Indian Ford Watershed Group Development and Restoration Planning

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Table of Contents

Technical Proposal

(1) Executive summary

01/18/2021
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Deschutes Soil and Water Conservation District (DSWCD), a local government in Deschutes County, will develop an Indian Ford watershed group comprised of diverse stakeholders to promote the sustainable use of water resources. This group will make decisions on a consensus basis to begin watershed restoration planning activities that will address the water availability and quality issues within the watershed. To assist with restoration planning activities, baseline information and stream and land data will be obtained and technical assessment plans will be completed. Indian Ford Creek is a spring fed system in the Whychus Watershed, which historically provided important habitat for steelhead, beavers, and other wildlife. Wildlife are experiencing the impacts of the changing system though an increase in water temperatures, diminished riparian vegetation and shade, invasion of noxious weeds, reduced water quality, and diminished summer flows. Whychus Creek connects Indian Ford Creek with the Deschutes River. The Whychus Watershed continues to receive a large amount of interest due to the rapid growth occurring in Deschutes County. The Indian Ford Watershed health has diminished due to many anthropogenic changes on the landscape and various documents have been written by federal, local, and non-profit agencies to identify the need to restore diverse components. The goal of this project is to develop a new watershed group and specific restoration planning activities on private land through engagement of a diverse group of stakeholders comprised of private landowners, U.S. Forest Service (USFS), Deschutes Land Trust (DLT), and Black Butte Ranch. This project will take two years and the estimated completion date for the proposed project will be 10/2023. Indian Ford Creek is comprised of 60% private land and 40% federal (USFS) land. Due to the large amount of private landowners within the watershed, strong and persistent outreach and engagement activities is crucial to begin watershed restoration efforts. This project will aim to create a baseline for USFS land (~ 4 miles of Creek) and create a geographic and biological assessment that will include restoration recommendations for future implementation for 2-4 miles of private land along Indian Ford Creek.

(2) Project location

Indian Ford Watershed is located in Sisters, Oregon in Deschutes County. This 12-mile stream's headwaters begin at Black Butte Ranch (8.6 miles NW of Sisters, OR) and flows SE through a checkerboard of U.S. Forest Service land, a Land Trust Preserve, and private properties where it joins at river mile (RM) 20 of Whychus Creek 3 miles downstream of the town of Sisters. It incorporates 37,302 acres and is comprised of two 6 field watersheds (Upper and Lower Indian Ford). See Attached Map (Appendix A.1). These two watersheds are part of 12 watersheds that

make up the Whychus Watershed, which is incorporated in the Upper Deschutes Watershed (HUC: 17070301).

(3) Background Data

Indian Ford Creek is located within the Whychus Watershed, which has been a focal resource concern area in Deschutes County and is currently undergoing large scale restoration and management programs. In 2013, USFS updated their Whychus Watershed Analysis and the Upper Deschutes Watershed Council (UDWC) developed a Whychus Creek Restoration and Management Plan in 2009. The importance of Indian Ford Creek watershed is highlighted in both documents. The purpose of these documents is to characterize resource features and provide information to aid in guiding future management. Also, the Whychus Watershed Analysis consolidates resource concerns, provides landscape strategy areas and management recommendations, prioritizes resource areas to guide future management, and identifies data gaps and monitoring needs. However, this analysis does not prioritize restoration actions that will greatly impact the identified resource concerns or how adapting the management will benefit the watershed. DSWCD is seeking funds to develop an Indian Ford Watershed Group and perform various restoration planning activities. These activities will improve on existing data and restoration plans, collect and compile new information and data, and identify restoration activities that would provide the most impacting efforts to the Watershed through water quantity and quality enhancement.

Historically, Indian Ford Creek was lined with densely vegetated wetlands with multiple braided channels for 80% of its length, but over time, these wetland complexes have dropped to 32%. Anthropogenic changes on the landscape altered the diversity of the creek to a single incised channel with minimal floodplain and riparian vegetation. The waters have been disconnected from fish and wildlife habitat downstream in Whychus Creek. Privately owned land consists of forest, pasture, meadow, and livestock facilities. Water diversions and withdrawals for farming, grazing, and irrigation has caused portions of the creek to dry in summer months and the water temperatures to be at or above the State standard. Reed Canary grass has been introduced to the area. It continues to thrive and transport seed downstream annually making it difficult to eradicate. This noxious weed impedes flows within the creek, leading to siltation and loss of habitat and food sources for native plants and wildlife.

Indian Ford Creek was once a major tributary to Whychus Creek where Summer steelhead, spring Chinook, and redband trout once migrated. Sensitive fish species that are currently known to reside in Indian Ford Creek are redband trout, Indian Ford Juga, and caddisfly. Beavers also inhabited the area. Water has been diverted for irrigation and livestock use and by the mid 1970's, the lower Creek dried in the summer cutting off fish passage to Whychus Creek and eliminating beaver populations. In the late 1800's grazing was at its pinnacle. Native meadow grasses and upland vegetation was severely overgrazed.

There has been an immense effort to reintroduce anadromous fish species to Whychus Creek over the last decade. To aid in these efforts there needs to be an emphasis on water quality and

quantity within the system and specifically Indian Ford Creek. The diminished wetland complexes provided a majority of the historic spawning and rearing habitat, but have lost much of their floodplain function over the past two centuries due to beaver trapping, irrigation withdrawals, stream channel straightening, residential use, industrial development, and livestock grazing. Now, these areas offer the greatest potential for restoration, both for salmon and steelhead reintroduction and for the overall resilience of the watershed in the faces of climate change. There have been great strides to improve the watershed, however limiting factors still exist. Degraded water quality resulting from high water temperatures, low dissolved oxygen levels, high nutrient concentrations, sediment from loss of riparian vegetation, over grazing, noxious weeds, and dewatering from irrigation, remain an issue in the watershed.

The goal of this project is to bring together key partners, stakeholders, and landowners to develop a new Watershed group that will prioritize habitat restoration work through mapping and biological assessments as well as relevant social and economic considerations resulting in the onset of watershed restoration planning activities. These planning activities will work to provide recommendations for on the ground projects ready for implementation. The DSWCD is in need of substantial support to build the capacity of a new watershed group, set in motion restoring the flows, enhancing water quality, and eradicating noxious weeds of the Creek.

(4) Technical Project Description

a) Applicant Category:

DSWCD is seeking funding to form a New Watershed Group. As a Conservation District established in 1947, we have not completed watershed restoration assessments or plans, but have been working with landowners in Deschutes County on a wide range of conservation projects. In 2018, our staff completed restoration work on four private properties along Indian Ford Creek that was outlined by Oregon Department of Agriculture (ODA). This work entailed riparian planting, invasive weed removal, exclusion fencing along the Creek, and two push dam removals. This project has created a great relationship with these private landowners in lower Indian Ford Creek and exemplified the substantial need for support to perform additional restoration work. There are 160 landowners that own and manage land along Indian Ford Creek and could contribute greatly to the restoration and enhancement of the entire watershed. There is more restoration demands in the Indian Ford Watershed and DSWCD will apply to form a New Watershed Group with the U.S. Forest Service, Deschutes Land Trust, Black Butte Ranch, and private landowners. The UDWC has been stretched thin working to restore Whychus Creek since 2008 and unfortunately at this time is not able to provide funding and employee's time.

Due to the high number of private landowners and their small tax lots (Attachment A.2-A.4), developing a watershed group from stakeholders within Indian Ford Watershed will be a difficult task, but one that needs to be undertaken and accomplished. DSWCD is the ideal organization to take on this complicated task of stakeholder engagement. DSWCD has a notable history of creating and maintaining a working and cooperative relationship with private landowners in Deschutes County and specifically along Indian Ford Creek.

b) Eligibility of Applicant:

DSWCD is a special District and local government located in Deschutes County, Oregon. The District promotes wise use and conservation of Oregon's natural resources within Deschutes County. DSWCD provides local leadership, technical assistance, information, and access to state and federal cost-share programs to make positive changes on private land and within the county. The top five resource concerns highlighted by DSWCD in Deschutes County are water quantity, water quality, invasive weeds, fish and wildlife habitat, forest health, and healthy soils. Our district and staff are capable of providing the sustainable use of water resources and we strive to provide local leadership, education, motivation, and assistance to the citizens of Deschutes County for responsible, efficient stewardship of our soil and water resources. Private landowners are significantly affected by the quality and quantity of water in the Indian Ford Watershed, and as a Soil and Water Conservation District, it is our duty to provide assistance to restore the creek and watershed to benefit private land and the health of the entire watershed and all wildlife that inhabit it.

The DSWCD programs lead and planner has an extensive career working with the Natural Resource Conservation Service (NRCS) and has built a strong and consistent relationship with landowners in the county and within Indian Ford Watershed. He will be a great asset to provide aid during outreach and engagement. The DSWCD general manager has a background through graduate education and work experience in stream restoration and restoration ecology. The general manager will be the project manager and perform a majority of the project work. With low employment capacity, this project will necessitate a hired contractor.

c) Goals:

A new Indian Ford Watershed Group will be developed. This group development will be completed by the two staff members of Deschutes SWCD and include outreach to stakeholders, various outreach activities, and conducting stakeholder meetings. The goal of this new group and project is to collaborate with key partners, perform mapping and biological assessments, and begin the process of performing watershed restoration planning activities on private parcels within the watershed. This project will improve on existing documents to prioritize resource concerns in the Indian Ford Watershed as well as relevant social and economic considerations. This project is a gateway to enhancing the health of the Watershed. This includes returning the flows of Indian Ford Creek to Whychus Creek and eradicating noxious weeds. Baseline information will be collected for the portion of creek that is federal land (~4 miles) and a complete geographic mapping and biological assessment of the stream and land will be completed on 10 private properties. These assessments will provide recommendations for watershed restoration planning activities conducive to their parcels. This project will be the first phase of a multi-step process to pursue funding to perform restoration projects that will aid in improving water quality to provide a healthy habitat for wildlife and fish species and improving water quantity and connection to enable fish migration to and from Whychus Creek.

Task A: Watershed Group Development
Objective #1: Stakeholder outreach and engagement

DSWCD will outreach to all 260 landowners and strive to engage a diverse group of stakeholders to achieve 10 private landowners' participation in the Indian Ford Watershed Group. Ideally, DSWCD is aiming to achieve a higher number of engagements, but due to the high number of homeowners, second homeowners, and rental properties, the number represents a realistic goal. This will include landowners that own property both along the Creek as well as in the uplands of the watershed in the forest urban interface of the town of Sisters. Engaging landowners with different resource concerns in the watershed will provide a full examination of resource concern areas and a variety of restoration projects in the watershed.

Objective #2: Conduct Stakeholder meetings

DSWCD will convene and conduct a series of collaborative and productive meetings with key landowners, stakeholders, and land managers in the watershed, which are the makeup of the new watershed group. These meetings will discuss and expand on information from local and government agencies about issues and needs related to water quality and quantity. These meetings will discuss and identify priorities for watershed restoration, financial impacts, and other stakeholder concerns. These cooperative meetings will foster a relationship to collaborate on management strategies to address the critical watershed issues and needs.

Task B: Watershed Restoration Planning
Objective #1: Compile existing information and data

The DSWCD manager will compile information and data from existing planning efforts of the watershed to evaluate what information is needed for this project. This task will consist of combining current available data and information to reveal what information and specific data need to be collected along the stream, uplands, and forested areas in the Watershed.

Objective #2: Collect Baseline Information for USFS public land

In the Whychus Watershed Analysis (2013), the following data gaps were identified for Indian Ford Watershed: invasive plant inventories, water quality, stream flows, and agricultural trends relevant to water use. Baseline information will be compiled to fill in these data gaps and update existing data where necessary. This baseline information will be acquired through a geographic mapping assessment and a biological and ecological assessment of the land and stream. A hired contractor will collect remote sensing data, perform a geographic mapping assessment, and create a database. The DSWCD manager will perform the biological and ecological in stream assessment. They will use the most beneficial and cost effective approach for this project. For the purpose of this project and due to the unknown results of private landowner engagement, baseline information will be collected for the public land sections of the watershed. The analysis for the baseline information will examine, but is not limited to information on the following variables: water temperature, vegetation composition,

noxious/invasive vegetation, soil erosion, floodplain separation, large wood debris, substrate, shade, and surrounding forest health and conifer encroachment.

Objective #3: Develop assessments and restoration activity recommendations for 10 private landowners

This project will work with each of the 10 engaged private landowners to develop a geographic mapping, biological, and ecological assessment for their land. Included in this assessment will be recommendations for restoration activities for future implementation. The hired contractor will collect remote sensing data and perform a geographic mapping assessment. The DSWCD manager will perform the biological and ecological in stream assessment for each private property. The hired contractor and the DSWCD Manager will work together to create the final private assessment and outline restoration project recommendations. These assessments will be discussed in full detail with the landowner by the General Manager.

d) Approach:

For this project, DSWCD will be focusing their efforts on Task A and B areas described in section C.3.1. The planned approach will be to develop a new watershed group and begin watershed planning activities within the watershed. The amount of private land assessments and restoration recommendations will be dependent on the number of private landowners engaged through outreach activities.

Task A: Watershed Group Development

The first step will be to develop a new watershed group for the Indian Ford Watershed. This will be accomplished by the manager and programs lead/planner of DSWCD. Group development will include outreach to stakeholders within the watershed. This will be accomplished through the perseverance of the DSWCD employees. Outreach activities will be conducted and include; shipment of letters and brochures to all 260 private landowners within the watershed. This letter and brochure will provide information about the project, resource concerns occurring within the watershed, goals of watershed enhancement, and restoration planning activities on private lands. Also, incentives for participation in the watershed group that include benefits to their private landscape will be described. In addition to an informational mailing, the manager of DSWCD will make personal phone calls, send emails, and coordinate safe site visits with landowners for project engagement. This task will be the most difficult portion and also the most important stage of this project. There is a high number of landowners within the watershed and most of their properties are small tax lots. Contacting and engaging these landowners is crucial for the restoration and enhancement of this watershed and will take perseverance of DSWCD. DSWCD has a great history of landowner engagement and these positive relationships will lead to successful contact and engagement for this project. Currently, seven landowners have written a letter to support this project (See Appendix B attached). This project aims to engage three additional landowners within the watershed.

In addition to landowners, other members of the watershed group will include the USFS, DLT, Black Butte Ranch, and the Conservation Reserve enhancement program (CREP) technician. These members have included letters of support or have been contacted and are knowledgeable about this project and willing to participate in the watershed group. DSWCD will be the lead for this project and maintain strong communication, outreach, and engagement practices with partners and stakeholders that represent the geographic scope of the watershed.

In addition to outreach and engagement activities, the manager will develop, plan, and host 2-4 stakeholder workshops and meetings. Each meeting will be 2 hours long. All information presented and individuals present will be documented in great detail by the DSWCD manager. This information will be recorded and meeting minutes will be developed and made available through DSWCD website. Every meeting will provide ample notice time for all partners to attend. An agenda will be created and sent to all members a week before the meeting by the DSWCD manager. The first 1-2 sessions will be led as a workshop to discuss and identify the resource concern categories that are occurring within the watershed. All partners within the watershed group will present specific information about management objectives, resource issues, inventory gaps and conservation treatment needed in the watershed. The USFS Sisters Ranger District will present information from their Whychus Watershed Analysis (2013) and past, current, and future restoration practices that they are performing on the Deschutes National Forest within the Indian Ford Watershed. Deschutes Land Trust will discuss details about their Indian Ford Meadow Preserve and the management plan that was developed in 2012 for that protected area. Also, Black Butte Ranch will present information about their property, the state of Indian Ford Creek, and what restoration work they have performed. DSWCD has recently performed restoration activities on four properties along Indian Ford Creek and will present information from these projects. The CREP technician will discuss the program and provide information to private landowners of how it can tie into restoration activities.

Another 1-2 sessions will be established for all partners and stakeholders in the watershed. The DSWCD will create a meeting agenda and be the lead for these meetings. These meetings will discuss resource concerns, restoration treatments, concerns or conflicts occurring within the watershed, and how this new watershed group can reduce these concerns or conflicts. These meetings will identify information that the group would like to see collected and updated, baseline information, and restoration needs and project recommendations for private lands and the entire watershed. Also, private landowners will have input as to what specific variables they would like addressed on their land. The DSWCD manager will also discuss the opportunity for engaged landowners to participate in a land and creek assessment on their property. This assessment will provide baseline information for their private parcel and include restoration activity recommendations to improve their landscape and enhance the watershed. Through this project, these assessments will be covered financially through this opportunity, which provides great incentive to engage ten landowners in the watershed to participate. Again, DSWCD will host these meetings and a high level of communication will be maintained and monitored.

Task B: Watershed Restoration Planning

This task includes many planning activities and will be conducted by the DSWCD manager and a hired contracted technical specialist. A contractor will be hired due to the small number of DSWCD employees, time availability, and expertise. The first step in outlining watershed restoration planning activities for Indian Ford Watershed is to compile existing information and data. This objective will be performed by the DSWCD manager.

This project will improve on existing restoration plans from the USFS, UDWC, and DLT and other agencies to identify inventory and data gaps and will include, but is not limited to the following documents:

- 2013 Whychus Watershed Analysis
- 2009 Whychus Creek Restoration and Management Plan
- NRCS and USFS Soil Survey
- USFS Water Quality Studies
- ODFW Oregon Conservation Strategy
- DLT Indian Ford Meadow Preserve Management Plan
- Data from the Indian Ford and Graze allotments
- Existing Farm plans

The most recent Whychus Watershed Analysis was completed in 2013 and provides an enormous amount of data and information about the entire watershed. There are data gaps identified in this analysis within various resource concern areas and include: forest urban interface use, invasive plant inventories, agricultural trends relevant to water use, water quality, stream flow, and landowner coordination. Also, DSWCD implemented restoration projects along Indian Ford Creek within the SIA that was proposed by ODA. This process has guided private landowners to perform work that will make them compliant with the SIA regulations. These projects are just a portion of the uplift that is needed within the watershed and there needs to be a medium to collaborate the work that has been completed and what resource concerns still need addressing.

The next stage of this project; perform watershed restoration planning activities, will be to create baseline information for the approximately 4 miles of public USFS land along Indian Ford Creek. For this project, we are going to begin this baseline information on federal land. This is due to the unknown number of engaged private landowners. There are 160 private landowners that live along or near Indian Ford Creek. To obtain permission to access such a large number of private lands is unfeasible at this time. More realistically, DSWCD strives to engage 10 landowners through this project. This engagement would include discussions and the development of private land assessments that include baseline information of their property and restoration planning recommendations.

There needs to be water quality, water quantity, and other riparian and land studies completed to provide a current baseline of information. The baseline information will be acquired through a combination of remote sensing data, existing data, geographic mapping assessment, and

biological and ecological assessment of the stream and land. A wide range of data sets and information can be utilized to accomplish this and include, but are not limited to the following:

- USGS National Elevation dataset
- NRCS and USFS Soil Survey
- USGS Land Cover dataset
- Vegetation Structure and composition
- Canopy cover and density
- USGS Ground Water
- Stream Coverage (Digitized from NAIP 1m Aerial)
- ODEQ 303(d) data (water temperature, nutrients, pH)
- Lidar information on Indian Ford Creek
- Delineated wetland and private landowner boundaries
- Land Ownership classification
- Tax lot locations (ESRI Imagery – Deschutes County GIS data)
- Historical dataset of Indian Ford Creek and Watershed

The most recent aquatic survey on Indian Ford Creek was in 1992 by the USFS. New data needs to be acquired to provide an updated collection of information about the biological and ecological attributes. These attributes include, but are not limited to stream survey (riparian vegetation, invasive weeds, active erosion, water depth, water table depth, and floodplain separation), stream temperature, available stream shade, vegetation composition in the uplands, forest health in uplands of watershed, and other factors. Any information about the stream, riparian corridors, and invasive weeds that are not able to be collected using GIS or remote sensing will be collected through on the ground surveys or possible Lidar collection. The hired contractor will perform the geographical mapping assessment and create a database. The DSWCD manager will be in charge of performing an assessment to determine the stream and land function. This assessment will include information on the following:

- Water Quality/Quantity
  Indian Ford Creek is listed under the clean water act 303(d) due to minimal shade along the riparian corridor, and increased water temperature, dissolved oxygen, nutrients, pH, and pollutants from Black Butte Ranch and grazing allotments.
- Riparian/Streamside, range/uplands
  Information on vegetation, erosion, floodplain, and secondary channels will be collected.
- Riparian Bank Erosion
  Most of the private property along Indian Ford Creek is utilized for ranching and livestock, which has had large negative effects on the creek banks leading to erosion and an increase of sediment.
- Secondary Streams
- Invasive/noxious weeds

Invasive and noxious weeds that occur along Indian Ford Creek include, but are not limited to: Reed canary grass, Thistle, and Knapweed. These weeds impede the natural flow of the creek and decrease opportunity for native vegetation and wildlife to thrive.

- Forest health information

  There has been many forest health treatment projects within the watershed and include; thinning projects, and prescribed burning.

Through the combination of documents, existing data, data collected through surveys, and information about upland forest vegetation cover and forest health will provide a thorough baseline of the USFS portion of Indian Ford Watershed.

Next, the contracted specialist will develop a database that can be utilized to manage existing data as well as newly collected data and information associated with the Indian Ford Watershed. The database will be used to combine and store any new information and data that needs to be collected along with available sources. Information collected and utilized will be stored in the same format. To properly develop the baseline information for USFS land and for the benefit of all stakeholders, a database is a means to organize a complex project and compile all the data and new information in one place.

The final stage of this project will be to create a complete environmental assessment for each of the 10 landowners that have been engaged and are members of the watershed group. These private landowners have been educated on this opportunity through outreach activities and participation in the new watershed group. These assessments will be completed for the entire parcel of private land and will be completed by the collaboration of the hired contractor and DSWCD manager. The hired contractor will perform a geographic mapping assessment and provide restoration activity recommendations. The DSWCD manager will perform the biological and ecological assessment for every private parcel of land. Identifying goals for watershed management projects on private lands in the watershed will lay the groundwork for additional stakeholder support and participation. Also, including restoration planning activities and recommendations is a great first step in pursuing funding opportunities for on the ground shovel ready projects. This project is an opportunity to gain interest and momentum in restoring Indian Ford Watershed. Starting at a small scale is a safe approach for achieving long term goals of uplifting the health of Indian Ford Watershed.

(5) Evaluation criteria

A. Watershed Group Diversity and Geographic Scope

Indian Ford watershed is 37,302 acres and incorporates two sub watersheds (Upper and Lower Indian Ford) within the Whychus Watershed. This site is in the Upper Deschutes Watershed defined by the 8 digit Hydrologic Unit Code (HUC) 17070301. The Indian Ford Watershed Group Development and Restoration Planning will include the formation of a new watershed group that represents a diverse array of stakeholders and sectors within the watershed. Stakeholders include private landowners, local government (Deschutes SWCD), federal agencies (U.S. Forest Service), a non-profit environmental organization (Deschutes

Land Trust), and Black Butte Ranch which incorporates tourist, recreation groups, and homeowners. The 260 private landowners within Indian Ford Watershed are farmers, irrigators, and ranchers. They are also members of tourist and recreation groups, and environmental organizations. Also, some of these landowners are new landowners, second home owners, trust owners, home associations, and ranch managers.

A1. Watershed Group Diversity

Indian Ford Watershed contains a diverse group of stakeholders that include: US Forest Service, Deschutes Land Trust, Black Butte Ranch, NRCS, UDWC, and a wide array of private landowners. All of these stakeholders have a diverse set of interests and sectors that include farming, irrigation, ranching, livestock, recreation, conservation, homeowners' associations, and members involved in their local community. Having this diverse group of stakeholders to represent the new Indian Ford Watershed Group and develop watershed restoration planning activities is integral to the success of the project and the overall health of the Creek and the entire Watershed. The details of each stakeholder's role in the watershed is outlined below.

Indian Ford is comprised of 60% private land and according to tax records there are approximately 160 private landowners within or near the riparian area of Indian Ford Creek and a 100 more within the Indian Ford Watershed. The 160 landowners along Indian Ford Creek are affected and have an effect on water quality and quantity through their land management practices. To engage an appropriate number of landowners, there must be a powerful concentrated outreach effort to engage and consult early in the project. The Deschutes Soil and Water Conservation District (DSWCD) maintains a good working relationship with landowners in Deschutes County. The district has recently worked with four landowners on Indian Ford Creek restoration projects as well as been in contact with several landowners about the resource issues that exist in the watershed. We believe that receiving support from landowners will be obtainable given our present relationships and is integral to the success of this project. The general manager and Programs Lead of DSWCD will perform outreach and engagement to private landowners to provide information about this project, resource concerns occurring within the watershed, goals, and benefits to private land and the entire watershed. DSWCD will be the lead for this project and maintain strong communication, outreach, and engagement practices with all partners and stakeholders for a successful cooperative development of an Indian Ford Watershed Group and Restoration Planning. Seven landowners have shown support for this project (Appendix B).

The USFS Sisters Ranger District developed a Whychus Watershed Analysis in 1998 and has updated this document in 2007 and again in 2013. It outlines and provides maps and boundaries of key findings by resource areas, five landscape strategies and recommendations, and detailed resource reports for every resource concern area in the watershed (Appendix A.6 and A.7). The importance for restoration measures within Indian Ford Watershed are noted many times throughout this document. The USFS has been performing a wide range of restoration activities within the Indian Ford Watershed for the past two decades. These activities are described in the proposed aquatic restoration projects document that was

developed in 2013. Since this time, these projects have been implemented and include removal of an irrigation diversion downstream of highway 20, a mainline culvert, and one downstream of the 2058 Road. In addition, there have been conifer encroachment thinning and prescribed burning forest projects within Indian Ford Watershed to enhance forest health (Appendix A.8). The Sister's Ranger District fish biologist is working towards constructing Beaver dam analogs along portions of Indian Ford Creek to reconnect the floodplain, restore steam and riparian health, and possibly aid in returning beavers to the watershed. The Sisters Ranger District (USFS) supports the creation of this new watershed group and is able to partake in this new group and attend stakeholder meetings (Appendix B).

Upper Deschutes Watershed Council is a key partner within the Whychus Watershed. In 2009, they developed a Whychus Creek Restoration and Management Plan. Since then, they have partnered with various agencies to implement large scale restoration projects along Whychus Creek. Indian Ford Creek joins at the confluence of Whychus Creek at RM 20. Whychus Creek was historically an important Steelhead spawning stream and connects Indian Ford with the Deschutes River. Steelhead have been reintroduced to Whychus Creek since 2008 and it is possible that Indian Ford Creek could provide habitat for this population in the future with additional restoration and reconnection. Currently no long term connectivity of Indian Ford Creek to Whychus Creek exists. Restoring Indian Ford Creek to address resource concern areas will aid in the overall efforts being performed within the larger Whychus Watershed and Deschutes River Basin. They are unable to commit time and employees to assist with this project, but have written a letter of support for DSWCD to take the lead on stakeholder engagement (Appendix B).

Deschutes Land Trust was donated the Indian Ford Meadow Preserve from a private landowner in 1996 to protect wildlife habitat and its scenic views. It provides a migratory corridor for mule deer and a breeding ground for song birds as well as full protection from anthropogenic alterations to the landscape. In 2012, a management plan was developed and highlights protection for fish and wildlife habitat and native plant communities. Restoration activities that have occurred on the preserve include weed management, aspen restoration, and pine restoration. DLT Restoration Specialist has written a letter of support and a commitment of in-kind staff hours to partake in the new watershed group and attend meetings (Appendix B). They would like to begin implementation of restoration projects on this preserve in the near future and will provide great insight into restoring this watershed.

Black Butte Ranch is working on a land management plan as they perform restoration treatments on their private property. The DSWCD manager has met with the Executive Director, natural resource technician, and board members to discuss this grant opportunity and they have verbally stated their interest in involvement. They were not able to contribute a letter of support on time due to needing full board approval and their board meeting schedule did not align.

The Deschutes SWCD has performed restoration activities on Indian Ford Creek through the Strategic Implementation Area that was identified by ODA (Attachment A.5). Culvert

replacement and riparian plantings have been completed on 3 private lands within the meadow area north of the Sisters airport. Noxious weed treatment, seeding, and tree thinning has been completed on the property where Indian Ford and Whychus Creek would meet if flows connected. Also, water quality issues due to manure runoff have been addressed on one private property.

NRCS has developed a Conservation Implementation Strategy (CIS) for restoration of fire resilient landscapes within Deschutes County. The area of this CIS spans a large area between and surrounding the cities of Bend and Sisters (Appendix A.9). This CIS has been approved and implementation will begin in the spring of 2021. In addition to this CIS, a complementary effort between NRCS and the USFS called the Joint Chiefs Initiative has been established to manage and restore the landscapes on both public and private land within the Sisters Ranger District area. These two projects include the Indian Ford Watershed and could be a great avenue for future funding for restoration projects that are recommended. They are aware of this grant opportunity and were not able to write a letter of support in time, but support any opportunity to work with private landowners and provide funding opportunities to enhance their land.

There have been great strides to improve the Indian Ford Watershed, however limiting factors still exist. Water quality resulting from high water temperatures and low dissolved oxygen levels, high nutrients concentration, sediment from loss of riparian vegetation, over grazing, dewatering from irrigation, and proliferation of noxious weeds remain an issue in the watershed. The Deschutes SWCD has engaged private landowners to implement conservation practices in lower Indian Ford which has improved stream flows and riparian habitat. Similarly, the USFS, Deschutes Land Trust, Black Butte Ranch have also implemented restoration efforts on their lands. Projects were implemented in the watershed without knowledge of the other, nor an understanding if projects would have a negative or positive affect to other areas in the watershed. This project will benefit all parties that are interested in funding or conducting restoration within the Indian Ford Watershed. It would complement current activities and assessments by creating watershed restoration planning activities necessary to significantly restore the function of Indian Ford Watershed. This project will bring together key partners, stakeholders and landowners to develop restoration activities and management strategies that will identify resource concern areas in the Indian Ford Watershed as well as relevant social and economic considerations. It will assist all parties interested in funding opportunities or conducting restoration projects within the Indian Ford Watershed and aid to prioritize restoration efforts on their private property. A baseline will be created for the USFS public land along Indian Ford Creek and complete land and stream assessments of interested private landowners will be conducted.

A2. Geographic Scope

Indian Ford Watershed encompasses 37,302 acres North of the town of Sisters, OR in Deschutes County. The map attached in Appendix A.1. illustrates the geographic boundaries of the Upper and Lower Indian Ford watersheds, which includes the entire area in which the watershed group will work for this project. This map also identifies the land within the watershed that is

private and federal (U.S. Forest Service) and the boundaries of Indian Ford Creek and the riparian/wetland zones.

The maps attached in Appendix A.2. - A.4 include detailed information of the tax lots within the watershed boundaries. These maps show all the names of private landowners and the location and boundaries of their properties within Indian Ford Watershed. Also, on Map A.3 the Deschutes Land Trust Indian Ford Meadow Preserve boundaries are highlighted in Red. The Stakeholders that have been involved in restoration projects and are interested in assisting with this project are highlighted in Green on Maps A.2 – A.4. There is an abundance of private landowners that are not currently involved in the group and this project would provide financial assistance for DSWCD to target as many of these landowners as possible through outreach activities.

Forest Service land comprises 40% of the watershed and the Sisters Ranger District has provided support to this project. There has been great strides to restore and enhance the Indian Ford Watershed on federal land. Map A.5. shows the boundaries and types of projects that have been implemented on federal land within the watershed. Having their support in addition to DLT and some private landowners is a great start to represent the full geographic scope of the entire watershed. Through outreach, education, and stakeholder involvement meetings, we will strive to target and engage stakeholders that represent the full geographic scope of the area in which the watershed group will work.

B. Addressing Critical Watershed Needs

B1. Critical Watershed Needs or Issues

There are many critical issues and needs within Indian Ford Watershed. These issues stem from a long history of human disturbance that continue to alter the riverine landscape for a variety of purposes. Farming, logging, and development on the floodplain has led to channelization and flood control on private land. These activities have had profound effects on the natural function of Indian Ford Creek. During low precipitation or drought years, the lower portion of the creek runs dry each spring or summer. Also, the more frequent water shortages are having negative effects on the spring that feeds the creek at Black Butte Ranch. The wetlands and riparian zones have been in decline and are being overtaken by noxious weeds such as Reed Canary Grass. Efforts to control Reed Canary Grass have not been successful due to the invasion along a large portion of the stream. The seeds of the grass are sent downstream annually making in near impossible to eradicate or control. Secondary streams and floodplains are non-existent. These variables have profound effects on the water quantity and quality and the economic resiliency for the entire watershed. Wildlife continues to decline and the reintroduction of steelhead and chinook into the larger Whychus watershed have no upstream travel opportunity at Indian Ford creek. Landowners that DSWCD has worked with in the past in lower Indian Ford have voiced their opinion of wanting to see Indian Ford flow back to Whychus Creek. If this is the overall goal of landowners in the watershed, then this project is an imperative first step to accomplish this goal. Reconnecting these two creeks in the Whychus Watershed would provide ecological benefits and improve fish and wildlife habitat. There are 160 private landowners that reside

along or near Indian Ford Creek and 100 more within the watershed. This is a major barrier to address and imperative uplift is needed in this watershed. This project will embark on performing activities that will lead to the cooperation and collaboration of these private landowners.

Numerous large scale restoration projects have been implemented along with the reintroduction of steelhead to the Whychus Watershed system. To complement the restoration occurring on Whychus Creek, it is imperative to restore Indian Ford Creek. Restoration activities can aid to improve the water quality/quantity, restoring habitat for steelhead, redband trout, and beaver, enhance riparian, stream, floodplain and upland habitat, enhance the health of the surrounding forest, restore native vegetation, and improve the overall health of the watershed. Improving the health of Indian Ford Watershed will over time enhance the larger watershed and the Deschutes River basin.

B2. Developing Strategies to Address Critical Watershed Needs or Issues

Task A: Water Group Development

To positively contribute to the management of the critical watershed issues and needs, there needs to be a watershed group developed. This group will contain a diverse group of stakeholders and create a partnership that represents the entire geographic scope of the watershed and a wide array of management viewpoints. The main concerns in the watershed is water quantity and quality and the prolific Reed Canary Grass. In order to fully address these concerns, there needs to be collaboration and cooperation to prioritize the needs of management in the watershed and develop strategies to address these needs and restore the function of the watershed.

There is a diverse group of stakeholders within the watershed that contains 60% private land and 40% federal public land. Landowner cooperation will be at the forefront of watershed group development through various outreach activities and engagement. To address the needs in the watershed a new group will be cultivated and comprised of as many stakeholders as possible. This will be accomplished through various outreach activities and a large commitment from the DSWCD. The USFS and DLT have committed to participate in this project and the missing piece is the private landowners. The goal is to attain as much area participation as possible to cover landowners throughout the entire watershed. For this project there must be the creation of a watershed group of diverse interests to contribute and partner on the management of the critical issues and needs outlined above.

Ideally, through strong and sustained outreach efforts, the watershed group will be a collaboration of 10 landowners throughout the watershed, the USFS, DLT, and Black Butte Ranch. This group will convene at 2-4 meetings to discuss watershed needs, critical issues, and the most conducive restoration practices to alleviate and properly manage these issues.

The USFS, Black Butte Ranch, Deschutes Land Trust, and DSWCD would provide insight into what resource concerns and restoration activities are currently being addressed in their management plans. This group will discuss previous building efforts and restoration activities that have been occurring and how the group can expand on these efforts throughout the entire watershed. These agencies will work with the landowners to engage in prioritizing resource concerns on their land with projects occurring on land in the watershed outside of the private sector. Also, it is imperative for all stakeholders to understand why this project is occurring, best techniques to restore the lost functions of the stream, and that streams functions are interrelated and build on each other. Understanding this will aid in building project goals, managing these goals, and obtaining success long term. DSWCD will present the opportunity for landowners to obtain a full environmental assessment of their property and restoration activity recommendations that could benefit their land, creek, and watershed.

Task B -Watershed Restoration Planning:

There is an abundance of uplift needed within Indian Ford Creek. Diminished flow at the headwater's springs and complete halt of flow in Lower Indian Ford are of major concern. These water shortages have major effects on the wetlands, riparian zones, wildlife, and sensitive fish species. Also, Reed Canary Grass and other invasive species have overtaken large portions of stream bank, which outcompete native species and contribute greatly to diminished flow. To address these critical issues, this project would begin the process of compiling existing information and data. This compilation will be completed from the DSWCD manager working with the watershed group and discussing what information is imperative to address the watersheds critical issues and needs. Also, researching existing documents and data available from government, state, and non-profit agencies to identify the key issues and needs and best practices to manage them. These previous documents and efforts will be discussed at the watershed group meetings and this project aims to expand on these efforts through the support, opinion, and expertise of the watershed group members.

There has been a significant observation of diminished flow within the creek. This has been identified over the last 10-20 years from Black Butte Ranch and private landowners. This diminished flow is just one observation occurring from changes in the environment. This group will begin to address and identify the best practices to manage the watershed to adapt to watershed changes and work to restore and create a resilient landscape for the future. There is no baseline information for this watershed and thus the first step in developing watershed restoration planning activities, a baseline will be completed for the stream. In order to successfully restore stream functions, it is necessary to understand how all the functions work together and effect one another. A baseline assessment will aid in accomplishing this. Due to the large number of landowners within the watershed and the uncertainty of landowner engagement, the baseline information would be conducted on USFS public land for the time being. This land comprises approximately 4 miles of stream. This project will be a jumping off point for future landowner engagement and the development of restoration planning.

Collecting a baseline for USFS land would include geographic mapping, modeling, biological and ecological assessment, and technical analysis of the four miles of creek. This stage in this project will be completed by the DSWCD manager and a hired contractor. Once this information is collected as the baseline, the hired contractor will create a database to store and collect all the information. The final assessment will be completed by a collaboration of the DSWCD and hired contractor and made available to the watershed group and other stakeholders within Deschutes County.

In addition to baseline information, assessments will be performed on private land parcels. The private lands that will obtain these assessments will be from interested and engaged landowners within the watershed. The goal for this project is to complete 10 private assessments. These will aid in a long term goal of developing general watershed management project concepts to identify and prioritize management projects. It is difficult to work with a large group of private landowners on a small section of creek. This project will work with 10 landowners and develop recommendations for projects on their land that will restore the function of land and stream. This is an amazing first feat to begin the process of performing restoration projects that will enhance the health of the watershed. These assessments will be performed similar to the baseline information. The DSWCD manager will collect a biological and ecological in stream assessment. The hired contractor will perform a geographic mapping assessment. This information will be combined to complete an assessment for the landowner to utilize for future restoration as more funding becomes available.

C. Implementation and Results

C1. Project Implementation

Estimated Project Schedule					
Major Tasks	**Major Activities**	**Milestones**	**Start Date**	**End Date**	**Cost**
Task A: Watershed Group Development Completed by DSWCD General manager and DSWCD Programs Lead/Planner	Outreach	Design brochure and develop letter for mailing	10/2021	11/2021	Manager: $594.24
		Mail informative letters and brochures to all 260 private landowners	11/2021	12/2021	Printing/Mailing $482
		Call, email, and perform site visits to private landowners	10/2021	2/2022	Manager: $1,857 Programs Lead: $1,330.50
		Engage and obtain watershed group participation from 10 private landowners	10/2021	3/2022	Manager: $1,114.20 Programs Lead: $798.30

	Stakeholder Meetings	Conduct 1-2 meetings to discuss and gather information about watershed issues and needs	3/2022	5/2022	Manager: $297.12 Programs Lead: $212.88
		Conduct additional 1-2 meetings to prioritize watershed management projects and resource concern issues	5/2022	7/2022	Manager: $297.12 Programs Lead: $212.88
Task B: Watershed Restoration Planning Completed by DSWCD General Manager and hired contractor	Compile existing information and data	Collect and review all relevant watershed plans	1/2022	3/2022	Manager: $1,485.60
		Collect and review all relevant data on Indian Ford Creek	1/2022	3/2022	Manager: $1,485.60
		Compile all information into a developed readable document	1/2022	3/2022	Manager: $2,971.20
		Present this information at stakeholder meetings	3/2022	7/2022	Manager: $297.12
	Create a Baseline assessment for USFS public land	Complete a geographic Mapping Assessment	3/2022	10/2023	Contractual: $3000
		Complete a biological and ecological in stream and land assessment	3/2022	10/2023	Manager: $1,485.60
		Database Creation	3/2022	10/2023	Contractual: $2,500
		Final assessment creation	3/2022	10/2023	Manager: $2,971.20 Contractual: $3,000
	Create an environmental assessment for 10 private properties within the Watershed.	Complete a geographic mapping assessment	3/2022	10/2023	Contractual: $5,000
		Complete a biological and ecological in stream and land assessment	3/2022	10/2023	Manager: $7,428
		Final assessment creation from two completed assessments. Includes restoration recommendations.	3/2022	10/2023	Manager: $7,428 Contractual: $5,000

C2. Building on Relevant Federal, State, or Regional Planning Efforts

There have been a diverse set of plans that have been written for the greater Whychus Watershed and Indian Ford Watershed. These plans have been written by federal, state, non-profit, and local agencies and include the following:

1) United States Forest Service (USFS) - Whychus Watershed Analysis – 1998, 2009, and 2013. These analyses identify the following: key findings by resource area, five landscape strategy areas, recommendations that are common to all landscape areas, and resource reports for all resource concerns in the area. Indian Ford is discussed in relation to several of the resource concerns (Hydrology, vegetation management, fish, wildlife, and plant species, and fuels management) and is highlighted in 2 of the 5 landscape strategy areas (Water Challenges and Forest Urban interface) (Appendix A.6 and A.7).
2) Upper Deschutes Watershed Council (UDWC) - Whychus Creek Restoration and Management Plan – 2009 identifies treatments for stream channel restoration on main tributaries in the Whychus creek watershed.
3) Oregon Department of Agriculture (ODA) - Upper Deschutes Agricultural Water Quality Management Area Plan (2018) – identifies Indian Ford Creek Watershed as a Strategic Implementation Area (SIA) for water quality impairment due to agricultural activities (Appendix A.5).
4) National Resource Conservation Service (NRCS) - Conservation Implementation Strategy (CIS) proposal for restoration of fire resilient landscapes in Deschutes County approved and, on the ground, implementation will begin in 2021.The CIS is located between and around the towns of Bend and Sisters and includes the Indian Ford Watershed (Appendix A.9).
5) Deschutes Land Trust (DLT) – Indian Ford Meadow Preserve Management Plan (2012) identifies the history of the preserve, resource concerns, and highlights restoration activities that have been completed on the property.
6) Department of Environmental Quality (DEQ) – Indian Ford is listed on the Oregon 2010 303(d) list for high water temperatures, oxygen, and high pH, and nutrient levels.
7) Environmental Protection Agency (EPA) – Listed on the clean water act 303 (d) for poor water quality.

The watershed group will consist of members from these federal, state, and non-profit agencies that identify critical watershed issues and needs. They are the basis of this project and outline the importance of addressing these issues. They lay the groundwork to create a watershed group that will develop watershed restoration planning activities to address the critical watershed needs. The creation of a watershed group will aid in cooperating and collaborating to create baseline information and develop environmental assessments on both public and private land. This project will lay the groundwork to implement these on the ground shovel ready restoration practices to enhance the entire watershed. Also, it is important to understand how restoration practices will impact other areas of the watershed. This watershed contains a diverse group of interested parties. To address and strive to solve the watershed issues and needs, every stakeholder in the watershed needs to cooperate and collaborate in outlining restoration activities and management project recommendations.

D. Department of the Interior and Bureau of Reclamation Priorities

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
This project will utilize science to identify the best practices to manage land and water resources and adapt to changes in the environment. With more frequent drought in central Oregon, landowners are observing drastic alterations to the spring fed Indian Ford System. The springs are producing less water as in years past and the lower creek is drying up earlier and for longer periods of time. Due to anthropogenic changes, no floodplain exists along the creek and the wetland matrix has diminished exponentially. This project will compile and expand on existing data on the entire watershed, create a baseline assessment for USFS public land, and develop assessments for 10 private land parcels. These assessments will include geographical mapping, and collection of biological and ecological information. This will aid in outlining best practices and prioritize restoration activities to manage the land and water resources.

2. Restoring Trust with local Communities
There are 260 private landowners within Indian Ford Watershed. Watershed restoration begins with cooperation and with the high number of landowners, this is imperative to the success of this project and future endeavors. Streams and watersheds have a functional hierarchy and each function builds on each other. This is a very important concept for landowners in this watershed to understand and build on to achieve project success. The conversation about restoring and enhancing Indian Ford needs to commence. This project will do this and improve dialogue and relationships with persons and entities and their bordering lands. Communication will begin and expand between federal, state, non-profits, and local communities.

Bureau of Reclamation Priorities

1. Increase Water Supplies, Storage, and Reliability under WIIN and other Authorities to Benefit Farms, Families, Businesses, and Fish and Wildlife

This project would begin the process of identifying restoration activities to enhance Indian Ford Creek. Currently, lower Indian Ford Creek runs dry every spring and there is no longer a connection to Whychus Creek and the greater Deschutes Basin. Creating a watershed group to begin the discussion on restoration treatments will aid in increasing water supplies, storage, and reliability to all stakeholders within the watershed. It will benefit private landowners immensely by providing more water for farms, vegetation, and fish and wildlife.

2. Leverage Science and Technology to Improve Water Supply Reliability to Communities

This project will utilize science through geographic mapping, biological, and ecological assessments to create baseline information and provide restoration recommendations for private landowners. The water supply currently of Indian Ford Creek is not reliable and to improve this, there needs to be collaboration and cooperation among private landowners and other entities in the watershed to begin to address this water shortage.

Project Budget:

Budget Proposal

Table 1.—Total Project Cost Table SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	$ 56,813.42
Costs to be paid by the applicant	$ 1,364
Value of third-party contributions	$ 1,200
TOTAL PROJECT COST	**$ 59,377.42**

1. Budget Narrative

The salaries and wages component of this grant will include the DSWCD General Manager who will also be the project manager and the DSWCD Programs Lead/Planner. The Project manager will work 800 hours on this project over the two year time frame and the base salary is $28.85/hour. The Programs Lead/Planner will work 96 hours and the base salary is $20.19/hour. The Project manager will work a total of 112 hours in the Task A component, where 96 hours will be spent performing outreach activities and 16 hours will be spent attending the stakeholder meetings. In Task A, the programs Lead will spend 96 hours assisting with outreach activities and attending stakeholder meetings. For Task B, the manager will spend 168 hours compiling and expanding on existing information, 120 hours collecting and creating a baseline assessment, and 400 hours collecting and creating assessments for 10 landowners.

The Fringe benefits for the manager include health insurance/dental ($8,730 annually), retirement ($1,200 annually), federal and state taxes that are a set federally approved rate and include unemployment insurance (.022%), Medicare, and Social security. These benefits equate to $8.29/hour. The fringe benefits for the Programs Lead include Health insurance ($7,452), retirement ($840 annually), federal and state taxes that are set a federally approved rate and include unemployment insurance (.022%), Medicare, and Social security. These benefits equate to $6.42/hour.

Travel for the purposes of this project will include the distance from DSWCD office at 625 SE Salmon Ave to Sisters, OR. Indian Ford Watershed is located in Sisters, OR and so all site visits, data collection, and meetings with stakeholders will occur in Sisters. It is 42 miles round trip from Redmond to Sisters. The mileage rate for 2021 is $0.56/mile. The DSWCD manager will take approximately 40 trips to Sisters over the two year time frame and the Programs Lead will take approximately 15 trips. This equates to $940.80 for travel costs for the manager and $352.80 for travel costs for the programs lead. The hired contractor will make approximately 20 trips from their office location in Deschutes County to Indian Ford Creek, in Sisters, OR. This exact mileage is to be determined, but for purposes of this application, I have used the roundtrip distance from Redmond to Sisters (42 miles). For 20 trips with the mileage rate of $0.56/mile, the travel cost for a hired contractor will be $470.40. DSWCD will utilize their capacity grant funds to pay for half of the project's mileage costs. For this project, we will be asking for $882 of federal dollars.

Materials for the purpose of this grant will include the costs to print tri-fold brochures, single paged letters, postage, and envelopes for all 260 private landowners in the Indian Ford Watershed. This will cost $1.85/unit for a total of $482. This amount will also be paid by DSWCD.

A contracted specialist will be hired to assist the General Manager of DSWCD to perform and complete a full environmental assessment of 4 miles of USFS public land and approximately 4 miles of private land that includes 10 private properties. This hired contractor will perform a geographical mapping assessment for 4 miles of USFS land to complete a baseline of the creek. This will cost $6,000. This hired specialist will also create a database to store and update all information for $2,500. It will cost $5,000 to perform a geographical mapping assessment of 10 private properties and another $5,000 to work with the General Manager to complete 10 environmental assessments of these 10 properties and provide restoration recommendations for future project implementation. A competitive procurement method will be utilized to select the contractor. This method will include the DSWCD placing an advertisement in the Bend Bulletin and notifying 3 contracting agencies within Deschutes County of this project. This advertisement will briefly state the description of the job, a request for proposals, and the deadline date for bids. This advertisement will be paid by the DSWCD from other funding sources. DSWCD will wait to open and read any bids until the deadline. The DSWCD Manager will follow the Districts and federal procurement methods outlined in CFR §200.317 – CFR §200.326 to select the contracting specialist. The selection process will be based on price, quality of work, time commitment, and other factors.

Third Party In-Kind Contributions will include the time that all stakeholders spend participating in meetings, discussion, phone calls, site visits, and environmental assessments. These stakeholders include DLT, USFS, Black Butte Ranch, and private landowners. This information is voluntary to this application and does not affect the budget requested. It exemplifies the commitment from agencies that will partake and contribute to the new watershed group.

Third Party In-Kind Contributions					
Organization	**Source Note**	**Contribution Type**	**Amount**	**Description**	**Funding Status**
Deschutes Land Trust	Inventory data gathering and meeting time	In Kind-Labor	$1,200	Employee salary time	Secured
USFS	Inventory data gathering and meeting time	In Kind-Labor	$1,200	Employee salary time	Pending
Black Butte Ranch	Inventory data gathering and meeting time	In Kind-Labor	$1,200	Employee salary time	Pending
Private Landowners	Meeting Time, phone calls, site	In Kind-Labor	$1,020	Oregon BOLI rate minimum wage (2021)	Pending

	visits, assessments			@$12.75/hour at 8 hours x 10 landowners	

The district will work with the Bureau of Reclamation to determine any Environmental and Regulatory Compliance Costs. If there is a cost required, DSWCD can pay this with the districts ODA Capacity Grant.

As a local government and a SWCD, our indirect cost rate will be 10%.

Budget Item Description	Computation		Quantity Type	Total Cost
	$/Unit	Quantity		
Salaries and Wages				
Erin Kilcullen General Manager DSWCD – Base rate	$28.85/hour	800	Hours	$23,080
Todd Peplin Programs Lead/Planner DSWCD – Base rate	$20.19/hour	96	Hours	$1,938.24
Total Salaries and Wages				**$25,018.24**
Fringe Benefits				
Erin Kilcullen – Workers Compensation insurance, Federal and state taxes, health insurance, and retirement	$8.29/hour	800	Hours	$6,632
Todd Peplin - Workers Compensation insurance, Federal and state taxes, health insurance, and retirement	$6.42/hour	96	Hours	$616.32
Total Fringe Benefits				**$7,248.32**
Travel				
Erin Kilcullen Roundtrip: DSWCD office (Redmond, OR) – Indian Ford Creek (Sisters, OR)	$0.56/mile x 21 miles x 2 = 23.52	40	Trips	$940.80 ($470.40 will be paid by DSWCD)
Todd Peplin Roundtrip: DSWCD office (Redmond, OR) – Indian Ford Creek (Sisters, OR)	$0.56/mile x 21 miles x 2 = 23.52	15	Trips	$352.80 ($176.40will be paid by DSWCD)
Hired Contractor Roundtrip: TBD – Indian Ford Creek (Sisters, OR)	$0.56/mile x 21 miles x 2 = 23.52 (TBD)	20	Trips	$470.40 ($235.20 will be paid by DSWCD)
Total Travel				**$1,764 ($882 will be paid by DSWCD)**
Supplies and Materials				

Printing, postage, and mailing brochures and letters	$1.85/mailing	260	Landowners	$482 (Will be paid by DSWCD)
Total Supplies and Materials				**$482**
Contractual				
Geographic Mapping Assessment of 4 miles USFS Land	$3,000	1	Unit	$3,000
Database Creation	$2,500	1	Unit	$2,500
Final development of Baseline Assessment	$3,000	1	Unit	$3,000
Geographic Mapping Assessment of 10 private Land parcels	$5,000	1	Unit	$5,000
Final Development of 10 Assessments of 10 private Lands	$5,000	1	Unit	$5,000
Total Contractual Costs				**$18,500**
Total in-kind contributions (See table above)				**$1,200**
Total Costs				**$54,212.56**
Federal costs Requested				**$51,648.56**
Indirect Costs				
Type of Rate: Federally approved	Percentage: 10%			$5,164.86
Total Estimated Project Costs				**$59,377.42**
Total Federal Costs Requested				**$56,813.42**

H.1. Environmental and Cultural Resource Considerations

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)?

No. This project is just to create a watershed plan. There will be no on the ground work performed.

- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area?

No. Redband trout is the only fish species in Indian Ford and it is not listed as threatened or endangered by the U.S. Fish and Wildlife Service.

- Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States”?

No. There are wetland complexes within the watershed, but they do not fall under CWA as “Waters of the United States”.

- When was the water delivery system constructed?

There is no water delivery system. This is a natural stream fed system.

- Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)?

No. There is no irrigation from Indian Ford Creek. No parts of an irrigation system will be modified.

- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? No, there are no buildings, structures, or features in the irrigation district that are listed or eligible for listing on the National Register of Historic Places.

- Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No. There is no work being done within the watershed and will have no adverse effect on low income or minority populations.

- Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands?

No. This project has no effect on the land, but is to create a watershed plan.

- Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

No. This project is just a watershed plan and does not include any on the ground work.

Required Permits or Approvals

There are no permits or approvals required for this project. If during the project, a permit is required, the DSWCD General Manager will comply with all regulations to obtain the proper permit. This can be paid by the DSWCD Capacity Grant funds.

Appendix A: Maps
See attachment.

Appendix B: Letters of Support
See attachment.

Official Resolution
See attachment.

Appendix A: Maps

A.1: Upper and Lower Indian Ford Sub watershed

A.2: Tax lot owner names and boundaries: Middle Indian Ford

A.3: Tax lot owner names and boundaries: Upriver and downriver of the DLT Preserve

A.4: Tax lot owner names and boundaries: Lower Indian Ford

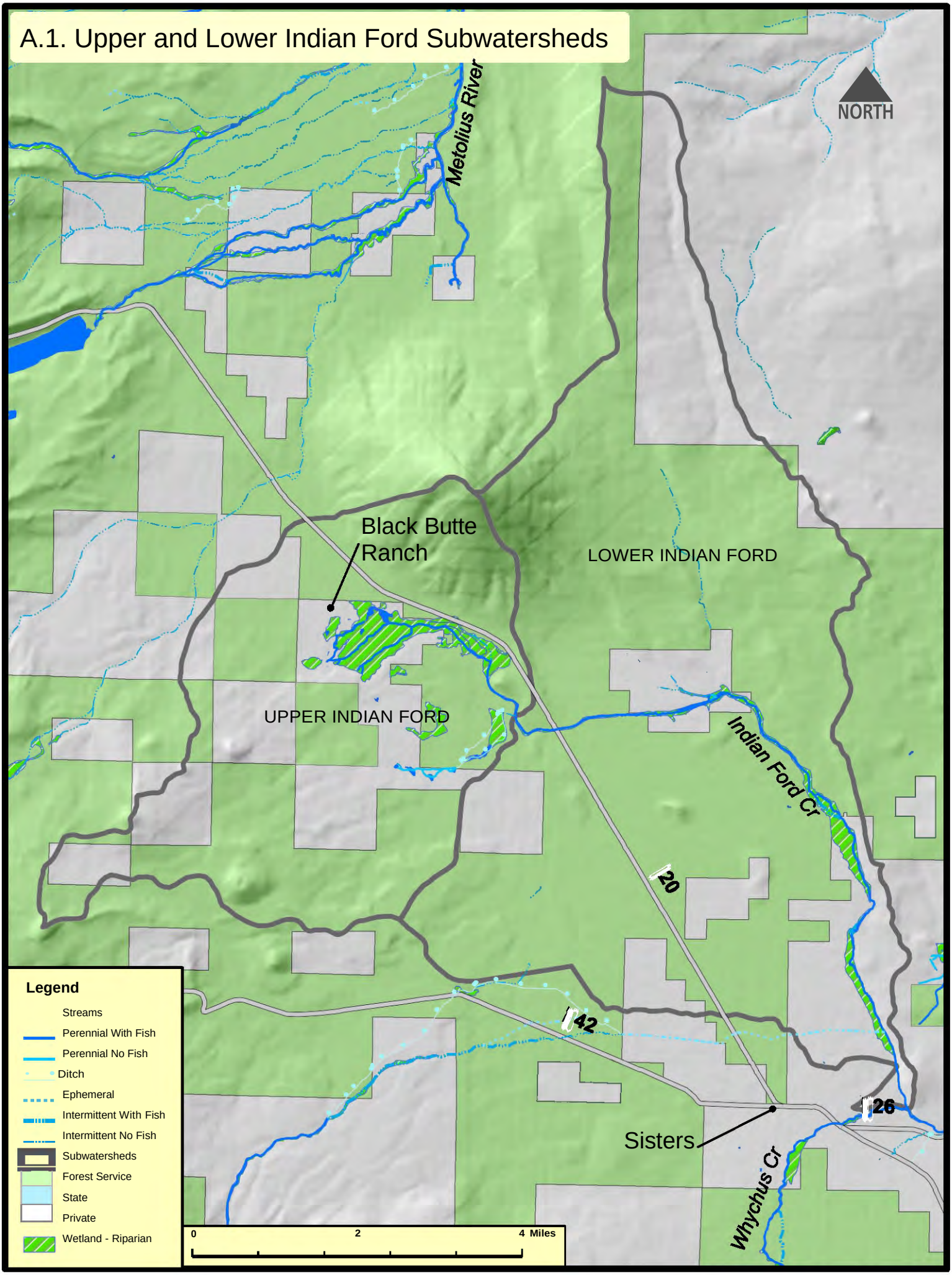
A.5: ODA Map of Deschutes Agricultural Water Quality Managing Reporting Area Highlights the boundary of the Strategic Implementation Area (SIA)

A.6: Boundary of the Water Challenges Strategy Areas identified in the Whychus Watershed Analysis 2013

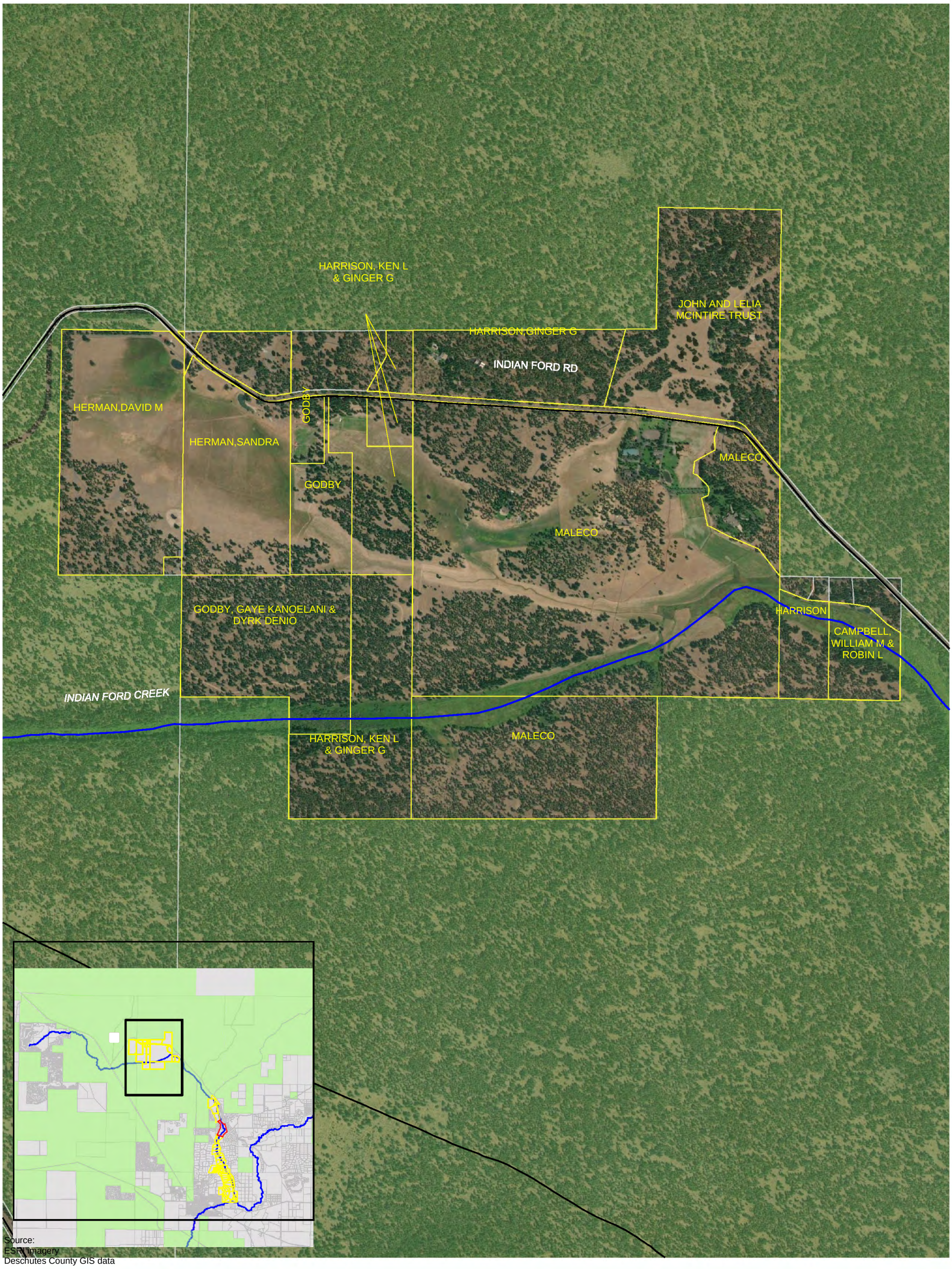
A.7: Boundary of the Forest Urban Interface Challenge Strategy Areas identified in the Whychus Watershed Analysis 2013

A.8: Restoration Projects and Treatment boundaries that have been completed on U.S. Forest Service land

A.9: Boundary of NRCS approved Conservation Implementation Strategy


A.1. Upper and Lower Indian Ford Subwatersheds
NORTH
Metolius River
Black Butte Ranch
LOWER INDIAN FORD
UPPER INDIAN FORD
Indian Ford Cr
20
42
26
Sisters
Whychus Cr
Legend
Streams
Perennial With Fish
Perennial No Fish
Ditch
Ephemeral
Intermittent With Fish
Intermittent No Fish
Subwatersheds
Forest Service
State
Private
Wetland - Riparian
0
2
4 Miles

A.2. Tax lot Ownership and boundaries: Middle Indian Ford Creek



Source:
ESRI Imagery
Deschutes County GIS data

D. Quinlan, 06/29/18
11x17_indfrd_lidar_ownership.mxd

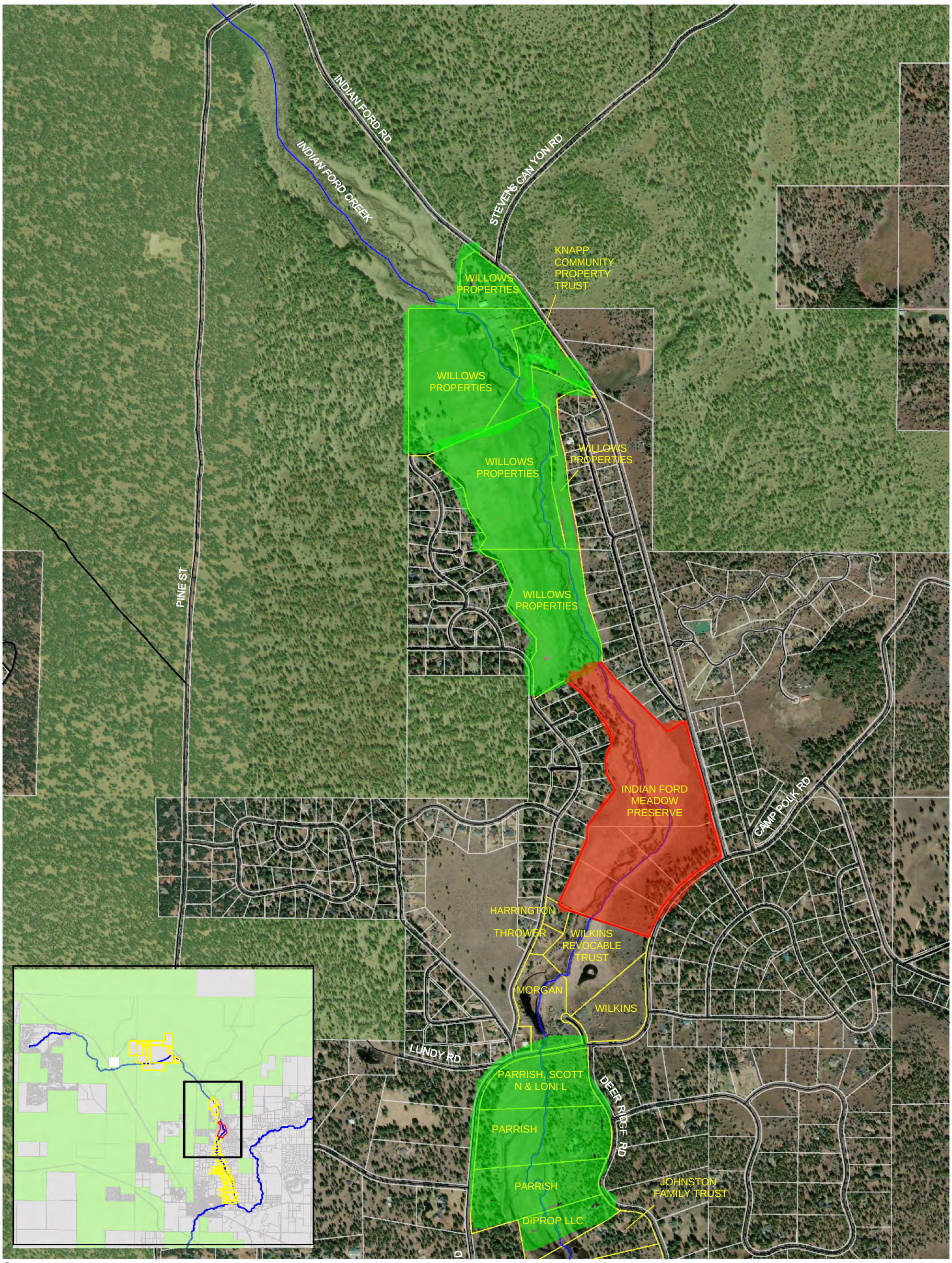
N
W E
S

0 500 1,000
Feet

Taxlots along Indian Ford Creek
Taxlot
Federal land
Stream

DESCHUTES LAND TRUST

A.3.Tax lot Ownership and boundaries Up and Down River of DLT Preserve: Indian Ford Creek



Source:
ESRI imagery
Deschutes County GIS data

D. Quinlan, 06/29/18
11x17_indfrd_lidar_ownership.mxd

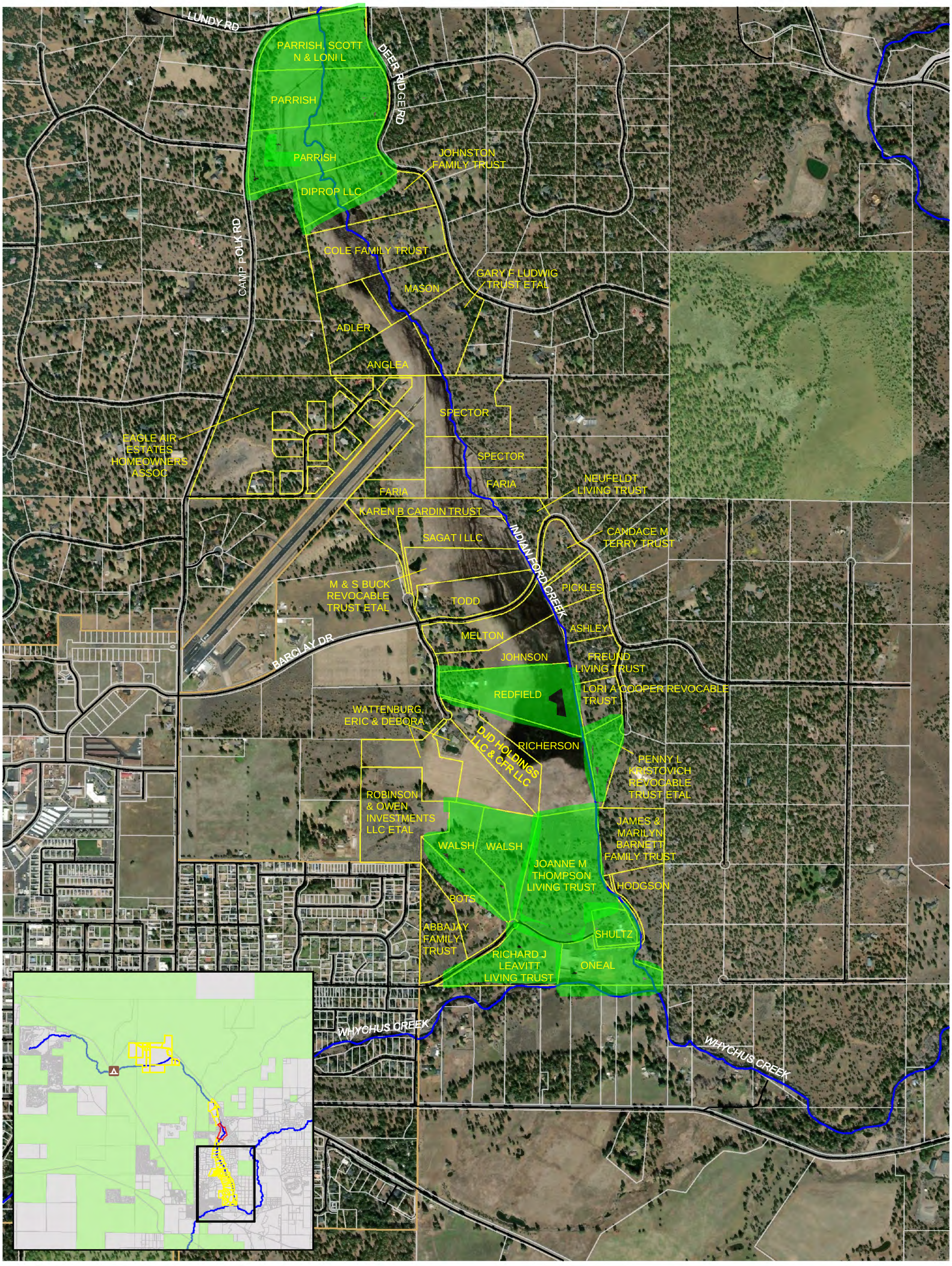
N
W E
S

0 500 1,000
Feet

Deschutes Land Trust Meadow Preserve
Private landowners previously engaged
Taxlots along Indian Ford Creek
Taxlot
Federal land
Stream

DESCHUTES LAND TRUST

A.4. Tax lot Ownership and boundaries: Lower Indian Ford Creek



Source:
ESRI imagery
Deschutes County GIS data

D. Quinlan, 06/29/18
11x17_indfrd_lidar_ownership.mxd

N
W E
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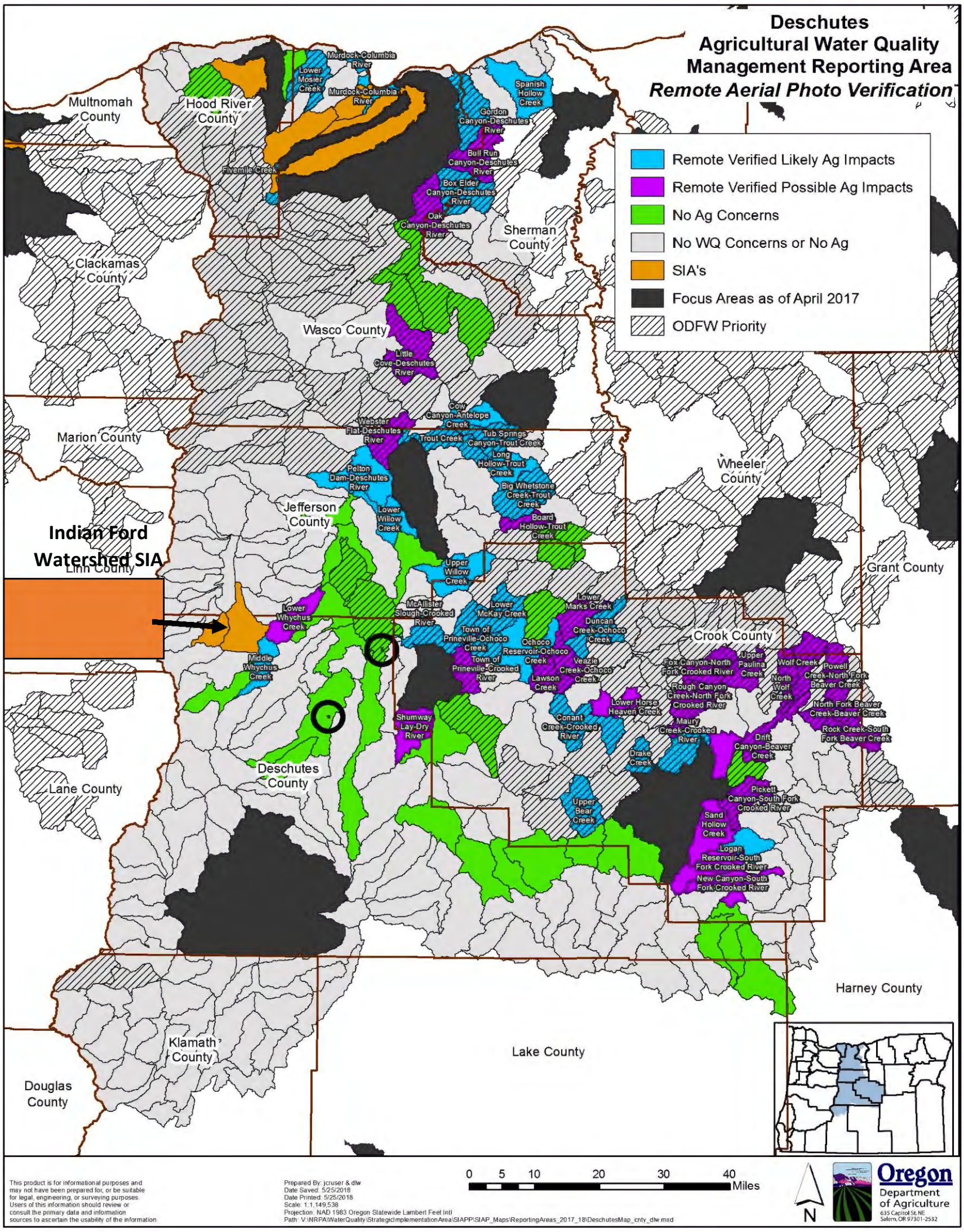
0 500 1,000
Feet

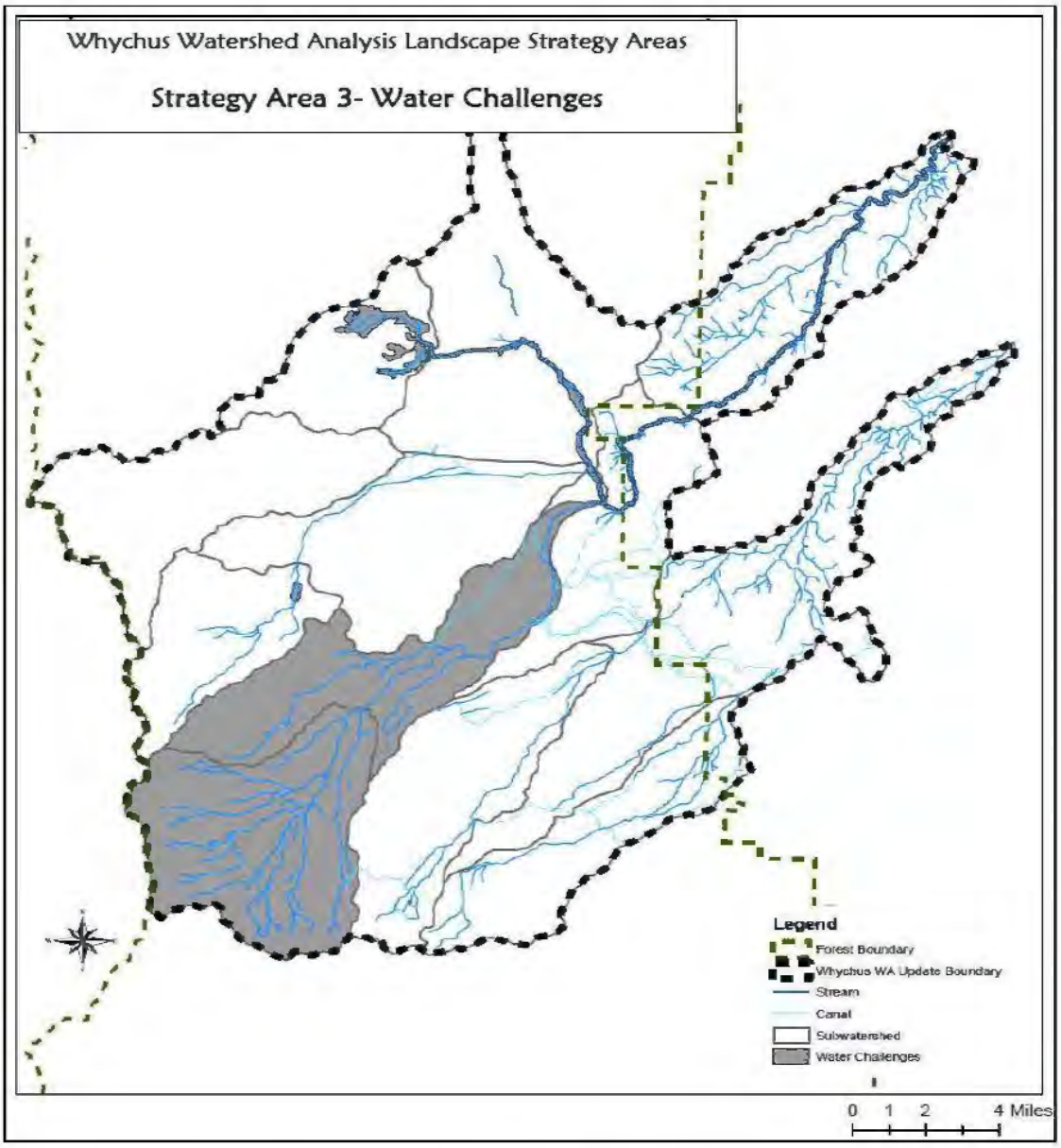
- Private landowners previously engaged
- Taxlots along Indian Ford Creek
- Taxlot
- Federal land
- Stream

DESCHUTES LAND TRUST

A.5. ODA Map of Deschutes Agricultural Water Quality Managing Reporting Area: Highlights the boundary of the Strategic Implementation Area (SIA)



A.6. Boundary of the Water Challenges Strategy Areas identified in the Whychus Watershed Analysis 2013

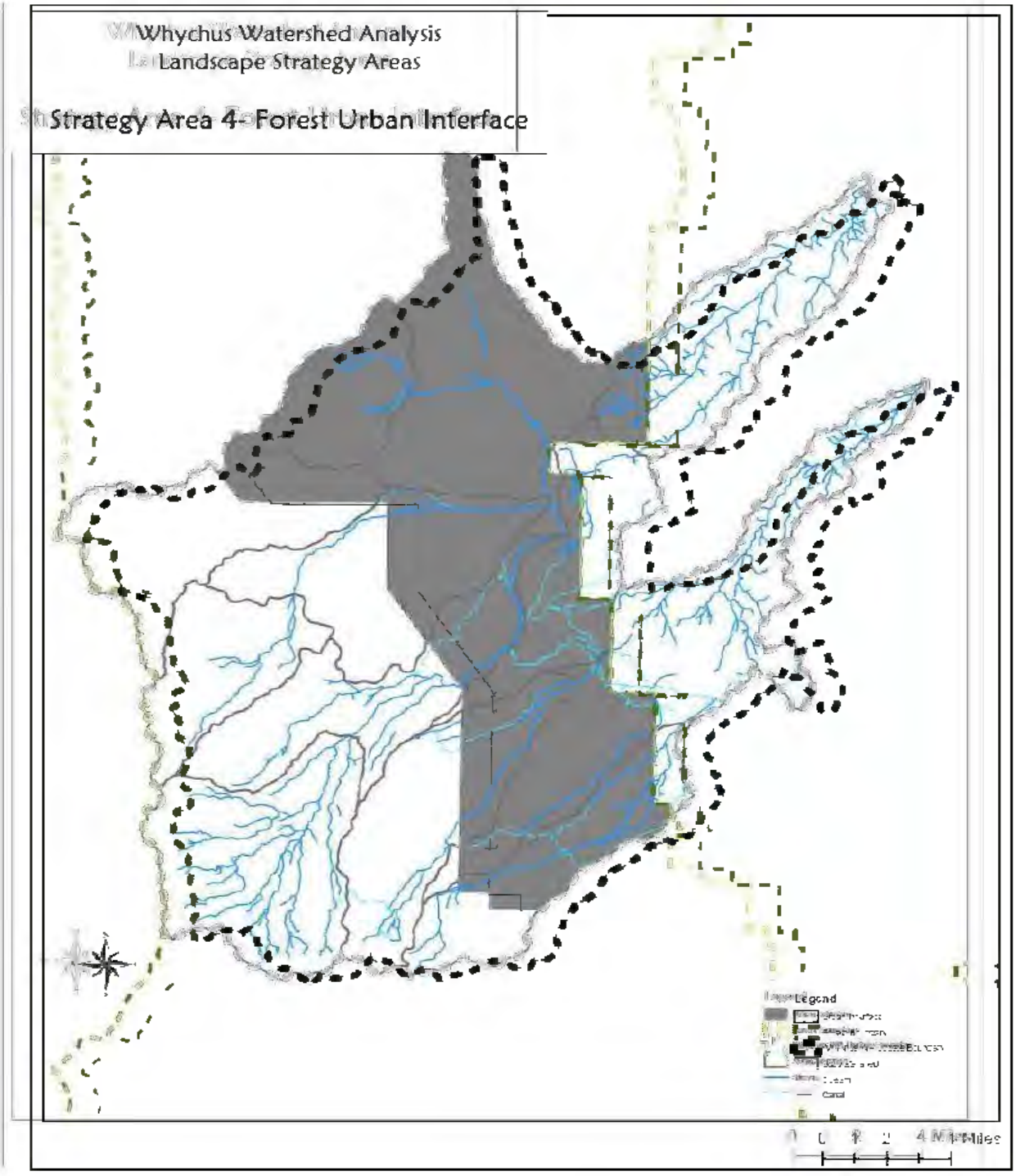


AREA 3 - WATER CHALLENGES

PRIORITY # 3- *HIGH*
FEASIBILITY- *MODERATE*

SUMMARY

A.7. Boundary of the Forest Urban Interface Challenge Strategy Areas identified in the Whychus Watershed Analysis 2013



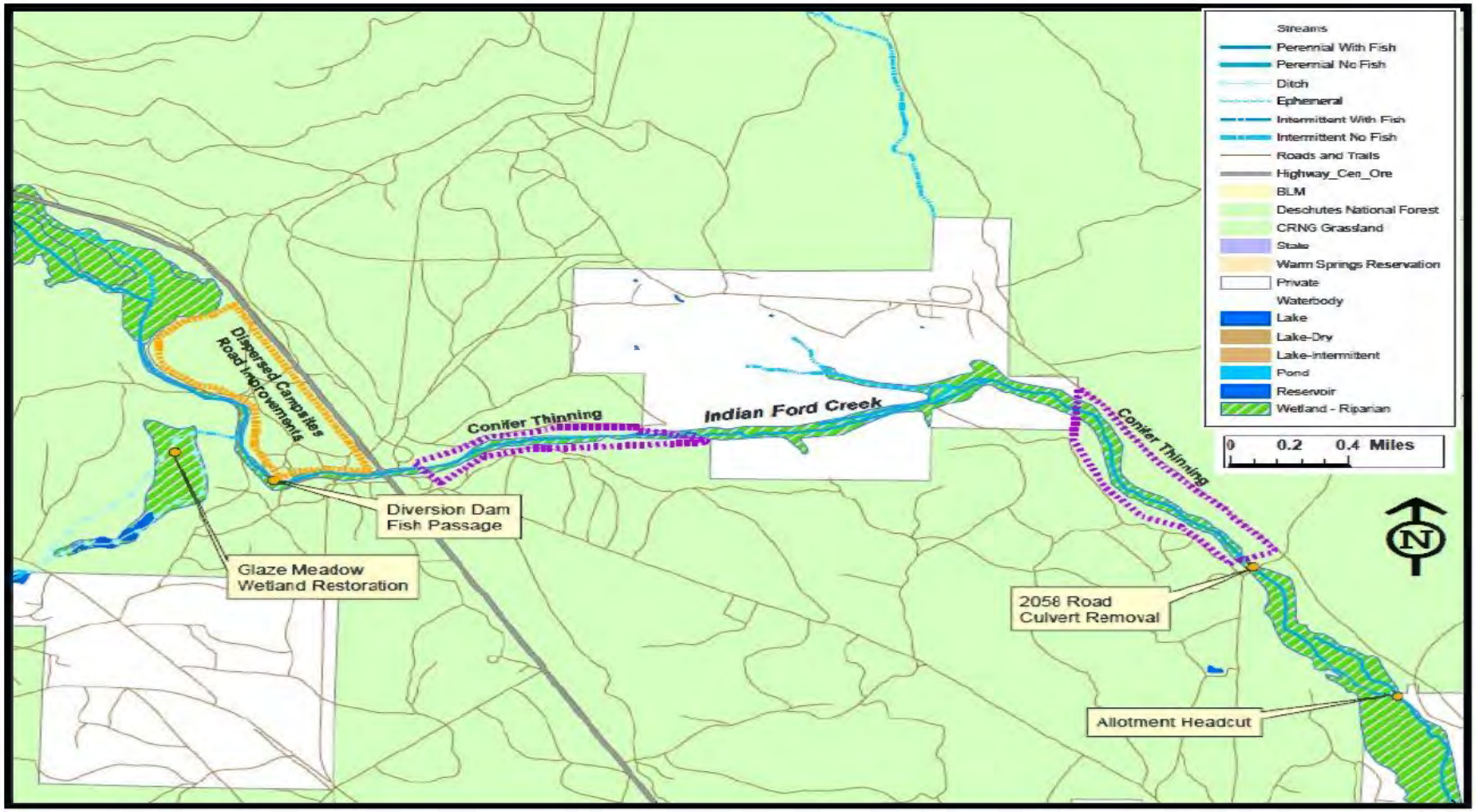
AREA 4- FOREST URBAN INTERFACE

PRIORITY # 4- *MODERATE*
FEASIBILITY- *DIFFICULT*

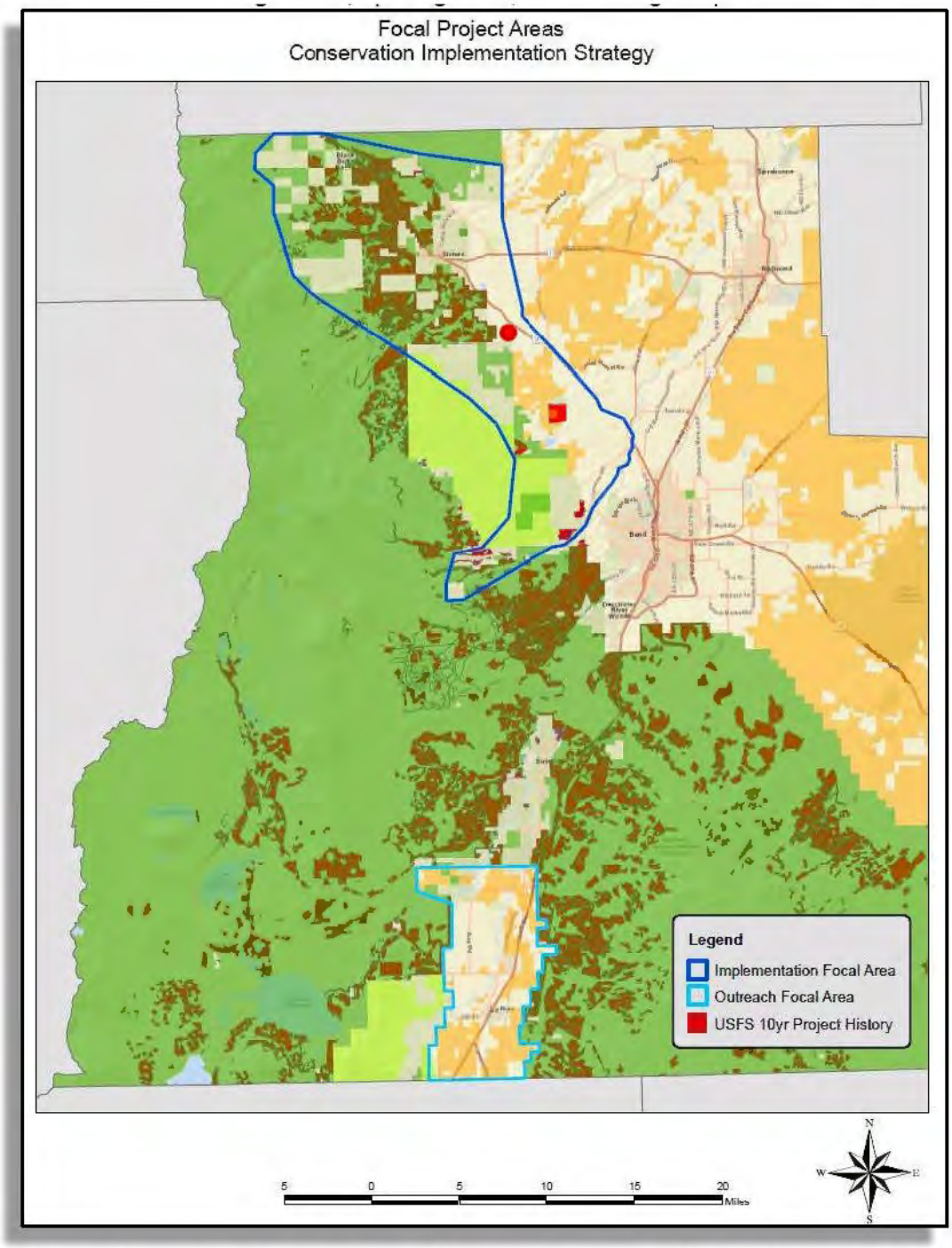
SUMMARY

A.8. Restoration Projects and Treatment boundaries that have been completed on U.S. Forest Service land

Map of the Indian Ford Creek Proposed Aquatic Restoration Project – July 26, 2013 by Nate Dachtler, USFS.
These projects have been completed since this report was written.



A.9. Boundary of NRCS approved Conservation Implementation Strategy for Restoration of Fire Resilient Landscapes in Deschutes County



Map of the two focal project areas and the 10-year history of the neighboring USFS projects. Green indicates USFS, Tan indicates BLM, Light shades indicate private lands

Appendix B: Letters of Support

USDA United States Department of Agriculture | Forest Service | Deschutes National Forest, Sisters Ranger District | Pine Street and Highway 20, Sisters, OR 97759, 541-549-7700

File Code: 2500
Date: January 5, 2021

Bureau of Reclamation
Denver Federal Center
6th Avenue and Kipling St
Denver, CO 80225

Dear Bureau of Reclamation,

The US Forest Service would like to express our support for the Bureau of Reclamation (BOR) grant proposal: *Indian Ford Watershed Group development and Restoration Planning* submitted by the Deschutes Soil and Water Conservation District. This project will compliment past, current, and future restoration efforts on the Deschutes National Forest within the Indian Ford subwatersheds. Fish passage, hardwood restoration, prescribed fire and meadow restoration projects have been completed. Although much has been accomplished there is still much work to be done to restore the two Indian Ford subwatersheds. Upcoming Forest Service partnership projects include the Garrison Vegetation and Fuels Reduction Project and placing beaver dam analogs along Indian Ford Creek to maintain wetlands and riparian habitat.

The Indian Ford Coordinated Watershed Group Development and Restoration Planning will be developed through the collaboration of key partners, stakeholders, and landowners to develop a comprehensive plan that will prioritize the entire watersheds resource concern areas and relevant social and economic considerations. The goal of this plan is to utilize existing information from different management plans within the watershed and compile new data and information that will strategically outline the location of restoration projects that address priority resource concerns for the entire watershed. It will provide information for on the ground restoration projects for all agencies and private landowners in the watershed to restore the function of the watershed.

We foresee the Watershed plan will benefit the Forest Service goal of complete watershed restoration and the collective decision-making process by coordinating restoration activities across private and public land in a cooperative manner and bring a strategic and cost-effective approach to restoration in the watershed.

Sincerely,

IAN REID
District Ranger

UPPER DESCHUTES
WATERSHED COUNCIL

December 28, 2020

Bureau of Reclamation
Denver Federal Center
6th Avenue and Kipling Street
Denver, CO 80225

Dear Bureau of Reclamation,

The Upper Deschutes Watershed Council (UDWC) would like to express our support for the Bureau of Reclamation grant proposal for the *Indian Ford Watershed Group Development and Restoration Planning* submitted by the Deschutes Soil and Water Conservation District (SWCD). This project seeks to complement current and future restoration efforts within the Indian Ford watershed. Indian Ford is a tributary to Whychus Creek where UDWC has completed many past and ongoing projects. UDWC has not had capacity to work with landowners and partners in Indian Ford watershed but we support the SWCD in taking steps to establish a plan to restore the Indian Ford watershed.

The Indian Ford Watershed Group Development and Restoration Planning will bring together key partners, stakeholders and landowners to develop a comprehensive plan that will examine the entire watershed's natural resources and relevant community and economic issues with the goal of identifying, coordinating, and prioritizing restoration activities necessary to restore the function of the watershed. Restoration efforts will ultimately support the larger Whychus Creek watershed.

We encourage you to support the Deschutes Soil and Water Conservation District's proposal. Please call me if you have any questions at all at 360-333-5105.

Sincerely,

Kris H. Kight

Executive Director
Upper Deschutes Watershed Council

lands in trust protected forever

DESCHUTES LAND TRUST

December 23, 2020

Bureau of Reclamation
Denver Federal Center
6th Avenue and Kipling Street
Denver, CO 80225

Dear Bureau of Reclamation,

The Deschutes Land Trust strongly supports the Deschutes Soil and Water Conservation District's efforts to coordinate restoration and prioritization planning in the Indian Ford Creek watershed.

We work collaboratively with landowners to conserve habitats and natural resources throughout the Deschutes Basin, with a particular focus on the tributaries of the upper Deschutes River. We have worked on Indian Ford Creek since conserving Indian Ford Meadow Preserve in 1996, and we have continued to engage with landowners, agencies, and nonprofits along the creek for the last two decades.

Holistic conservation and management of Indian Ford Creek will require partnerships across a variety of stakeholders. The Deschutes Soil and Water Conservation District's coordination process will catalyze these partnerships and contribute to successful long-term conservation and restoration within the Indian Ford Creek watershed. The Deschutes Land Trust looks forward to participating in this process.

Sincerely,

Jason Grant
Restoration Specialist

From: Jason Grant
Sent: Wednesday, December 23, 2020 3:16 PM
To: Erin Kilcullen
Subject: Re: Indian Ford application

Hi Erin,

I've attached our Letter of Support. Let me know if this works for you. Also we can commit to 24 hours of in-kind staff time at a rate of $50/hour.
Thanks —Jason

Jason Grant
Restoration Specialist
Deschutes Land Trust
210 NW Irving Avenue, Suite 102
Bend, Oregon 97703
O: [541] 330 0017
C: [541] 729 7730
jason@deschuteslandtrust.org

January 8, 2021

Bureau of Reclamation
Denver Federal Center
6th Avenue and Kipling Street
Denver. CO 80225

Dear Bureau of Reclamation.

We, the private landowners that live and own property along Indian Ford Creek would like to express our support for the Bureau of Reclamation grant proposal submitted by the Deschutes Soil and Water Conservation District to coordinate and enhance our properties land and stream segments and the entire watershed. This project is needed to help with our restoration activities on our properties.

The watershed issues have been an ongoing problem for at least 10 years. Efforts have been made to restore flows in Indian Ford Creek which have had positive impact. but there is more work to be done. This plan would improve coordination with surrounding neighbors and federal agencies in restoring flow in Indian Ford creek and reconnecting Indian Ford with Whychus Creek. Also, Reed Canary Grass has and continues to be an ongoing battle. We would like to see more consistent resolve and believe that coordinating with other landowners upstream of our properties would aid in managing this noxious weed. We are willing to attend necessary meetings and assist the Deschutes SWCD in the coordination and development of restoration planning activities.

Sincerely,

NAME / ADDRESS

Joanne Hooper 16080 PERIT HUNTINGTON RD.

Scott Redfield 69146 BARCLAY CT.

Julie Seaberg 16075 Perit Huntington RD

Allen Smith 16081 Perit Huntington Rd Sisters

Kris Kristovich 69005 BARCLAY PLACE

Kathleen (Kathy) Walsh 16074, Perit Huntington Rd. Sisters, OR 97759

Frank Mussell, 16074 Perit Huntington Rd, Sisters, OR

From: Brett Hodgson
Sent: Tuesday, December 29, 2020 8:56 AM
To: Andrew J Walch; MOBERLY Erik R; Erin Kilcullen
Subject: FW: Indian Ford Creek

This provides a little background and context regarding conditions in Indian Ford Creek and difficulties in prioritizing it for fish and wildlife. There is a reach of the creek on the Forest that has perennial flow and a modest population of redband. However, once you proceed downstream onto private lands and irrigation activity the creek is dewatered on an annual basis. Thus, limiting the creek's overall ability to support robust fish populations, including steelhead. ODFW supports restoration in Indian Ford Creek, but it really needs to start with flow restoration for the effort to be meaningful. As with most things fish related, it all comes down to water.

Brett

Brett Hodgson
Deschutes District Fish Biologist
Oregon Department of Fish and Wildlife
61374 Parrel Road, Bend, OR 97702
541-388-6009

2020-12-18

Resolution of the Deschutes Soil and Water Conservation District

Resolution # 2020 – 3

A Resolution Authorizing to commit Erin Kilcullen to the financial and legal obligations associated with the receipt of a financial assistance award under this FOA: BOR-DO-21-F003 the WaterSMART Cooperative Watershed Management Program Phase I Grant.

Whereas by unanimous agreement of the full board of the Deschutes Soil and Water Conservation District directors; therefore,

Be It Resolved that on December 17, 2020 the directors unanimously voted to approve Erin Kilcullen, acting in her duties as the General Manager of the Deschutes Soil and Water Conservation District is the official with legal authority to enter into an agreement under this FOA. The board of directors has reviewed and supports the application submitted and that the applicant will work with the Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

William Kuhn

Co-Chair of the Board of Directors

Deschutes County Soil & Water Conservation District

Jeff Rola

Co-Chair of the Board of Directors

Deschutes County Soil & Water Conservation District

Date of Board Action: December 17, 2020

CONTACT

DESCHUTES SWCD
625 SE Salmon Ave, Suite 7
Redmond, OR 97756
SWCD Phone: 541-923-2204