOSKI | Landscape Designer**

Helen Davidoski is a landscape designer with 3 years of experience working with clients and communities to create contextually relevant, sustainable designs including residential, commercial, and public projects. She has years of experience in community outreach and marketing strategy across multiple fields in Ohio, Louisiana, and Colorado. Helen is passionate about creating sustainable designs that center climate change adaptation and community cohesion by identifying and leveraging existing strengths.

After working for the past year in marketing and strategy for a number of values-driven clients she has returned to Colorado to focus on landscape design and implementation, bringing her and her team's vision to reality.

#### **CERTIFICATIONS**

#### **EDUCATION**

LEED GA (GBGC)

2020 University of Colorado Denver Master in Landscape Architecture

#### **RECOGNITION / LEADERSHIP**

2016 Tulane University

Bachlors in Environmental and Urban Studies

Jeff Harnar Award for Contemporary Architecture, 1881 Farm Park, 2022.

**PROFESSIONAL POSITIONS** 

Winner of DIG's Urban Greening Challenge 2020 2021-Superbloom - Landscape Designer

Green Associate

2020 - 2021 17 Ways - Engagement Strategist

Leadership in Energy and

2020 Homebound - Social Media Manager

Environmental Design

2020 Thrive - Landscape Designer and Project Manager

(LEED)

2019 Miller Company Landscape Architects - Design Intern

Professional Coordinator **UCD ASLA Student Chapter** 

#### **SELECTED PROJECTS**

2021-ongoing	1881 Farm Park, Aurora, CO
2021 -ongoing	Englewood Apartment Network, Englewood CO
2021-ongoing	Wild Bear Nature Center, Nederland, CO
2021-ongoing	Cloud Bosque Park, Castle Rock, CO
2021	Ted Scheske Park Vision Plan, Mt. Crested Butte, CO
2021-ongoing	West Meadows Ranch Residence, San Miguel County, CO
2021-ongoing	Wilson Mesa Ranch Residence, San Miguel County, CO
2021-ongoing	Regenerative Meadow Orchard, Englewood, CO
2021 -ongoing	Austin Residence, Greenway Garden, Austin, Texas



#### Title

**Principal Geomorphologist** 

Professional Experience 20 years

#### Education

MS, Quaternary Sciences with Distinction Northern Arizona University, 2003

Post-Baccalaureate Geology Coursework University of Montana Western, 1999-2000

Honors BS, Environmental Science; Minor, Mathematics Oregon State University, 1999

#### **Discipline Areas**

**River Restoration** 

Geomorphology

**Project Management** 

Natural Resources Management

**Channel Migration** 

Risk Analysis

**Open Channel Hydraulics** 

Hydrology

Climate Change

GIS

#### **Professional Certifications**

Professional Geologist licensed in Idaho, Washington, & Oregon

Project Management Professional

#### **Affiliations**

Member, American Water Association, Idaho

Board Member, Boise River Enhancement Network

### Rob Richardson, PG, PMP

#### **Summary of Experience**

Rob is a geomorphologist with 20 years of experience in natural resource planning, management, analysis, and restoration design throughout the western United States and Alaska. His focus has been on river and hillslope processes related to habitat restoration, irrigation, infrastructure, and risk. During his career, Rob has managed dozens of large, interdisciplinary project teams with diverse stakeholders and broad objectives and has achieved outcomes that are both mutually agreeable and supported by the best available science. Rob's technical approach includes understanding historic, existing, and potential future site conditions in order to develop solutions that address the problem rather than simply treat the symptom.

Rob has completed projects within private, government, NGO, and Tribal sectors including river and habitat restoration designs; watershed- and reach-scale geomorphic assessments; channel migration zone analyses and other risk assessments; pipeline and bridge stream crossing evaluations; paleoenvironmental site reconstructions; climate change research; and interdisciplinary planning and prioritization studies. Rob is a licensed professional geologist in Idaho, Oregon, and Washington and a certified Project Management Professional.

#### **Significant Projects**

#### **Project Geomorphologist**

Silver Creek Assessment The Nature Conservancy 2019 Blaine County, Idaho

Rob was the lead geomorphologist for this watershed- and reach-scale assessment developed as a partnership between Rio ASE and Ecosystem Sciences. Silver Creek is a prized, spring creek trout fishery that has been subject to diminishing habitat and fish numbers for decades. Rob managed the project team that developed an approach to evaluate the watershed, prioritize reaches, perform refined geomorphic and biologic investigation on select prioritized reaches, develop target conditions, and prepare conceptual restoration designs for two reaches integrating the results from all assessment efforts. The assessment has led to the development of one high-priority restoration design (completed by Rio ASE) and two additional designs in development (also by Rio ASE); it is expected to support the coordinated development and completion of additional future restoration design and implementation efforts. Construction of the first of two project phases was completed in 2022.

#### **Project Geomorphologist**

Lemhi River Eagle Valley Ranch, Subreaches 1, 3, & 4 U.S. Bureau of Reclamation 2017 – Present Lemhi County, Idaho

Rob is the lead geomorphologist for this multi-reach, multi-phase project intended to provide rearing and refugia habitat to juvenile spring Chinook salmon and steelhead. Subreach 3 (constructed) includes 1 mile of new perennial side channel and 0.8 miles of habitat enhancements on the mainstem Lemhi River. In total, the project has 31 log jams and 8 mainstem constructed riffles. Subreach 4 – Phase I (constructed) includes an excavated alcove and 150 linear feet of bank stabilization through bank recontouring and 9 log jams. Subreach 4 – Phase II (design in progress) includes 1,000 linear feet of

mainstem channel realignment, 2,000 linear feet of new side channel, and 50 log jam structures (9 different types). Subreach 1 (in progress) includes 1 mile of existing channel reconstruction to create a multi-threaded channel complex with increased floodplain connectivity and habitat diversity. Each subreach includes 2D hydraulic modeling, terrain modeling, conceptual-to-final designs (drawings, wood stability calculations, design report, cost estimate, specifications, and bid documents), permitting support, bid assistance, and construction observation. Total construction cost for all subreaches is approximately \$6 million.

#### **Project Manager/Project Geomorphologist**

Upper Salmon River Basin Assessment, Planning, & Design Idaho Governor's Office of Species Conservation

2016 – Present Lemhi County, Idaho

This multi-year project includes a watershed-scale Integrated Rehabilitation Assessment (IRA) and Multiple Reach-Scale Assessments (MRAs). The IRA integrated biologic and geomorphic assessments, identifying Chinook salmon and steelhead capacity limitations and geomorphic response potential within the entire upper Salmon River watershed. The MRSs evaluate reach-scale habitat and geomorphic characteristics for the upper Lemhi, lower Lemhi, lower Pahsimeroi, upper Salmon (upstream of Redfish Lake Creek), North Fork Salmon River, and several reference reaches to evaluate existing fish species and life-stage utilization and to identify target conditions that are both geomorphically appropriate and optimized to improve conditions for ESA-listed fish. Rob is helping to coordinate project development in the Upper Salmon subbasin, ensuring priority projects are developed in accordance with and supported by the IRA and MRA conclusions. Rob is managing the overall project effort, participating in the Executive and Science teams, and lead the geomorphic analysis before passing that responsibility to another geomorphologist on our team in 2020.

#### **Project Manager/Project Geomorphologist**

Rattlesnake Creek Restoration & Adaptive Management Plan Bonasa Breaks Ranch 2018 – Present Asotin County, Washington

On April 13, 2017, a private earthen dam failed, contributing to a significant flood on Rattlesnake Creek in the lower Grande Ronde River subbasin in southeastern Washington. Subsequent reconnaissance revealed significant impacts to habitat, water quality, and infrastructure along the entirety of the 6.5-mile stream corridor that is occupied by ESA-listed steelhead trout. Rio ASE had detailed LiDAR topography flown of the post-flood site and performed geomorphic, habitat, and vegetation surveys to evaluate post-flood conditions, identify fish passage barriers, and inform a restoration design. Rio ASE developed a detailed and comprehensive restoration plan and design for all 6.5 miles of stream and floodplain impacted. Rio ASE also coordinated and negotiated all restoration plan details with 11 affected landowners, several regulatory agencies, lawyers, and insurance companies. Rio ASE completed all necessary permits, including cultural resources consultation (with help from Plateau Archaeology), riparian revegetation plans (with help from Wildlands, Inc.), and ESA consultation. Rob led the assessment and design approach and managed all aspects of the project including technical, agency coordination, and landowner outreach. The final design and permits were submitted in February 2020, revised in February 2021, and the first phase of three years of phased construction is planned for summer/fall of 2022.

#### **Project Manager/Project Geomorphologist**

Upper Lemhi River & Big Springs Creek Restoration Lemhi Regional Land Trust 2016 – Present Lemhi & Custer Counties, Idaho

Rob is the lead geomorphologist for this series of projects that includes improving instream and off-channel habitat for threatened Chinook salmon and steelhead by restoring reach-scale river processes focused on improving instream habitat diversity, increasing floodplain connection, and reducing water temperatures for over six miles of streams of a private ranch. Rio ASE has provided engineering designs from concept through final on over four miles of stream to-date, including hydrologic, hydraulic and sediment transport analyses, channel grading and engineered log jam designs, and contract document preparation (basis of design reporting, quantities and cost estimates, and technical specifications). These projects were built in phases between 2017 and 2019. An additional three miles of design is ongoing with proposed construction dates in 2023.



#### Title

Principal River Engineer

Professional Experience 18 years

#### Education

MS, Civil Engineering University of Idaho, 2003

BS, Civil Engineering University of Idaho, 2001

#### Discipline Areas

Project Management

**River Restoration** 

Geomorphology

**Engineered Large Wood Jams** 

**Risk Analysis** 

**Open Channel Hydraulics** 

Hydrology

**Habitat Uplift Modeling** 

**Construction Observation** 

**Project Prioritization** 

#### **Professional Certifications**

Professional Engineer licensed in Idaho, Montana, Oregon, & Washington

#### **Affiliations**

Member, Association of Conservation Engineers

Member, American Water Resources Association, Idaho

### Jeff Fealko, PE

#### Summary of Experience

Jeff is a river engineer with experience focused on water resource issues throughout the western United States and has been the engineer of record on countless river restoration and enhancement projects. Jeff excels at managing and working collaboratively with project stakeholders and landowners with diverse perspectives to thoroughly understand project objectives and constraints. He has immense experience advancing projects beginning with project identification, planning, and prioritization to design and implementation while providing the most efficient and effective natural solutions to meet the project objectives.

Jeff strives to understand the underlying riverine processes that influence river restoration and enhancement designs, engineered wood structure design, and fish passage design. He also has extensive experience conducting hydrologic and hydraulic analyses and modeling, aquatic habitat modeling, bridge scour and river instability analysis and design, sediment transport analyses, flood hazard assessments, and construction observation. His experience in hard civil design and construction inspection facilitates advancing design concepts to final construction-ready designs to on-the-ground implementation. Jeff strives to achieve technical excellence integrated with an understanding of variability, complexity, and long-term processes within river systems, which results in successful real-world solutions. Jeff provides quality assurance and quality control on most projects and as a lifelong fisherman, his knowledge of rivers, fish, and fish habitat is an invaluable asset and an instrument utilized continually within his engineering toolbox. Jeff is a licensed professional engineer in Idaho, Montana, Oregon, and Washington.

#### **Significant Projects**

#### **Lead Engineer**

Eagle Valley Ranch Subreaches 1, 3, & 4 U.S. Bureau of Reclamation

2017 – Present Lemhi County, Oregon

Jeff is the lead engineer on this large-scale restoration project at Eagle Valley Ranch along an approximately 3.4-mile-long segment of the lower Lemhi River. Working with the Idaho Department of Fish and Game, Rio has been working on the restoration design for three of the four reaches. The Lemhi River lacks floodplain connectivity and has been historically straightened and confined; as a result, the aquatic habitat has been greatly simplified. The restoration efforts associated with this project include new side channel networks, main channel relocation, floodplain development, in-stream wood structures, and the reestablishment of a robust riparian corridor. Subreach 3 was constructed in 2017-2018 and subreach 4 was constructed in 2019. Subreach 1, the largest and most complicated, is currently under construction.

#### **Lead Engineer/Project Manager**

Walla Walla River Lampson Restoration Walla Walla Basin Watershed Council

2018 – 2020 Umatilla County, Oregon

This project provides perennial flow to an existing non-perennial side channel for improved rearing and high flow refugia for ESA-listed fish and reduced stranding

potential during low-to-moderate flows. This project included design of 400 linear feet of new perennial side channel, two new side channel inlets, engineered log jams, and habitat wood structures throughout the side channel. Jeff worked collaboratively with the landowner to develop a design that provides flooding and erosion protection of private infrastructure and property while still meeting project goals and objectives. Rio ASE completed a wetland delineation following the U.S. Army Corps of Engineers 1987 Delineation Manual and the Western Mountains, Valleys, and Coast Regional Supplement. This assessment began with early coordination with the Oregon Department of Lands and USACE to verify the level of assessment and methodology proposed, and a joint 404 permit application was submitted to USACE and DSL to comply with Clean Water Act Sections 401 and 404.

#### **Lead Engineer**

Upper Lemhi River & Big Springs Creek Restoration Lemhi Regional Land Trust

2016 - Present Lemhi County, Idaho

Jeff is one of the lead engineers for a series of projects located on a large conservation easement in the upper Lemhi River. This project area spans over 8 miles of the Lemhi River and over 4 miles of Big Springs Creek. Rio ASE utilized a shade and bank stability analysis (completed by Rob Richardson prior to Rio ASE) to identify priority reaches for restoration in conjunction with the Lemhi Regional Land Trust. Rio ASE has been working on seven projects on this property to-date. The majority of work associated with these restoration efforts includes improving instream and offchannel habitat for threatened Chinook salmon and steelhead. The projects focus on restoring reach-scale river processes, improving in-stream habitat diversity, increasing floodplain connection, and reducing water temperatures for over 6 miles of streams on the private ranch. The designs include channel relocation, channel narrowing, floodplain development and activation, and installation of large wood habitat complexity treatments. Rio ASE has provided engineering designs from concept through final on over four miles of stream to-date, including hydraulic and sediment transport analyses, channel and engineered log jam designs, and bid document preparation (basis of design reporting, cost estimates, and technical specifications). Some of these projects were built in phases between 2017 and 2019. An additional 4 miles of design is ongoing with proposed construction dates through 2023.

#### **Lead Engineer**

Renovare LOMR Renovare Development II, LLC 2018 - 2019

Ada County, Idaho

Jeff was the lead engineer in a flood study on the Boise River in Eagle, Idaho. This flood study evaluated the existing conditions flood model and revised the FEMA regulatory floodway through the project reach to optimize the allowable 1-foot rise in base flood elevation to maximize buildable lot square footage for this development. Rio developed the duplicate effective hydraulic model, developed the necessary figures and submittals and coordinated with FEMA through the regulatory review process until a Letter or Map Revision (LOMR) was issued for the client.

#### **Lead Engineer**

Lost River Village Flood Study KM Engineering, PLLC

Ada County, Idaho

2017

Jeff was the lead engineer for a flood study on Tenmile Creek in Nampa, Idaho. The study was developed to evaluate flood risks and associated development potential within a proposed 45-acre land development site. Tenmile Creek through the property is located within a FEMA regulatory Zone A floodplain where the existing base flood elevation and floodway has not been established. To meet municipal regulations, Jeff developed an existing conditions flood model incorporating multiple bridge and irrigation diversion structures. A detailed base flood map and 100-year inundation map were prepared for the client to facilitate their conceptual site development and to meet regulatory requirements.



#### Title

Principal Fluvial Geomorphologist

Professional Experience 27 years

#### Education

PhD, Environmental Science Washington State University

MS, Natural Resources Science Washington State University

BS, General Sciences University of Wisconsin

Discipline Areas Geomorphology

**Open Channel Hydraulics** 

**Sediment Transport** 

Hydrology

Hydraulic Modeling

**River Restoration** 

**Engineered Large Wood Jams** 

**Restoration Assessment** 

**Project Management** 

**Construction Observation** 

Professional Certifications Certified Floodplain Manager (CFM)

#### **Affiliations**

American Geophysical Union

**American Fisheries Society** 

American Water Resources Association

Association of State Floodplain Managers

### Tim Hanrahan, PhD

#### Summary of Experience

Tim is a fluvial geomorphologist with 27 years of experience working on projects associated with large gravel-bed rivers in the intermountain western United States. His professional interests and projects focus on river processes and associated interactions with aquatic organisms and their habitats. His current and recent projects include fluvial geomorphic assessments of historical and contemporary gravel-bed river conditions and evaluations of potential future channel adjustments. Many of these assessments are applied to river restoration projects for the purposes of identifying the underlying processes responsible for the creation and maintenance of riverine and floodplain habitats. Tim has extensive experience in all phases of river restoration, including assessments, modeling, prioritization, planning, design, implementation, and monitoring. Tim's areas of expertise include river hydraulics and sediment transport, quantitative fluvial geomorphology, assessment and modeling of aquatic habitats, and evaluation of groundwater/surface water interactions in rivers.

#### **Significant Projects**

#### **Project Manager/Lead Geomorphologist**

Lower Crooked River Sigman Ranch Improvements Crooked River Watershed Council 2021 – Present Crook County, Oregon

This project is a part of the comprehensive Lower Crooked River Strategic Restoration plan aimed at improving habitat for both fish and wildlife, increasing watershed connectivity, improving water quality, and restoring riparian areas over 17 miles of the Crooked River in central Oregon. As the project manager and lead geomorphologist, Tim is directing Rio ASE's efforts to design a new side channel to improve connectivity to the mainstem river. The geomorphic-based design is intended to provide ecological functions similar to spring creeks. The design phase is due to be completed in the spring of 2022, with construction scheduled for fall 2022.

#### **Technical Lead/Fluvial Geomorphologist**

Upper Salmon River Basin Assessment, Planning, & Design 2016 – Present Idaho Office of Species Conservation Lemhi & Custer Counties, Idaho

This multi-year project includes a watershed-scale Integrated Rehabilitation Assessment (IRA) and Multiple Reach-Scale Assessments (MRAs). The IRA integrated biologic and geomorphic assessments, identifying Chinook salmon and steelhead capacity limitations and geomorphic response potential within the entire upper Salmon River watershed. The MRSs evaluate reach-scale habitat and geomorphic characteristics for the upper Lemhi, lower Lemhi, lower Pahsimeroi, upper Salmon (upstream of Redfish Lake Creek), North Fork Salmon River, and several reference reaches to evaluate existing fish species and life-stage utilization and to identify target conditions that are both geomorphically appropriate and optimized to improve conditions for ESA-listed fish. Rob is helping to coordinate project development in the Upper Salmon subbasin, ensuring priority projects are developed in accordance with and supported by the IRA and MRA conclusions. Tim is participating in the Executive and Science teams and has taken over as the lead geomorphologist for the interdisciplinary and multi-agency/partner team.

#### **Fluvial Geomorphologist**

Lemhi River Eagle Valley Ranch, Subreaches 1, 3, & 4 Idaho Department of Fish and Game

2017 – Present Lemhi County, Idaho

Tim is one of the technical contributors for this multi-reach, multi-phase project intended to provide rearing and refugia habitat to juvenile spring Chinook salmon and steelhead. Tim's technical contributions to restoration designs are focused on evaluations of open channel hydraulics, sediment transport, floodplain connectivity, secondary channel development, and the design of wood structures. Restoration designs have been completed and are continuing in multiple subreaches, with all of the designs including primary channel and secondary channel reconstructions, large wood material structures, off-channel wetland and alcove habitats, and riparian vegetation replanting. Each subreach analysis and design includes detailed 2D hydraulic modeling, conceptual-to-final designs (drawings, terrain modeling, wood stability analyses, basis of design report, cost estimates, specifications, and bid documents), permitting support, bid assistance, and construction observation.

#### **Technical Lead/Fluvial Geomorphologist**

Upper Walla Walla River Assessment & Action Plan Confederated Tribes of the Umatilla Indian Reservation

2021 – Present Lemhi County, Idaho

This project is being completed for the Confederated Tribes of the Umatilla Indian Reservation in collaboration with state resource managers in Washington and Oregon, federal and local agencies, and other stakeholders. Tim and Rio ASE are leading a team to develop a scientifically defensible, aquatic-based, and strategic habitat restoration plan founded on a watershed-scale geomorphic, hydrologic, and biological assessment of historical, current, and desired conditions throughout over 115 miles in the upper Walla Walla River, North Fork Walla Walla River, and South Fork Walla Walla River. The project is using a scientifically robust, efficient, and effective approach to assess the watershed, identify target conditions for restoration, and recommend a suite of potential actions to achieve those targets. The goal of restoration is to protect, enhance, and restore functional streams, floodplains, and uplands, which support and sustain healthy aquatic habitat conditions and fish populations.

#### **Project Manager/Fluvial Geomorphologist**

South Fork Clearwater River Restoration Assessment & Design
Nez Perce Tribe

2019 – 2020 Idaho County, Idaho

Prior to joining Rio ASE, Tim was the technical lead on behalf of GeoEngineers for this stream restoration project with the Nez Perce Tribe. This project was identified as a high priority in the South Fork Clearwater River Restoration Strategy. The selected geomorphic-based design was led by Tim and included live-felling of streamside trees for large wood recruitment to the river and the in-river placement of floodplain placer-dredge spoils for natural sediment transport within the channel. Tim designed additional restoration treatments that included side channels, boulder placement in the primary channel, and large wood structures of varying sizes.

### DEREK RISSO SENIOR SCIENTIST, WETLAND AND RIPARIAN ECOLOGIST

#### **Education**

M.S., Fisheries and Wildlife Science, Oregon State University B.A., Environmental Studies, Gettysburg College

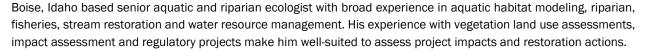
#### **Certifications / Registrations**

Professional Wetland Scientist Spatial GIS Hydrologist

#### **Special Studies**

Wetland Delineation Training, USACE Spatial Stream Network Modeling, USFS PFC Training, BLM

#### **Experience**



Derek has over 20 years of experience as a fisheries, aquatic and riparian ecologist with broad project application. Derek has outstanding skill sets suited for applications in fisheries ecology, riparian and stream restoration, geomorphology, watershed assessments, statistical analyses, permitting and geospatial planning. His work includes fisheries and aquatic habitat assessments, natural resource evaluations, watershed ecology, hydrology assessments, aquatic macrophyte studies, water quality assessments and modeling. Derek manages and implements projects from study design through project completion. He possesses a wide range of technical skills including geospatial, statistical, and habitat modeling applications. His modeling experience includes 1-D and 2-D habitat models for multiple species at multiple life stages. His experience makes him well suited not only for technical tasks but also for agency consultation, stakeholder interaction and project management.

Derek has worked on several large-scale projects internationally and in the Western US, but he specializes in impact assessments on salmonid-bearing stream and riverine ecosystems. He has a wealth of experience with federal, state, tribal and regulatory projects. He has used his knowledge and expertise to prepare numerous restoration and enhancement plans, biological reports, impact analyses, modeling exercises, and statistical analysis of ecosystems. Derek has performed several surveys of land and aquatics habitats.

### ZACHARY HILL ENVIRONMENTAL PLANNING AND DESIGN

#### **Education**

M. Arch., Environmental Design, Montana State University
B.Arch., Architecture, Montana State University
M. Sc., Ecological Design, San Francisco Institute of Arch

#### **Certifications/Registrations**

Registered Architect
Association of Landscape Ecologists International
American Society of Landscape Architects
National College of Architectural Registration Boards
American Water Resources Association
Leadership in Energy and Environmental Design (LEED, AP)

#### **Experience**



Zach is an ecological designer and landscape ecologist specializing in environmental design, planning and ecology. Zach leads project teams and works to integrate environmental management goals with plan needs. His work considers long-term ecosystem health and encourages the positive correlations between economic prosperity and environmental wellbeing. Zach's expertise includes environmental design, planning and research related to natural resources use and the environment. Zach's responsibilities emphasize design and management of natural resources, riparian systems and wetlands, community development, urban systems and ecology, community -based environmental protection, master planning, stream and river ecology and habitat conservation planning. Zach specializes in innovative planning and design, and he applies this forte to resource management through strategy organization and prioritization.

Zach's design work has garnered numerous awards for planning and. Zach creates effective strategies for resource management and designs and creates visually rich environmental plans to convey this information. Zach distills complicated information to a comprehensible format that is effective, compelling and communicates. Zach is proficient with GIS systems, modeling and watershed investigations. Zach produces compelling reports and graphics based on the Adobe CC suite of programs. Zach's design expertise has benefited many recent projects with outstanding visual content and production composition and outputs.

### TIM MAGUIRE SENIOR SCIENTIST, GIS ANALYSIS

#### **Education**

M.S., Geography, Portland State University B.A., Environmental Studies, Gettysburg College

#### **Certifications/Registrations**

Certified ESRI Spatial Hydrologist Certified GIS Professional

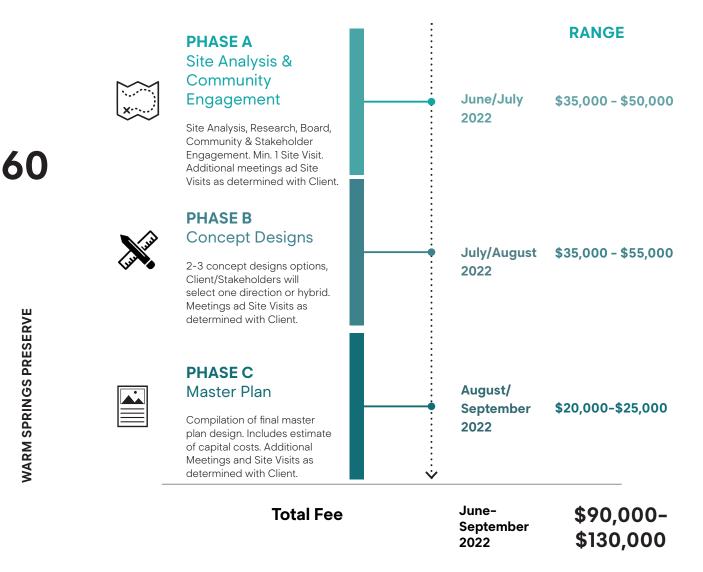
#### **Experience**

Tim specializes in biogeography, landscape ecology, modeling and geographic information systems (GIS). With over 19 years of experience, Tim has put his skills to use modeling natural resources, modeling and analyses, hydrologic systems, assessment of riparian landscapes and designing strategic plans that enable a broad audience to understand complex topics. Such efforts aided in the implementation of innovative river-basin management, ecology and restoration projects in the U.S. and abroad.

Tim's principal expertise and interest lies in biological-geography and the assessment of natural resource use, ecology, and spatial data infrastructure design. Tim understands a broad range of ecological and GIS topics ranging from hydrology and species interactions in urban and wildland systems to flow modeling, sediment modeling and resource utilization. Tim has also spent considerable time examining the ecological effects of water use in heavily managed watersheds and impacts on natural ecology and system resilience.

Tim's in-depth experience and knowledge of GIS, databases, biogeography, ecological systems, aquatic habitat, and riparian vegetation types makes him an exceptional team member on any ecological based investigation. Tim manages Ecosystem Sciences' GIS databases, which employs ArcGIS 10.6 to manage, model, analyze, and present spatial data at multiple scales. He populates and compiles all of the Geodatabases needed to display project data and produces high-quality modeling and cartography. Tim is well-versed in the riparian and upland plant species and community types, as he has spent considerable time performing road and botanical based surveys throughout thewest. Tim's background in natural resources, modeling and GIS expertise enables him to ensure that investigations and management actions are employed at applicable scales.

We look forward to working with you closely to develop a scope and fee that meets your needs. Based on our current understanding, the fee ranges below suggest anticipated design costs for the completion of the Warm Springs Preserve Master Plan through each phase of the design process. This estimate is highly scalable depending on your needs and the agreed upon scope. These fees include all required disciplines/consultants for the Master Plan as described herein including Superbloom, Rio ASE & Ecosystem Sciences. Fee ranges have been provided to allow for flexibility in the discussion regarding the overall scope and scale of Warm Springs Preserve plan as it progresses through these next steps of project and program definition.



#### **Standard Billing Rates, 2022**

Team billing rates below, provided for reference only. Rates subject to change annually. Superbloom will notify Client of updates 30 days prior to change.

#### Superbloom

Principal/Landscape Architect	\$175.00/hr
Project Manager	\$125.00/hr
Landscape Designer	\$100.00/hr
Graphic Designer	\$100.00/hr
Research Assistant	\$ 90.00/hr
Intern	\$65.00/hr

#### **Rio ASE**

Senior Principal Geomorphologist	\$150
Principal Geomorphologist	\$145
Principal Engineer	\$145
Staff Engineer II	\$115
Staff Engineer I	\$95-110
Office Manager	\$85

#### **Ecosystem Sciences Staff Rate Schedule Rate**

Senior Ecologist/GIS Analyst/Planner	\$135/hr
GIS Analyst	\$105/hr
Field Scientist	\$65/hr

#### **Reimbursable Expenses**

to be approved in advance by Client and may include additional site visits, reproductions or renderings.



# References

### **SUPERBLOOM**

#### 1. Contact: Jill Dreves, MBS

Role: Executive Director, Wild Bear Nature Center Project: Wild Bear Nature Center P: 303-258-0495 | 303-588-0299 (cell) E: jill@wildbear.org

www.wildbear.org

#### 2. Contact: Christopher H. Fellows, Board Chair

Windler Public Improvements Authority & Painted Prairie, LLC Project: 1881 Farm Park AND Painted Prairie Parks P: 303-795-9900 C: 720-341-7052



#### 1. Erika Green Phillips

Watershed Manager The Nature Conservancy erika.phillips@TNC.ORG 208-721-8112 (cell)

#### 2. Mark Davidson

Executive Director Blaine County Recreation District mdavidson@bcrd.org 208-720-2475 (cell)

#### 3. Mike Edmondson

Administrator Idaho State Office of Species Conservation Mike.edmondson@osc.ida 208-571-4812 (cell)

## Contact

## **SUPERBLOOM**



Stacy Passmore, Principal Role: Primary Contact and Project Director

23 Lincoln Street, Suite 200 Denver, CO 80203 p: 214-288-1517 e: stacy@superbloom.net



Diane Lipovsky, Principal Role: Consulting Principal

23 Lincoln Street, Suite 200 Denver, CO 80203 p: 720-725-9406 e: diane@superbloom.net





Rob Richardson, PG, PMP Role: Principal Geomorphologist

3380 W Americana Terrace Ste 390 Boise, ID 83706 p: 208-559-4615 e: Rob@RioASE.com

#### INDEPENDENT CONTRACTOR AGREEMENT #22107

This INDEPENDENT CONTRACTOR AGREEMENT ("Agreement") is made by and between the CITY OF KETCHUM, IDAHO, an Idaho municipal corporation (hereinafter referred to as "City") and Studio Superbloom, LLC (hereinafter referred to as "Contractor").

#### **RECITALS**

WHEREAS, the City of Ketchum purchased the 65-acre Warm Springs Preserve parcel;

WHERAS, there is a need to conduct a formal master plan for the property to inform future improvements;

WHERAS, the City completed a competitive process to solicit proposals and has selected the Contractor to perform the master plan scope of work;

NOW, THEREFORE, on the basis of the foregoing recitals, and upon motion duly passed by the Ketchum City Council, and for the consideration set forth herein, the parties agree as follows:

- **1. AGREEMENT.** Contractor agrees to provide services pursuant to the terms and conditions of this Agreement.
- 2. SCOPE OF WORK: Contractor will provide the services outlined in the Proposal for Park Master Planning Services (Attachment A). Work will be completed in a phased authorized task order process which will be reviewed and approved by the City Council.
- 3. AMOUNT AND METHOD OF PAYMENT: The City agrees to pay Contractor for services rendered under this Agreement. Contractor shall maintain time and expense records and make them available to the City monthly and provide monthly invoices in a format acceptable to the City for work performed to the date of the invoice. All invoices shall be paid by the City within forty-five (45) days of receipt of proper invoice unless no funds are available, then as soon as funds become available. Uncontested invoices paid after forty-five days may be subject to the statutory rate of interest pursuant to Idaho Code section 67-2302.
- 4. **INDEPENDENT CONTRACTOR RELATIONSHIP:** Contractor is not an employee, servant, agent, partner, or joint venture of the City. The City shall determine the work to be done by Contractor, but Contractor shall determine the legal means by which it accomplishes the work specified by the City. This Agreement shall not be construed to create any employer-employee relationship between the City and Contractor.
- 5. FEDERAL, STATE, AND LOCAL PAYROLL TAXES: Neither federal, state, or local income taxes nor payroll taxes of any kind shall be withheld and paid by the City on behalf of Contractor or the employees of Contractor. Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes. Contractor understands that Contractor is solely responsible to pay, according to law, Contractor's income tax. Contractor further understands that Contractor may be liable for self-employment (Social Security) tax to be paid by Contractor according to law.

- 6. **LICENSES AND LAW:** Contractor represents that it possesses the requisite skill, knowledge, and experience necessary, as well as all licenses required, if any, to perform the services under this Agreement. Contractor further agrees to comply with all applicable laws, ordinances, and codes of federal, state, and local governments in the performance of the services hereunder.
- 7. **FRINGE BENEFITS:** Because Contractor is engaged in its own independently established business, Contractor is not eligible for and shall not participate in any employee pension, health, or other fringe benefit plans of the City.
- 8. **WORKER'S COMPENSATION:** While performing duties within the scope of the professional services, as set forth herein, Contractor shall be covered under the City's workers compensation liability policy.

**PROPRIETARY RIGHTS:** All data, materials, reports, maps, graphics, tables, memoranda, and other documents or products developed under this Agreement whether finished or not shall become the property of the City, shall be forwarded to the City at its request, and may be used by the City for any business or municipal purpose. The City agrees that if it uses products prepared by Contractor for purposes other than those intended in this Agreement, it does so at its sole risk.

**CONFIDENTIALITY:** Contractor agrees to maintain confidentiality of all work product produced under this Agreement, including both interim and draft, materials, reports, maps, graphics, tables, memoranda, and other documents unless and until the City signifies its written approval that such work product may be published as final work product subject to the public records laws of the state of Idaho. The City reserves the right to distribute the final work product as it sees fit provided that Contractor may use final reports as approved and adopted by the Ketchum City Council in the marketing of its firm.

**TERM OF AGREEMENT:** This Agreement shall commence as of the effective date specified in **Section 25** and shall remain in effect up to one year unless terminated by either party as specified in **Section 16**, or extended by mutual consent of both parties.

**ENTIRE AGREEMENT:** This Agreement, contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

**GENERAL ADMINISTRATION AND MANAGEMENT:** The City Administrator or his/her designee shall be the City's representative and shall oversee and approve all services to be performed, coordinate all communications, review and approve all invoices, and carry out any and all tasks as may be required under this Agreement.

**CHANGES:** The City reserves the right to make changes from time to time in the scope of services to be performed hereunder. Such changes, including any increase or decrease in Contractor's compensation, which are mutually agreed upon by and between the City and Contractor, shall be incorporated in written amendments to this Agreement.

AMENDMENTS: This Agreement may be amended only in writing upon mutual agreement of

both the City and Contractor.

**ASSIGNMENT:** It is expressly agreed and understood by the parties hereto that Contractor shall not have the right to assign, transfer, hypothecate, or sell any of its rights under this Agreement except upon the prior express written consent of the City.

#### **TERMINATION OF AGREEMENT:**

**TERMINATION BY THE CITY:** The City reserves the right to terminate this Agreement at any time, for any reason, by giving at least fifteen (15) days' notice in writing to Contractor. If this Agreement is terminated by the City as provided herein, Contractor shall be paid for the work performed prior to termination, less payment or compensation previously made. Contractor shall also provide the City all products or works related to this Project generated to date of termination.

**TERMINATION BY THE CONTRACTOR:** The obligation to provide further services under this Agreement may be terminated by Contractor upon thirty (30) days' written notice. Such termination shall be based upon substantial lack of performance by the City under the terms and conditions of this Agreement when said substantial lack of performance is through no fault of Contractor. If this Agreement is terminated by Contractor, Contractor shall be paid for services rendered and for reimbursable expenses incurred to the date of such termination.

**NOTICES:** Any and all notices required to be given by either of the parties hereto, unless otherwise stated in this Agreement, shall be in writing and be deemed communicated when mailed in the United States mail, certified, return receipt requested, addressed as follows:

To CITY: Jade Riley

City Administrator

PO Box 2315 | Ketchum, ID 83340

To CONTRACTOR: Studio Superbloom LLC

23 Lincoln St #200 Denver, CO 80203

**DISCRIMINATION PROHIBITED:** In performing the services required herein, Contractor agrees not to discriminate against any person on the basis of race, color, religion, sex, national origin or ancestry, age, or handicap. Violation of this section shall constitute a material breach of this Agreement and deemed grounds for cancellation, termination, or suspension of the Agreement by the City, in whole or in part, and may result in ineligibility for further work for the City.

**STANDARD OF SERVICE:** Contractor shall provide services as described in this Agreement. These services will be performed in accordance with generally accepted professional practices for the scope of this project. Contractor makes no other warranty either expressed or implied.

**INDEMNIFICATION:** Contractor agrees to indemnify and hold the City of Ketchum harmless from and against all claims, suits, damages (including without limitation, damages to persons and property including deaths), costs, losses, and expenses, in any manner related to or arising from the acts or omissions of Contractor, its managers, members, directors, officers, shareholders,

agents, and employees.

**NONWAIVER:** Failure of either party to exercise any of the rights under this Agreement or breach thereof shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

**APPLICABLE LAW:** Any dispute under this Agreement or related to this Agreement shall be decided in accordance with the laws of the state of Idaho.

**SEVERABILITY:** If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will nevertheless remain in full force and effect.

**ATTORNEY FEES:** Should any litigation be commenced between the parties hereto concerning this Agreement, the prevailing party shall be entitled, in addition to any other relief as may be granted, to costs and reasonable Attorney fees as determined by a court of competent jurisdiction. This provision shall be deemed to be a separate contract between the parties and shall survive any default, termination, or forfeiture of this Agreement.

**EFFECTIVE DATE:** The effective date of this Agreement shall be the day this Agreement is signed by the City.

**SUCCESSORS IN INTEREST:** The provisions of this Agreement shall be binding upon and shall inure to the benefit of the parties hereby and their respective successors and assigns.

**CONFLICT OF INTEREST:** Contractor shall disclose any conflict of interest to the City that may arise or exists with any of Contractor's current or former employers, clients, contractors, or the like, of or regarding any work, information, or data that may relate to any of the subject matter of the scope of work or not. In the event a conflict of interest is identified, Contractor shall immediately disclose the conflict and the City may, in its sole discretion, determine that this Agreement will terminate, or agree to measures to address the conflict and limit Contractor's scope of work to avoid the conflict. Failure to promptly disclose a conflict of interest constitutes Contractor's breach of this Agreement.

IN WITNESS WHEREOF, THE CITY and Contractor have executed this Agreement as of the effective date specified above.

Mayor Neil Bradshaw
CITY OF KETCHUM
ATTEST
Tara Fenwick, City Clerl



### **CITY OF KETCHUM**

PO BOX 2315 \* 191 5TH ST. \* KETCHUM, ID 83340 Administration 208-726-3841 (fax) 208-726-8234

## PURCHASE ORDER BUDGETED ITEM? \_\_\_Yes \_\_\_No

**PURCHASE ORDER - NUMBER: 22107** 

To:	

5810 STUDIO SUPERBLOOM, LLC 23 LINCOLN ST #200 DENVER CO 80203

#### Ship to:

CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340

P. O. Date	Created By	Requested By	Department	Req Number	Terms
06/09/2022	kchoma	kchoma		0	

Quantity	Description	Unit Price	Total
1.00	MASTER PLANNING WARM SPRINGS P 93-4900-5910	1.0	TBD
			0.00
	SHIPPIN	SHIPPING & HANDLING	
	TOTAL PO AMOUNT		TBD

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