Attachment A: Project Work Plan

A. Project Title

Lower Animas Watershed Based Plan Implementation Projects Phase 3

B. Applicant Information

Organization:	**San Juan Soil & Water Conservation District (San Juan SWCD), on behalf of San Juan Watershed Group (SJWG)**		
Address:	**200 S. Ash Street** **Aztec, New Mexico 87410**		
Contact Person:	**Alyssa Richmond**	Title:	**SJWG Coordinator**
Phone:	**505-234-6040 X 3**	Email:	**sjwg@sanjuanswcd.com**
FED. Tax ID #	85-0274066	Date of Incorporation:	*(non-profits only)*

C. Project Manager

The project manager is responsible for oversight of the approved project including: administering contracts; ensuring technical viability of the project; ensuring funds expended are within the budget and in accordance with applicable law; and ensuring that quarterly fiscal and technical progress reports, and a final report, are submitted to NMED.

Name:	Melissa May		
Organization:	San Juan SWCD		
Phone:	505-234-6040 X 1	Email:	melissa.may@sanjuanswcd.com

D. Start and End Dates

Planned project start date:	08/01/2021	Planned project end date:	09/30/2024

E. Plan Citation

Plan citation information:	The implementation projects and outreach proposed in this work plan are based on the Lower Animas Watershed Based Plan (LAWBP) accepted by the EPA on August 9, 2016. The LAWBP, developed by the San Juan Soil & Water Conservation District, San Juan Watershed

	Group, and Mountain Studies Institute is available here: https://www.env.nm.gov/surface-water-quality/accepted-wbp.

F. Planning Feedback

This project will make several updates to the LAWBP: expanded planning for the temperature impairment, annual updates to the milestones table in Section 6, providing further detail to pending/existing projects, and updating the Implementation Schedule with completed and newly identified projects. The temperature impairment will receive renewed focus after the 2020 delisting of the Animas for E.coli, which had previously been SJWG's main focus. Over four years of detailed and consistent temperature data from USGS Sondes is publicly available and will be incorporated into a new section of the LAWBP to characterize the temperature impairment for Assessment Unit NM-2404_00 and NM-2403.A_00 and prioritize effective best management practices to address this water quality issue. Additional attention will be allocated to updating pending and existing project plans to agricultural Best Management Practice (BMP), riparian restoration, and upland management projects through partnerships further described in Section L.

G. Project Area

Assessment Units name and ID:	Animas River (Estes Arroyo to Southern Ute Indian Boundary) NM-2404_00 and Animas River (San Juan River to Estes Arroyo) NM-2403.A_00
12-digit Watersheds:	140801041001, 140801041002, 140801041003, 140801041004, 140801041005, and 140801041006
Project area (stream miles):	36
Project area map:	Project maps are available below.

H. Problem Description

Assessment Unit ID	Assessment Unit	Impairment Parameters
NM-2404_00	Animas River (Estes Arroyo to Southern Ute Indian Boundary)	Turbidity, Nutrients, Total Phosphorus, Temperature, Total Dissolved Lead | TMDL for E.coli and Total Phosphorus

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Assessment Unit ID	Assessment Unit	Impairment Parameters
Assessment Unit Narrative		
Nutrients were identified as a problem in the Animas River in 2002, and a TMDL for total phosphorus was developed in 2013. The Animas was first listed as impaired for turbidity and E. coli in 2012 (TMDL developed in 2013) and was delisted for E.coli in 2020. Temperature was listed as an impairment on this reach in 2004, and was reconfirmed in 2020. This AU is characterized by low population density with a majority of the community concentrated along the riparian corridor using the valley for irrigated pasture and cropland, while upland land use is primarily roads systems to service oil and gas extraction activities. Source activities contributing to these impairments include but are not limited to poor soil health on cropland/pastureland, loss assimilative capacity due to bank erosion and lack of riparian vegetation, direct removal of vegetation, channelization, artificial hardening of banks, and overgrazing (more information on these source activities are provided in Section 3 on pages 52-54 of the LAWBP). For a complete list of pollutant source activities, please refer to Table 9 on page 78 of the LAWBP. Due to the recent availability of USGS real-time temperature data in this AU, the SJWG has re-prioritized finding cost effective and impactful means to address this stressor to aquatic life. Several sources are hypothesized to contribute to this impairment, including persisting drought conditions, poor soil health, grazing in riparian areas, flow alterations, and channelization. While these source activities are in various stages of being remediated throughout the watershed, the SJWG has identified the essential action of providing pools for temperature refugia and improving the species diversity in riparian areas to increase canopy cover and facilitate the survival of heat sensitive aquatic species during summer months along the Animas River.		

Assessment Unit ID	Assessment Unit Name	Impairment Parameters
NM-2403.A_00	Animas River (San Juan River to Estes Arroyo)	Temperature| TMDL for Nutrients, Temperature, and E.coli
Assessment Unit Narrative		
This stretch of the Animas River was first listed as impaired for nutrients in 2004 and delisted in 2020, with a TMDL developed and still in effect since 2006. An E.coli impairment was determined in 2012 and delisted in 2020, with a TMDL developed and still in effect since 2013. A temperature impairment was added in 2012 and is the only impairment still on the 2020 impairment list. Downriver from Estes Arroyo to the confluence of the Animas with the San Juan River, the land use is characterized by increasingly urban areas with higher population densities interspersed with irrigated crop and pastureland while dirt roads systems that service oil and gas extraction activities sprawl throughout the scrub-shrub/pinyon-juniper uplands. Source activities contributing to previous and current impairments include but are not limited to poor soil health on cropland/pastureland minimizing water infiltration, loss of riparian areas with adequate assimilative capacity due to erosion, direct removal of vegetation, channelization, artificial hardening of banks, and overgrazing (more information on these source activities are provided in Section 3 on pages 52-54 of the LAWBP). For a complete list of pollutant source activities, please refer to Table 9 on page 78 of the LAWBP. Several sources are hypothesized to contribute to this impairment, including persisting drought conditions, poor soil health, grazing in riparian areas, flow		

alterations, and channelization. While these source activities are in various stages of being remediated throughout the watershed, the SJWG has identified the essential action of providing pools for temperature refugia and improving the species diversity in riparian areas to increase canopy cover and facilitate the survival of heat sensitive aquatic species during summer months along the Animas River.

I. Goals

Assessment Unit ID	Assessment Unit Name	Current Impairment Parameters	Load Reduction Goals of Project
NM-2404_00	Animas River (Estes Arroyo to Southern Ute Indian Boundary)	Turbidity, Nutrients, Phosphorus (Total), Temperature, Total Dissolved Lead	Nitrogen: 244.2 lbs/yr, Phosphorus: 94 lbs/yr, Sediment: 179.6 tons/yr
Goal Narrative The project aims to meet load reduction goals for this AU by implementation of a soil health outreach campaign (Management Measure 4) and a bank stabilization and restoration project (Management Measure 1). Load Reductions for this project were based on results from STEPL (Spreadsheet for Estimating Pollutant Loads) Streambank Erosion Tool. The LAWBP Section 3 Water Quality Improvement Goals (pg 58 – 59) provides specific pollutant load reduction goals for each section of the Animas River. While it is challenging to quantify the cumulative impact of individual projects on downstream temperature as measured at the USGS Gage in Aztec (09364010), the preservation of riparian canopy coverage and formation of pools to decrease surface area subject to warming from sunlight is considered by the SJWG and SWCD as an ascertainable mitigation method to address temperature impairments in this AU.			

Assessment Unit ID	Assessment Unit Name	Current Impairment Parameters	Load Reduction Goals of Project
NM-2403.A_00	Animas River (San Juan River to Estes Arroyo)	Temperature	Nitrogen: 51.82 lbs/yr, Phosphorus: 19.74 lbs/yr, Sediment: 37.6 tons/yr ,Total Suspended Solids: 36.41 lbs/yr

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Goal Narrative
The project aims to achieve quantitative load reductions and increase awareness of LAWBP principles by implementation of a floodplain restoration/erosion mitigation project (Management Measure 2), wetland restoration and riparian management/educational volunteer events (Management Measure 3), and an outreach campaign spanning both assessment units (Management Measure 4). Load Reductions for this AU are based on results from STEPL (Spreadsheet for Estimating Pollutant Loads). The LAWBP Section 3 Water Quality Improvement Goals (pg 58 – 59) provides specific pollutant load reduction goals for each section of the Animas River. The projects proposed within this AU will complete several goals (as listed above), as well as to further reduce nutrient loading and increase the chances of this AU remaining delisted for nutrients in the future and accumulatively reduce the quantified temperature impairment that continues to be listed.

J. Management Measures

Management Measure #1: Tucker Watershed Riverbank Stabilization
Management Measure #1 Description: Restoring the functioning capacity of the river and adjacent floodplains is one of the best long-term solutions for abating nutrient pollution and improving assimilative capacity of pollution loads (LAWBP 2016). One of the Best Managements Practices prioritized as a high potential for pollutant load reductions over all land use types is bank stabilization methods designed to match the degree of channel and/or riverbank erosion. Approximately two and a half river miles downstream of the confluence of Cox Canyon within the Tucker Canyon HUC12 Watershed, multiple private landowners are experiencing exacerbated river erosion endangering their homesteads, hobby farms, and irrigated alfalfa fields due to a tight-radius meander where the thalweg has shifted directly along the river right bank. This vertical channelization of the river and disconnection of the river's floodplain was previously addressed through years of piling inappropriate bank stabilization materials (i.e. riprap and debris). To remedy this problem, SJWG will work with the two landowners along the impacted reach to install a series of six to seven geomorphologically appropriate modified J-hook and bendway weir structures. Designs and USACE 404 permits for one of the properties were already completed in 2019 at the expense of the landowner, who then reached out to SJWG for implementation assistance. The existing plans will be updated to include the neighboring reach before construction. These structures will adjust the distribution of flow away from the eroding bank, promote the aggradation of material in the near-bank region, provide habitat for aquatic species, and support a rooting medium for the long-term establishment of native vegetation. Altogether, this bank stabilization BMP will assimilate sediment, nutrients, and phosphorus that was previously being introduced to the watershed through active erosion. Through the collaboration with both landowners, who have agreed to provide match funding to ensure the project's success, this project will provide a prime example of private landowner partnerships to address streambank erosion instances throughout the Lower Animas Watershed.
Management Measure #2: Flora Vista North Bank Floodplain Restoration

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Management Measure #2 Description:
This management measure was originally included in the SJWG's Phase 1 LAWBP Implementation Project grant, as a component of the Ranchman's Terrell Diversion Improvement and Flora Vista River and Riparian Restoration Project. While 4 out of 5 proposed components of that project were completed in Phase 1 (details on all components available on pages 114-116 of the LAWBP), project timing and funding were not sufficient to complete restoration of the river right floodplain. Approximately a quarter mile downriver of the Ranchman's-Terrell diversion, years of cobble push-up dam maintenance and washouts have played a role in the aggradation of a large cobble bar. While natural and to be expected as the river morphology adjusts to the new Ranchmans Terrell cross vane diversion structure, the cobble bar has induced a lateral side channel along the north bank disconnecting the river from the floodplain during the majority of low flow conditions and migrating the majority of the river's center of flow towards the south bank, which is actively eroding an already barren riverbank with minimal vegetation coverage. Not only is this inducing sediment contributions to the river during stormwater events, decreasing habitat quality and floodplain acreage, but the rate of the erosion introduces long term risk to an adjacent natural gas facility and a subterranean utility pipe crossing the riverbed. The river right landowner has prioritized restoration assistance to improve floodplain access and provide a stable riparian area with meandering floodplain access within two acres of undeveloped floodplain. The river left landowner intends to collaborate with the priority of reducing bank erosion and vegetating approximately half an acre of riparian area. In addition to these landowner goals, SJWG and NMED want to create a healthy floodplain with functional assimilative capacity which will reduce nutrient contributions, and create sustainable terrestrial and aquatic habitat. The SJWG proposes to procure a contractor to design, permit, and implement a project that meets the above goals. The project components may be slightly altered from the project description on pages 114-116 in the LAWBP, and will be designed after evaluation of the first year of runoff post-completion of the R-T diversion structure. Restoration methods may include bioengineering a series of woody check dams tied into the side channel to capture sediment and debris, reshaping the bank to induce more lateral flow of water throughout the floodplain, redistribution of cobble deposits from river center to banks, and revegetation with a mixture of riparian and upland native plants. Larger instream structures like crossvanes or bendway weirs will be evaluated as potential restoration methods, but may be cost prohibitive in combination with these other project components. Specific project designs will be finalized during fall of 2021 to be submitted to NMED for review and approval, with the anticipation that project implementation will be conducted in 2022, followed by 2 years of visual post construction surveys.

Management Measure #3: Animas Park Wetland Restoration and Riparian Education Garden

Management Measure #3 Description:
In a collaborative effort with the City of Farmington and Friends of Riverside Nature Center, the SJWG is proposing to assist these partners with a restoration and education project in the highly visible Animas Park in Farmington. This project aims to focus on the northeast corner of the park between Riverside Nature Center and Browning Parkway, encompassing approximately 2 acres of wetlands fed by urban stormwater overflows and four adjacent acres bordered by an irrigation return canal from the Echo Ditch. Woody invasive species

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were recently removed throughout the project area, which has since been colonized by herbaceous weeds (i.e. Kochia and Russian Knapweed). City of Farmington staff have been wanting to establish permanent desirable native vegetation in this area and take advantage of its highly visible location at the park's entrance to create an intentional riparian education garden. The project has the following components: Revegetate a 2 acre wetland area that will act as a filter strip for stormwater flow before joining a ditch drainage outlet that flows into the Animas River; Implement a grass/pollinator mix filter strip parallel to the Echo ditch drainage as a demonstration to educate the public on the types and benefits of filter strips; Host a series of educational volunteer days to establish the plantings and discuss healthy riparian habitat, invasive/native species, and water quality BMP principles that can be taken back home to implement throughout the watershed. Animas and Berg Parks are nested within the heart of Farmington in the lower reaches of the Animas River corridor, and include over eight miles of river trails that are used by thousands of community members every year. This beloved park, encompassing an ecologically critical connected floodplain spanning over one and half river miles within a Conservation Opportunity Area as designated by the New Mexico Department of Game and Fish, has been prioritized in the LAWBP (more information available on pages 117-118) for its high potential for increased river recreation opportunities, wildlife habitat, temperature reduction, outreach and education projects, and riparian restoration potential to reduce wildfire risk (as discussed in the 2014 San Juan Basin Community Wildlife Protection Program). This wetland restoration and educational riparian garden aims to expand on successful environmental education efforts at Riverside Nature Center and riparian restoration projects already completed within this reach, and is located at one of the 3 main entrances to the park and trail network. Farmington City Parks Department staff have offered in-kind services to design the layout of the revegetation so that it can function as both a natural aesthetic riparian area wetland and be clear to the public that it is an intentionally planted area intended as a "Children's Nature Garden." Friends of the Nature Center will assist with volunteer recruitment and hosting educational tours. Revegetation will be conducted through a series of educational volunteer planting days that will interactively teach riparian restoration techniques, the significance of strategically planted native vegetation in improving water quality, and the importance of ongoing invasive species management to maintain the health of riparian areas. This demonstration project will be used by the SJWG, project partners, and other stakeholders groups for educational opportunities detailing healthy wetland ecosystems and urban stormwater management, functional riparian ecosystems, and encourage healthy soils practices and restoration techniques for the local community to implement on their properties throughout the Lower Animas Watershed. Indirect benefits of the project include strengthening relationships between SJWG and the City of Farmington Parks and Recreation Department, Friends of the Nature Center, and the River Reach Foundation, all key stakeholders, educators, and environmental stewards in the watershed.
Management Measure #4: Soil Health Outreach Campaign and Workshop

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Management Measure #4 Description:
Nearly all the impairments on the Animas could be alleviated by improving soil health across the landscape. The LAWBP discusses the importance of soil health on page 55 and 96, recommending annual soil health workshops as a low-cost way to encourage broad implementation of these practices. SJWG thus plans to leverage the increasing popularity of the soil health movement in the state of New Mexico by conducting an outreach campaign and hands-on soil health workshop. The goal of these efforts is to get more people implementing the five principles of soil health: Keep the soil covered, minimize external inputs and soil disturbance on cropland, maximize biodiversity, maintain a living root, and integrate animals into land management. These practices will improve soil organic matter, water infiltration, and water holding capacity, which will reduce stormwater runoff and lead to more water reaching the river during baseflow than in flashy storm events. Outreach: COVID-19 has made it especially apparent that there is a communication divide in our community between those who are comfortable with technology and those who aren't. Our soil health outreach campaign will plan separate methods for both populations: We will work with materials already developed by NRCS and the NM Healthy Soils Working Group to create an email and social media campaign, as well as a series of targeted mailings and newsletters. Workshop: The SJWG and San Juan SWCD are already in the process of collaborating with the NMSU San Juan County Extension Office to establish a Healthy Soil Demonstration Area on a recently acquired 12 acre parcel of county owned land they are calling Growing Forward Farms. This location will demonstrate cover crops, improved tillage practices, multiple composting methods, and biodiversity plantings. A field day and soil health workshop is already planned for August 2021, and as part of this grant we proposed to host a second Healthy Soils Workshop in early summer of 2022. We will recruit guest speakers from organizations including NRCS, NMSU extension, NMSU Ag Science Center, and NM Healthy Soils Working Group, as well as ag producers in the area who can share their own healthy soil stories. As an extra incentive for attending this workshop, free soil testing equipment and vouchers will be provided to workshop participants, with the offer for the SJWG Coordinator to offer technical assistance in soil sampling methods, which will potentially further identify projects throughout the watershed that will support future implementation of the LAWBP.

Management Measure #5: Stakeholder Group Outreach and Coordination

Management Measure #5 Description:
Outreach and project coordination will both be important components of project success. The San Juan Watershed Group Coordinator will maintain active local involvement in water quality management measure implementation, along with continuation of the collaborative watershed group and conducting educational and outreach activities. The SJWG will continue meeting on a monthly basis to provide oversight of this 319 project and to review and adjust pollutant load reductions and priority areas during the course of the project. The Watershed Coordinator will manage the overall project with the cooperation and input of the SJWG Steering Committee and members. In addition, the Coordinator will continue and expand efforts to gain broad public understanding and support for water quality activities within the watershed, with a dual goal of high visibility for project implementation and adoption of practices by other partners and residents elsewhere within the watershed.

Further details on specific stakeholders and programs to be supported by the SJWG coordinator are provided in Section L.

K. Key Persons

Key Person 1:	**Melissa May**	**San Juan Soil & Water Conservation District**	**Project Manager**
Key Person 1 Qualification Summary:	Melissa May is the District Manager and Chief Procurement Officer for the San Juan Soil & Water Conservation District in Aztec, NM. She holds an MS in wildlife and fisheries science from Penn State University's Watershed Stewardship program and has successfully managed numerous watershed and natural resource management projects since starting with San Juan SWCD in 2012. She led the 2013-2014 SJWG Microbial Source Tracking study and was the lead author of the LAWBP.		
Contractor?	No.		
Matching effort?	As fiscal agent for the SJWG, she will be paid as personnel under this grant. Some of Ms. May's time spent on complementary projects paid for using private funds will be used as match.		
Key Person 2	**Alyssa Richmond**	**San Juan Watershed Group**	**Project Coordinator**
Key Person 2 Qualification Summary:	Alyssa Richmond holds a BS in Environmental Science with minors in Sustainability Studies and Geospatial Analysis. She has been the coordinator for the San Juan Watershed Group since Oct 2019 and is manages the suite of projects under the SJWG's active and recently completed 319 grants with NMED SWQB. She is successfully building relationships with agencies, stakeholders, and landowners through the Animas and San Juan Watersheds.		
Contractor?	No. Ms. Richmond is a career employee of the San Juan SWCD and will be compensated for her time spent planning and managing the projects included in this grant.		
Matching effort?	Yes. A portion of Ms. Richmond's time spent on complementary projects, paid for through private funding, will be used as match.		
Key Person 3	**Doug Abe and Rachelle Crosby**	**City of Farmington: Parks, Recreation,**	**Project Assistants and Designers**

		and Cultural Affairs Department	
Key Person 3 Qualification Summary:	Doug Abe serves as the Parks Superintendent while Rachelle Crosby serves as the Park Planner and Designer for the Farmington: Parks, Recreation, and Cultural Affairs Department. Both oversee park operations, project management, recreational opportunity expansion, community engagement, and outreach events (Riverfest, Earth Day, etc) for the entire city of Farmington.		
Contractor?	No.		
Matching effort?	Yes. Time put towards project assistance, garden design, and site prep for restoration practices for Management Project 3 will be counted as in-kind match.		
Key Person 4	**Donna Thatcher and Callie Vanderbilt**	**Friends of the Riverside Nature Center**	**Project Assistants and Volunteer Coordinators**
Key Person 4 Qualification Summary:	Donna Thatcher and Callie Vanderbilt serve as Board Members for the Friends of the Riverside Nature Center, which operates as a non-profit in support of the Farmington: Parks, Recreation, and Cultural Affairs Department and Farmington Museum Association. Both members maintain operations of the Riverside Nature Center in Animas Park and regularly conduct educational tours and activities on the importance of wildlife and native plants to the local community at the Nature Center and surrounding park.		
Contractor?	No.		
Matching effort?	Yes. Time put towards assisting in garden and wetland restoration design and coordinating volunteers for planting days and educational tours will be counted as match.		

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L. Complementary Programs and Match

Several project partners in the Animas Watershed had proposed projects in the LAWBP but whose progress has stalled for various reasons. As part of this grant request, SJWG Coordinator will provide coordination and technical assistance to these entities to encourage both active participation in the SJWG and progress on projects that will benefit water quality in the Animas River. While exact match amounts for each component are not known, multiple projects are expected to make progress within the term of this grant, so our funding request includes both a match estimate, and a cost-share amount to assist these projects and partners towards their water quality goals. These LAWBP projects and partners include: NM State Land Office – Cox Canyon erosion control and upland vegetation management projects, City of Farmington - Animas bank stabilization between Riverside Nature Center and Anesi Park, San Juan Basin Roads Committee – Pipeline erosion control in Cox Canyon and Hart Canyon areas, River Reach Foundation – RiverFest, San Juan Citizens Alliance – Animas Riverkeeper landowner and stewardship outreach, NRCS – Landowners participating on the Animas River, Irrigation Ditch Associations – Cedar Ditch, Kello-Blancett Ditch, and others in need of diversion improvements.

Additional match requirements for this grant will be met via cash and in-kind donations from the two landowners involved in MM1, donations of supplies and in-kind match from volunteers at Friends of the Nature Center, staff time from City of Farmington Parks & Recreation Department, in-kind match time from workshop attendees and participation in SJWG meetings, and additional staff time from SWCD personnel.

M.Clearances

US Army Corps of Engineers (USACE) 404 Permits are the only needed clearances for Management Measure 1 and 2 of this project. Prior to the full development of the bank stabilization project including both landowners in Management Measure 1, a USACE 404 permit was approved in 2019 at the expense of one of the landowners. To implement this project in fall of 2021, the landowner will renew the current standing USACE 404 permit and a secondary USACE 404 permit will be acquired following BHI's surveys and designs for the second property within this project area. The SJWG and BHI will also acquire a USACE 404 permit for Management Measure 2 after surveys and designs are completed during this funding agreement. SWCD Personnel will work with NMED to develop a QAPP for monitoring, using QAPPs from Phase 1 and Phase 2 LAWBP Implementation Projects as a template.

N. Measures of Success

Success of the five Management Projects will be measured by: monitoring successful installation of management measures coupled with load reduction estimates, feedback from stakeholders participating in/influenced by outreach campaigns and educational events, and strengthened partnerships with partner organizations and more involvement in activities of the SJWG. Management Measures 1 and 2 (Tucker Watershed Riverbank Stabilization and Flora Vista North Floodplain Restoration) success will be measured by pre-construction and two years of post-construction surveys coupled with repeat photography of bank stabilization activities. The main goals of these surveys will be to determine the quantity of deposition rebuilding the bank, flow condition changes observed, and long term recommendations to ensure the project's success over time (i.e. potential replacement of moved rocks over ensuing water years, and/or revegetation along the bank once bed material has adequately accumulated). Management Measure 3 (Animas Park Wetland Restoration and Education Riparian Garden) success will be measured by pre and post revegetation RAM surveys that will mark improvement in overall RAM ranking for the urban stormwater-fed wetland, repeat photography of the project area coupled with pre and post surveys documenting invasive treatment (provided as match by the City of Farmington) and revegetation efforts, and feedback from riparian education and planting volunteers through survey forms. Management Measure 4 (Soil Health Outreach and Workshop) success will be measured by number of attendees and feedback from attendee evaluations of course content, presenter skill, and local applicability. Technical assistance and project plans developed with landowners will also be tracked and included in updates to the LAWBP. Management Measure 5 (Stakeholder Group Outreach and Coordination) success will be measured through increased participation in SJWG meetings, media presence growth, new partners and collaborators, increased community awareness, and implementation of complimentary programs/projects through coordination with the SJWG.

O. Implementation Plan and Schedule

Task Number	Task Title	Key Person	Planned Start Date	Planned End Date	Completion Benchmark
Task 0	QAPP Development	SJWG Coordinator, SWCD	October 2021	November 2021	Completed and approved QAPP
Task 1.1 Task 2.1	MM1 & MM2: Contractor Procurement,	SJWG Coordinator, SWCD	November 2021	July 2022	Procured project contractor,

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Task Number	Task Title	Key Person	Planned Start Date	Planned End Date	Completion Benchmark
	Project Design, and Permitting	Manager, Contractor, Landowners,			Pre-construction surveys, finalized construction designs, and acquired permits
Task 1.2 Task 2.2	MM1 & MM2: Project Construction	Contractor(s), SWCD Manager	August 2022	November 2022	Completed construction and as built reports
Task 1.3 Task 2.3	MM1 & MM2: Post Construction Site Surveys	Contractor, SJWG Coordinator	August 2022	August 2024	Completed Year 1 & 2 surveys
Task 3.1	MM3: Project Design, Planning, and Site Prep	City of Farmington, Friends of the Nature Center, SJWG Coordinator	November 2021	March 2023	Completed project designs, completed pre wetland planting RAM survey, site prep for revegetation
Task 3.2	MM3: Volunteer Planting and Education Tours	SJWG Coordinator, Friends of the Nature Center	March 2023	June 2023	Completed plantings and education through

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Task Number	Task Title	Key Person	Planned Start Date	Planned End Date	Completion Benchmark
					volunteer events
Task 4.1	MM4: Workshop Planning and Preparation	SJWG Coordinator, SWCD	January 2022	April 2022	Advertising complete, workshop agenda finalized
Task 4.2	MM4: Host Workshop and Feedback Review	SJWG Coordinator, SWCD	April 2022	June 2022	Completed workshop and workshop review report
Task 4.3	MM4: Soil Health Consultations	SJWG Coordinator	June 2022	October 2022	Landowner consultations report and project plans developed
Task 5.1	MM5: SJWG Meeting and Stakeholder Engagement	SJWG Coordinator	November 2021	September 2024	Monthly SJWG meetings, stakeholder engagement and outreach
Task 5.2	MM5: Reporting	SJWG Coordinator	October 2021	September 2024	Quarterly reports and final report

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Task Number	Task Title	Key Person	Planned Start Date	Planned End Date	Completion Benchmark
Task 6	LAWBP Update	SJWG Coordinator, SWCD	January 2024	August 2024	Updated LAWBP approved by EPA and NMED

Task Number	Task Title	Task Description
Task 0	QAPP Development	A Quality Assurance Project Plan (QAPP) will be developed and submitted to NMED for approval.
Task 1.1 Task 2.1	MM1 & MM2: Contractor Procurement, Project Design, and Permitting	Contractors will be procured to provide expertise on conducting surveys, finalizing project designs, and overseeing construction. Currently approved USACE 404 permits will be reinstated and new permits for project area expansion will be acquired based off a design that meets NMED, SJWG, and landowner goals. QAPP will be developed for this project as necessary.
Task 1.2 Task 2.2	MM1 & MM2: Project Construction	Select contractors using proper procurement procedures and oversee construction of both projects to ensure they meet construction design specifications. As built reports will be submitted to the SJWG Coordinator and NMED SWQB.
Task 1.3 Task 2.3	MM1 & MM2: Post Construction Site Surveys	Two years of post construction surveys and repeat photo point monitoring procedures as approved by the QAPP will be compiled into reports and submitted to the SJWG Coordinator and NMED SWQB.
Task 3.1	MM3: Project Design, Planning, and Site Prep	Project partners will coordinate to develop an overall garden design, wetland restoration plan, and revegetation plan for this project area. Park staff will conduct necessary site preparations, including mowing, necessary invasive species control, and soil preparation. Plants and seeds will be ordered, volunteer and educational days will be scheduled and advertised.

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Task Number	Task Title	Task Description
Task 3.2	MM3: Volunteer Planting and Education Tours	A series of half day volunteer and educational days will be hosted with multiple audiences in the project area. Surveys will be conducted with volunteers after the events to provide feedback on future volunteer events.
Task 4.1	MM4: Workshop Planning and Preparation	The SJWG Coordinator and SWCD will coordinate with the San Juan County Extension Office and other partners to recruit speakers, develop proceedings and activities for the day, arrange catering, and advertise for the workshop. Concurrent mailings, emails, and a social media campaign will be conducted to share resources and advertise for the workshop.
Task 4.2	MM4: Host Workshop and Feedback Review	Workshop will be hosted with project partners and guest speakers using a combination of a classroom/virtual setting and field demonstration activities as recommended by COVID safety guidelines. A survey form will be adapted for the workshop and feedback will be collected from participants, which will be compiled into a workshop review report. A light meal or non-alcoholic refreshments will be provided to workshop attendees, to keep them on site for longer and facilitate exchange of information.
Task 4.3	MM4: Soil Health Consultations	As part of the workshop participants will receive soil test kits and necessary materials to have them analyzed at a certified lab. They will also have the option to sign up for soil health consultations and technical assistance. The SJWG Coordinator will provide this assistance and potentially work with the landowner to develop a project plan to be include in the LAWBP.
Task 5.1	SJWG Meeting and Stakeholder Engagement	The SJWG will continue to meet monthly to discuss project progress, strategize group structure, and long term plans. The SJWG Coordinator will continue to assist project partners with implementation of complimentary projects identified in the LAWBP and will update the plan accordingly.
Task 5.2	Reporting	Progress reports, invoices, and financial records will be submitted to the NMED SWQB quarterly, with a final report delivered at the end of this funding agreement. The SJWG Coordinator and San Juan SWCD will coordinate with project partners to track and report all match for this project.

Task Number	Task Title	Task Description
Task 6	LAWBP Update	The LAWBP will be updated to expand planning addressing the temperature impairment, update the milestones table in Section 6, provide further detail to pending/existing projects, and update the Implementation Schedule with completed and newly identified projects.

P. Budget

Budget Categories	CWA 319 Funds	Cash or In-Kind Match	Total
Personnel			
SJWG Coordinator (Hourly rate includes fringe benefits) $30.91/hr * 52 hrs/mo * 36 months	$50,000.00	$7,863.52	$57,863.52
SWCD Project Manager (Hourly rate includes fringe benefits) $38.19/hr * 15 hrs/mo * 36 months	$15,000.00	$5,622.60	$20,622.60
Travel			
SWCD Staff Mileage (1000 mi @ State employee rate of $0.43/mi)	$215.00	$215.00	$430.00
Mileage match for volunteers (1000 mi @ Federal rate of $0.575)		$575.00	$575.00
Supplies			
Riparian garden reveg. - trees/shrubs	$2,000.00		$2,000.00
Riparian garden reveg. - seed mix	$2,488.80		$2,488.80
"Children's Nature Garden" educational signs		$1,500.00	$1,500.00
Soil testing supplies	$500.00		$500.00
Food for Workshops	$1,000.00		$1,000.00
Paper, Ink Cartridges, Postage, etc.	$500.00		$500.00
Soil Health flyers/outreach materials	$500.00		$500.00
Contractual			

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Budget Categories	CWA 319 Funds	Cash or In-Kind Match	Total
Contractor TBA - $82.11/hr (Estimated by BHI at 260 hrs Pre-Construction, 215 hrs Construction, 65 hrs Post-Construction, plus mileage)	$45,438.00		$45,438.00
Tucker Watershed Bank Stabilization (Construction estimate includes purchase and delivery of rock, excavator with operator, and equipment mobilization)	$35,000.00	$25,375.00	$60,375.00
Flora Vista North Bank Floodplain Restoration (Construction estimate includes loader with operator, excavator with operator, and equipment mobilization)	$49,160.00	$9,000.00	$58,160.00
Soil Tests	$1,808.00		$1,808.00
Other			
City of Farmington In-Kind Match (Staff time for Garden Design, Project Mgmt, Site Prep)		$11,010.80	$11,010.80
Friends of the Nature Center In-Kind Match (Volunteer Coordination, Outreach, Project Mgmt, Volunteer time at plantings/workshops)		$9,370.20	$9,370.20
Soil Health Workshop In-Kind Match (Volunteers at $22.31/hr)		$21,417.60	$21,417.60
LAWBP Complementary Program Cost-share and Match	$10,000.00	$40,000.00	$50,000.00
SJWG Meeting Participants In-Kind Match (Volunteers at $22.31/hr, Professionals at $50/hr)		$21,693.00	$21,693.00
Indirect Costs - 10% de minimus of estimated $171,971.80 MTDC	$17,197.18		$17,197.18
Totals:	$230,806.98	$153,642.72	$384,449.70
	60.0%	40.0%	

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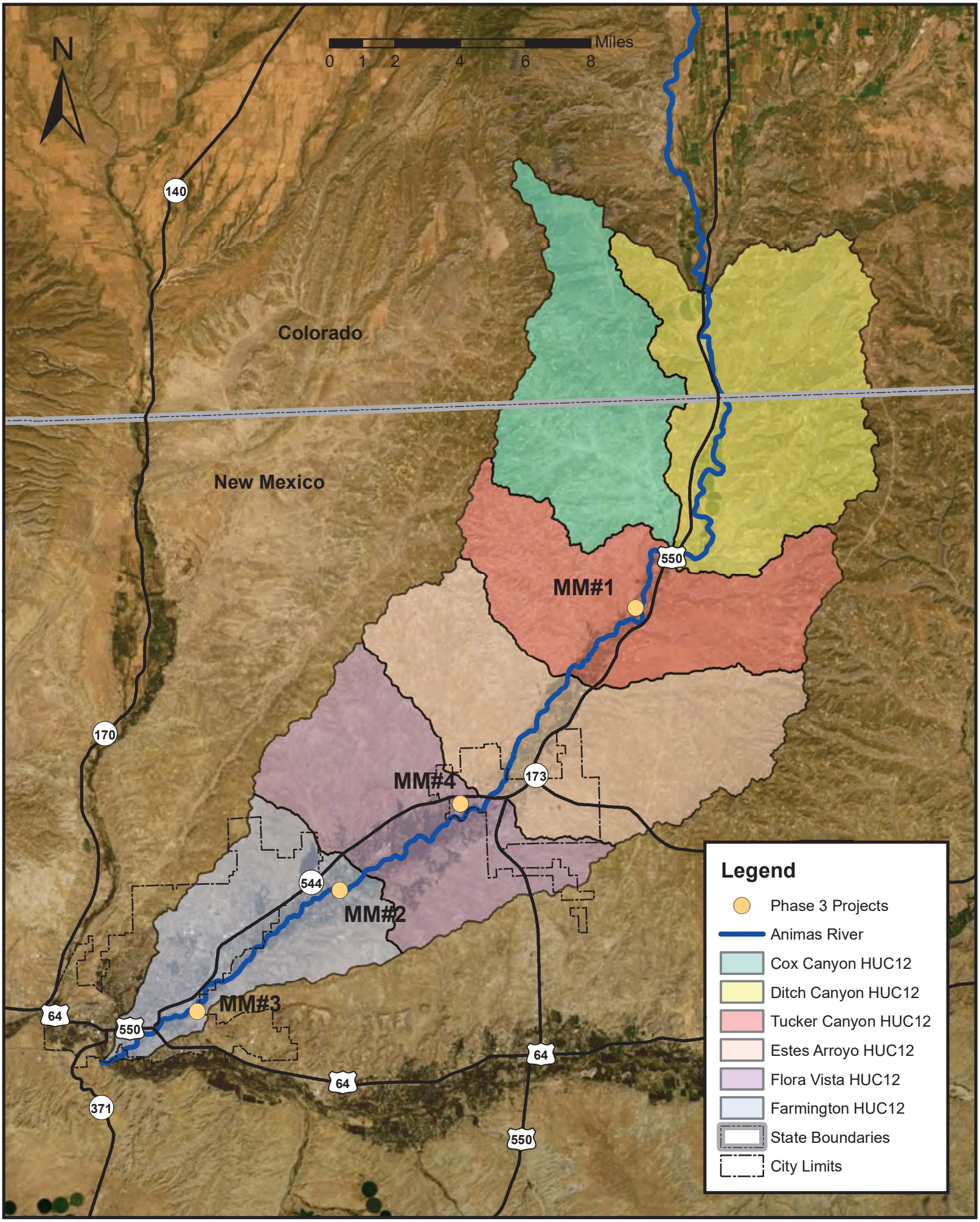
Lower Animas Watershed Based Plan Phase 3 Projects



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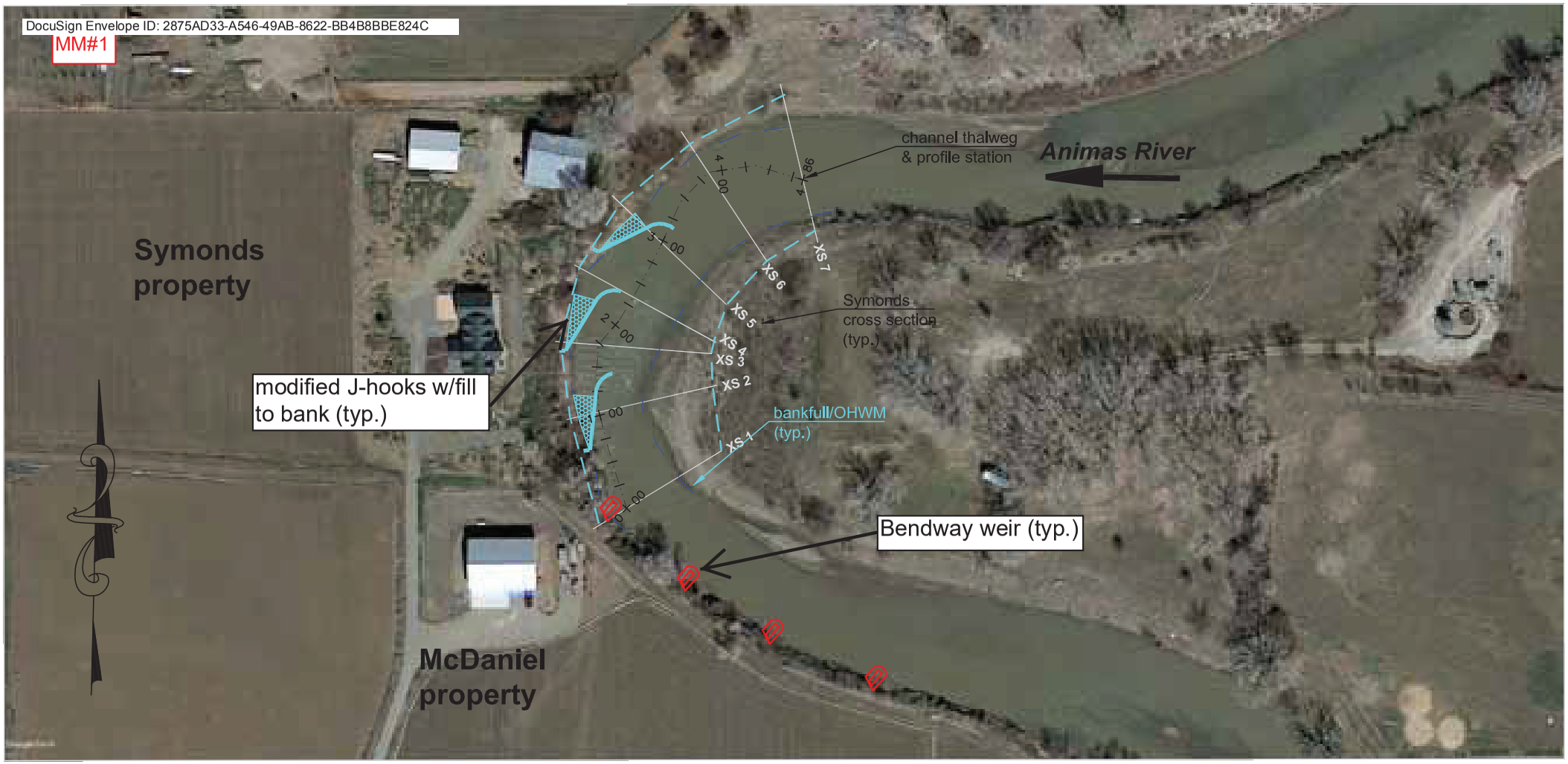

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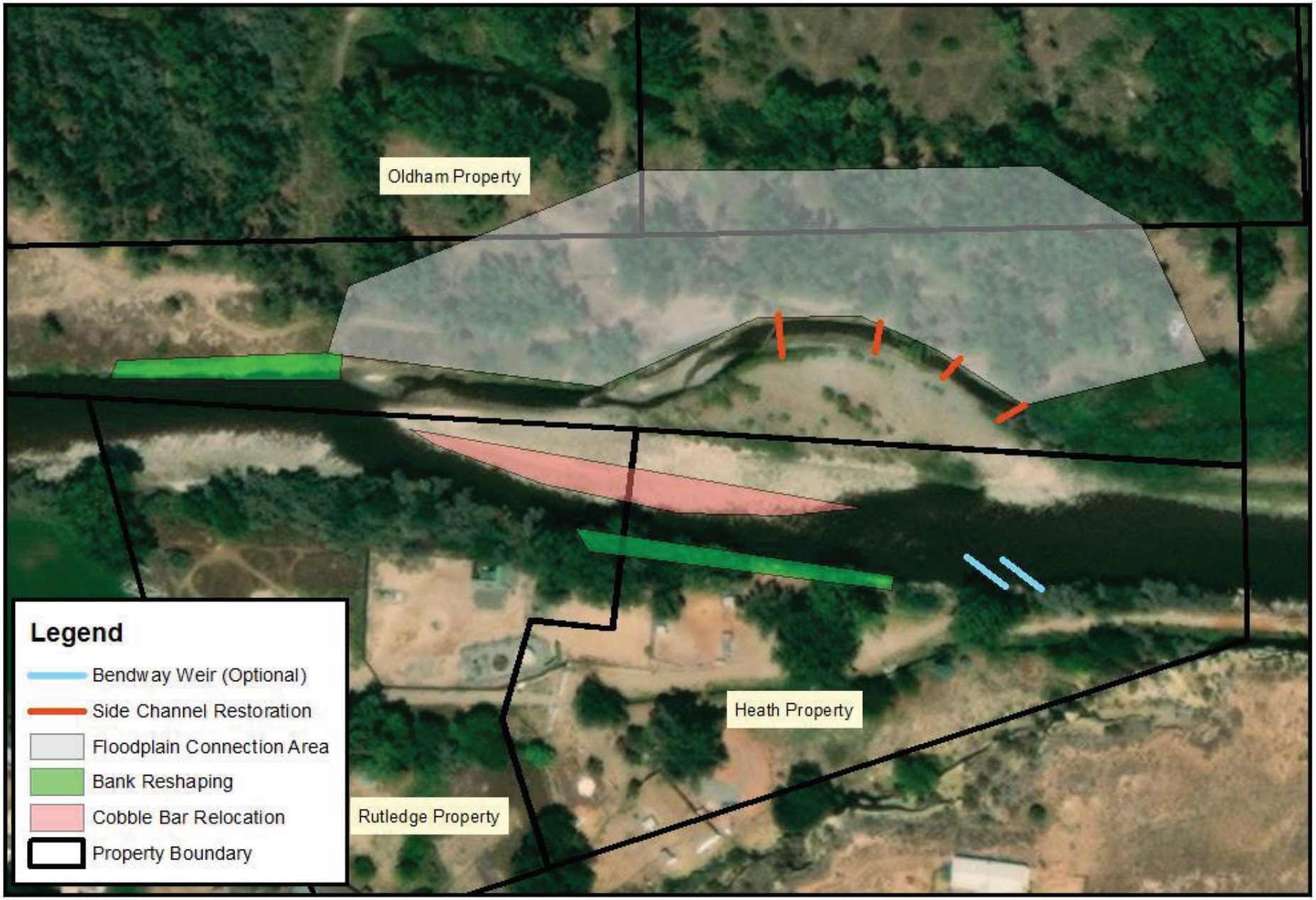
Flora Vista North Bank Floodplain Restoration Conceptual Project Plan
LAWBP Phase 3



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MM#3 Project Area