PRAIRIE CITY STATE VEHICULAR RECREATION AREA SOIL CONSERVATION PLAN

Prairie City State Vehicular Recreation Area

July 2025

CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

Abbreviation	**Definition**
ATV	All-Terrain Vehicle
BMP	Best Management Practice
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CDPR	California Department of Parks and Recreation
EIR	Environmental Impact Report
ETC	Environmental Training Center
GP	General Plan
GIS	Geographic Information System

Abbreviation	Definition
LSAA	Lake and Streambed Alteration Agreement
MU	Management Unit
NDVI	Normalized Difference Vegetation Index
NRCS	Natural Resources Conservation Service
NRD	Natural Resources Division
OHMVRD	Off-Highway Motor Vehicle Recreation Division
OHV	Off-Highway Vehicle
PCMX	Prairie City Motocross
PEF	Project Evaluation Form
PG&E	Pacific Gas and Electric
PRC	Public Resources Code
ROV	Recreational Off-Highway Vehicle
RTMP	Road and Trail Management Plan
SCP	Soil Conservation Plan
SMART	Specific, Measurable, Achievable, Realistic, Timely
SMUD	Sacramento Municipal Utility District
SVRA	State Vehicular Recreation Area
USDA	United States Department of Agriculture
USGS	United States Geological Survey
VegCAMP	Vegetation Classification and Mapping Program
WHPP	Wildlife Habitat Protection Plan

1 EXECUTIVE SUMMARY

The 2024 Soil Conservation Plan (SCP/the Plan) for Prairie City State Vehicular Recreation Area (Prairie City SVRA/the Park) describes in detail the Best Management Practices (BMPs), measures, and strategies using best available science to ensure compliance with the 2020 Soil Conservation Standard (the Standard) (Defined below). The Plan defines protocols for assessment, maintenance, and monitoring efforts to be implemented at Prairie City SVRA. It also discusses how to provide high-quality recreational opportunities for multiple OHV user groups and non-motorized user groups using management actions implemented to reduce erosion from trails, roads, and facilities associated with off-highway vehicle (OHV) use and minimize sedimentation impacts outside the Park boundaries over and beyond natural occurring conditions.

The Plan provides a comprehensive overview of adaptive soil management practices at Prairie City SVRA. Section 3 provides the baseline of adaptive management and includes an overview of Park history and setting characteristics, regional context and land use, and assessments of climate, air quality, hydrology, geology, soils, and erosion. Section 4 discusses the goals and soil conservation and improvement objectives to meet the Standards throughout the next five years. Section 5 discusses the monitoring plan which provides evaluation of the condition of resources and informs adaptive management within the Park to evaluate compliance with the Standard. Section 6 includes details regarding management actions and BMPs including protocols for completing and documenting ongoing maintenance work, soil related policies, and development projects. Finally, Section 7 includes the chain of command to approve management actions set for the following year and the requirements for the Compliance Report to document the monitoring and work completed during the previous year.

2 INTRODUCTION

2.1 PURPOSE AND SCOPE OF THE 2024 SCP

In 2017, Senate Bill 249 revised portions of the Public Resources Code (PRC). PRC §5090.35(b)(1) requires the Off-Highway Motor Vehicle Recreation Division (OHMVRD; Division) to "review, and, if deemed necessary, update the 2008 Soil Conservation Standard and Guidelines to establish a generic and measurable soil conservation standard." This standard is meant to ensure appropriate resource management and maintenance in areas of OHV use. Following the review, the OHMVRD updated the 2008 document to create the 2020 Soil Conservation Standard (the Standard) and Guidelines for purposes of clarification and to account for technological changes in vehicles used for OHV recreation.

In short, the Standard (CDPR 2020b) states:

"Off-highway vehicle recreation facilities shall be managed for sustainable long-term prescribed use without generating soil loss that exceeds restorability, and without causing erosion or sedimentation which significantly affects resource values beyond the facilities." Senate Bill 249 added other specific SCP requirements, including considering statutorily required state and regional conservation objectives, applying best available science, including the annual monitoring undertaken at each SVRA to ensure SCP objectives are being met, and providing an opportunity for public comment. Specific PRC §5090 language relating to the SCPs can be found in Section 1.3 of the Standard on the OHMVR website or at this link. Development of SCPs and documentation of maintenance and monitoring activities provide the tools needed to assess compliance with the Standard. This SCP is consistent with the California Department of Parks and Recreation's (CDPR) Departmental Operations Manual, CDPR's Strategic Plan, and the Prairie City SVRA 2016 General Plan and Environmental Impact Report (EIR).

The SCP provides a framework for adaptive management through a process of assessing current conditions of OHV facilities, inventorying maintenance and repair needs, and monitoring conditions over time to ensure sustainability of the facility. The SCP describes in detail the BMPs, strategies, and programs using the best available science to ensure compliance with the Standard. BMPs are measures that minimize or eliminate the effects of soil erosion and sedimentation on stormwater (CDPR 2007). According to the OHV BMP Manual (2007) implementation and proper maintenance of BMPs will protect the park, park users, trails, and natural resources values of the Park by (CDPR 2007):

1) Minimizing soil erosion and compaction of soils resulting in loss of soil productivity and sedimentation to waterways.

2) Minimizing disturbance and sedimentation to riparian areas, wetlands, and waterways adversely impacting amphibians and wildlife.
3) Minimizing the spread of invasive, non-native, and noxious weeds along travel routes, and minimize disturbance to botanical resources.
4) Preventing the creation of additional routes in environmentally sensitive areas.

We know that conservation and improvement of soils through management actions and maintenance programs can directly and indirectly improve and conserve other aspects of the ecosystem (Figure 1). Soils form the basis for ecosystems—transitional between the non-living physical rock and sediments below and plant and animal life above and below the ground surface. Living systems occurring above and below ground surface are determined by the properties of the soil, which in turn are determined by the properties of the underlying rock, climate, living organisms, topography and time. Soil performs vital functions in ecosystems such as sustaining plant and animal life; regulating and partitioning water and solute flow; filtering, immobilizing, detoxifying, buffering, storing, and cycling nutrients; and providing physical support (CDPR Department Operations Manual (DOM) Section 308). The SCP focuses more on soil quantity and how it's managed within the Park as a facility, whereas the Wildlife Habitat Protection Plan focuses on soil quality as it relates to the ecosystem (See Section 2.4 Relationship with other SVRA Plans for more detail).

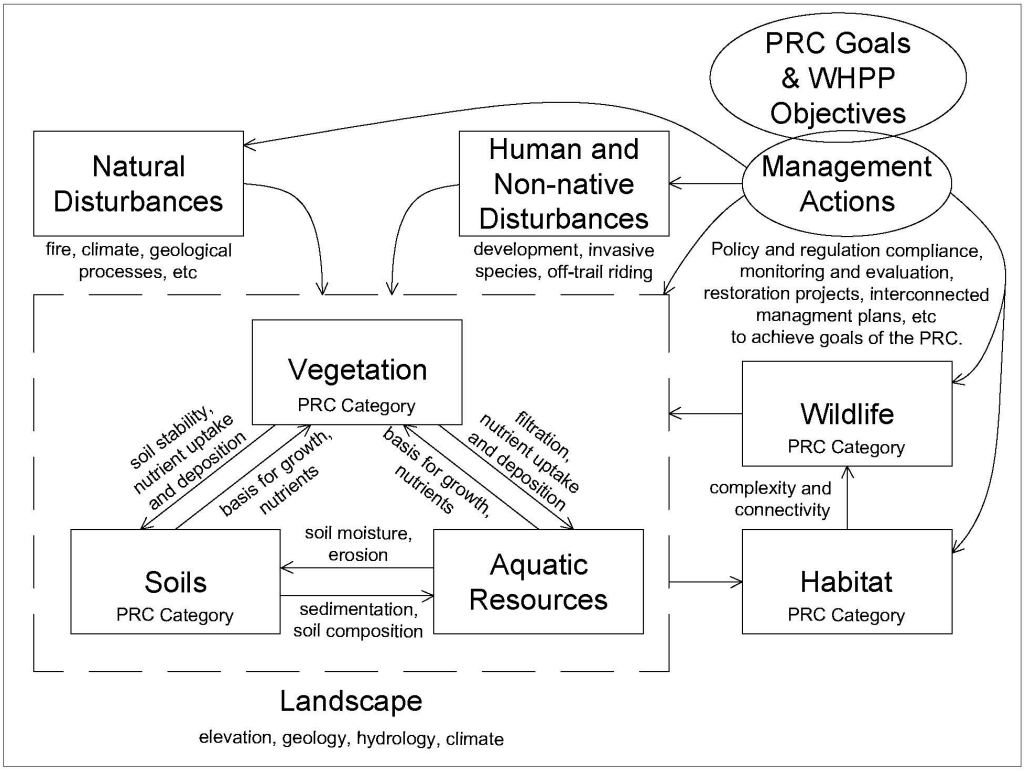

Figure 1. Conceptual Model Demonstrating the Interwoven Nature of Soils, Plants, Wildlife, and Habitat within the Ecosystem and the Reflective Interconnected Nature of the Goals, Monitoring, and Management Actions (CDPR 2022)

A Compliance Report and Action Plan are prepared and submitted annually to demonstrate compliance with the SCP, identify actions to be taken to continue compliance, and describe future projects. As an evolving document based on the best available science with clear guidance for a five-year planning horizon and a roadmap for work well beyond that, SCP development includes a transparent peer-review process and an opportunity for public comment.

2.2 GOAL AS DEFINED BY THE STANDARD

The goal of the SCP is based on demonstrating compliance with the Standard as described above. Prairie City SVRA shall be managed for long-term prescribed uses such that soil loss does not exceed restorability. More descriptions on what these terms mean can be found in the Standard (CDPR 2020b). Section 4 describes objectives aimed toward completing this goal to show compliance with the Standard over the next 5 years.

2.3 State and Regional Conservation Objectives

PRC Section 5090.32(g) requires that management plans within SVRAs be developed in consideration of state and regional conservation objectives (CDPR 2021b). As a result, the plans below were reviewed and considered while developing this plan and the goals and objectives herein.

2018 Safeguarding California Plan

Developed by the California Natural Resources Agency, the updated 2018 Safeguarding California Plan's purpose is to layout guidelines for agencies to incorporate strategies necessary to address climate change into their future planning efforts. The 2018 update included a chapter specific to Parks which included the recommendation (PC-5) to incorporate climate change in all California State Parks conservancy planning and decision-making. To meet Recommendation PC-5, the Plan identifies a step (PC-5.6) to "prioritize conservation, protection, and restoration of natural resources in climate change adaptation projects and planning to ensure sustainable recreational opportunities for the public." The 2024 SCP can contribute to this plan by adaptively conserving and improving soils while evaluating whether recreational opportunities are sustainably managed.

California Healthy Soils Action Plan

The California Department of Food and Agriculture created a California Healthy Soils Action Plan. This plan is an interagency effort to promote the development of healthy soils on California's farm and ranchlands through innovative farm and ranch management practices that contribute to building adequate soil organic matter. Even though the plan is directed to farms and ranches, the goals align with the Prairie City SCP such as improving degraded soils which provide these benefits: increasing water infiltration and retention, reducing erosion, improving water quality, and biological diversity and wildlife habitat.

Central Valley Basin Plan

The Basin Plan issued by the Central Valley Regional Water Quality Control Board (CRWQCB) (2018) sets forth water quality standards for the surface waters and groundwater of the region. Those standards include both designated beneficial uses of the water, and the narrative and numeric objectives that must be maintained or attained to protect those uses. Generally, narrative criteria require that water quality not be degraded because of increases in pollutant loads that adversely affect a water body's designated beneficial uses. The basin plan provides allowable limits for water turbidity leaving the site compared to entering the site. The SCP

aligns with this Basin Plan by developing and implementing management actions which conserve and improve the SVRA's hydrological features and the park's water quality.

Sacramento County General Plan

On November 9, 2011, the Sacramento County Board of Supervisors adopted an updated General Plan. The planning horizon of the County's previous General Plan was from 1990 to 2010; the updated General Plan's planning horizon looks out to 2030. The General Plan is a set of goals, objectives, policies, implementation measures and maps that form a blueprint for physical development in the unincorporated County. One section of the general plan focuses on conservation which provides direction regarding the conservation, development, and utilization of natural and cultural resources including water, forests, soils, rivers, mineral deposits, and aquatic and terrestrial species and their habitats. The 2024 SCP aligns with the Sacramento County General Plan conservation element by incorporating a long-term goal of soil conservation and improvement.

2.4 Relationship with other SVRA Plans

The 2024 SCP complements other management plans for the Prairie City SVRA, including the 2022 Wildlife Habitat Protection Plan (WHPP) and Road and Trail Management Plan (RTMP). These management plans are interconnected, and topics in one plan may cross over into elements of another.

2.4.1 Prairie City SVRA General Plan

The GP, adopted in 2016, establishes long-range vision, goals, and guidelines for the SVRA and serves as the basis for developing focused feasibility and management plans, project plans, and other management actions necessary to implement the goals of the GP (CDPR 2016a). The GP is the Park's primary management document, and any other planning or management documents, including the SCP, developed for the Park must remain consistent with it. Therefore, the GP was used as a guide and source for developing this SCP and the information provided within.

2.4.2 WHPP

Where the SCP focuses more on soil management and related maintenance within the park as a facility, the WHPP focuses on soil quality as it relates to the ecosystem. The WHPP discusses the Park's wildlife and habitat management effort and provides land managers with guidance for the management of habitat, along with short- and long-term habitat goals and methods to achieve these goals (CDPR 2022). The SCP includes many topics also in the WHPP since soils are

a key abiotic factor in any ecosystem. The final 2022 WHPP was approved in December of 2022 and can be found on the Prairie City SVRA Website.

2.4.3 RTMP

The RTMP describes the existing road and trail conditions in the Park and provides direction for their future management (CDPR 2017b). A comprehensive road and trails program ensures recreational trail opportunities are made available at their fullest potential while conserving and enhancing cultural and natural resources. The RTMP provides a landscape and project-based approach to implement goals and management actions related to both the 2024 SCP and the WHPP while delivering engaging recreation opportunities for Park users. The final RTMP and environmental document were completed in January of 2025 and can be found on the Prairie City SVRA Website. Implementation of the RTMP may trigger edits to this SCP.

2.5 Update Cycle

SCPs are to be reviewed every five years and updated as needed.

2.6 Adaptive Management Strategy

Adaptive management is a fundamental component of implementing the best available science in natural resource management (CDPR 2021b). Adaptive management includes assessing existing conditions, developing objectives based on those conditions, identifying management actions, and monitoring these actions, which allows evaluation and adjustment of practices. Sections 3 through 7 provide information on natural resource planning for each step of the adaptive management process.

3 SVRA SETTING AND EXISTING CONDITIONS

The following chapter provides information on the Prairie City SVRA setting and existing condition assessments. The setting and existing conditions assessments are used to understand important conservation issues within the SVRA. Additionally, this information provides the basis or baseline for applying adaptive management. The following sections include an overview of Park history and setting characteristics, regional context and land use, and assessments of climate, air quality, hydrology, geology, soils, and erosion.

3.1 LOCATION

The Park is in eastern, unincorporated Sacramento County, approximately 20 miles east of downtown Sacramento, California (Figure 2). This Park lies in the transition zone between the central valley and the Sierra Nevada foothills, and the American River is approximately four miles to the north. The Park covers portions of Sections 25, 26, 30, and 31 on the USGS Buffalo Creek 7.5 quadrangle and is approximately 1,350 acres.

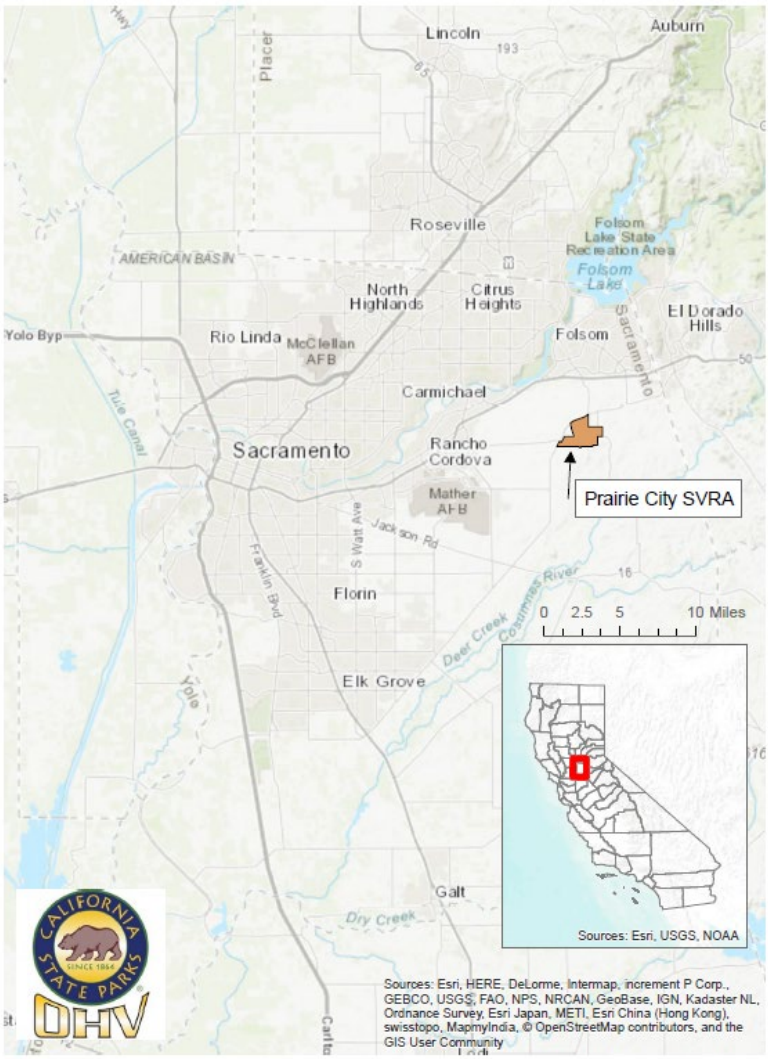

Figure 2. Location of The Park

3.2 HISTORY

The Park is situated at the intersection of the Nisenan (sometimes referred to as the Southern Maidu) and Plains Miwok prehistoric spheres of influence. A few bedrock milling features can be found within the Park's boundaries, and additional milling features may be buried beneath the sediment (CDPR 2016a).

During the Gold Rush, miners started a boomtown a few miles north of the Park bearing the name of Prairie City. The Park displays the remains of bucket-line dredging operations of the

Capital Dredging Company, which operated from 1927 to 1952 in the western portion of the present-day SVRA (Figure 3).

In December 1950, Aerojet purchased 7,200 acres of land, including the area currently occupied by the Park. In 1962, Aerojet began developing the M-1 Rocket Engine Program for NASA. In February 1965, the project received a stop-work order, and the program was halted. Most facilities related to the program were dismantled and removed. Area 39, a Superfund Site, contains former test stand burn areas and former waste production burn areas fenced off to prohibit access (Figure 3). Several contaminated groundwater plumes have been identified at the former Aerojet operations facility. As part of a remediation effort, there are numerous groundwater monitoring and extraction wells owned/operated by Aerojet to capture and treat the groundwater.

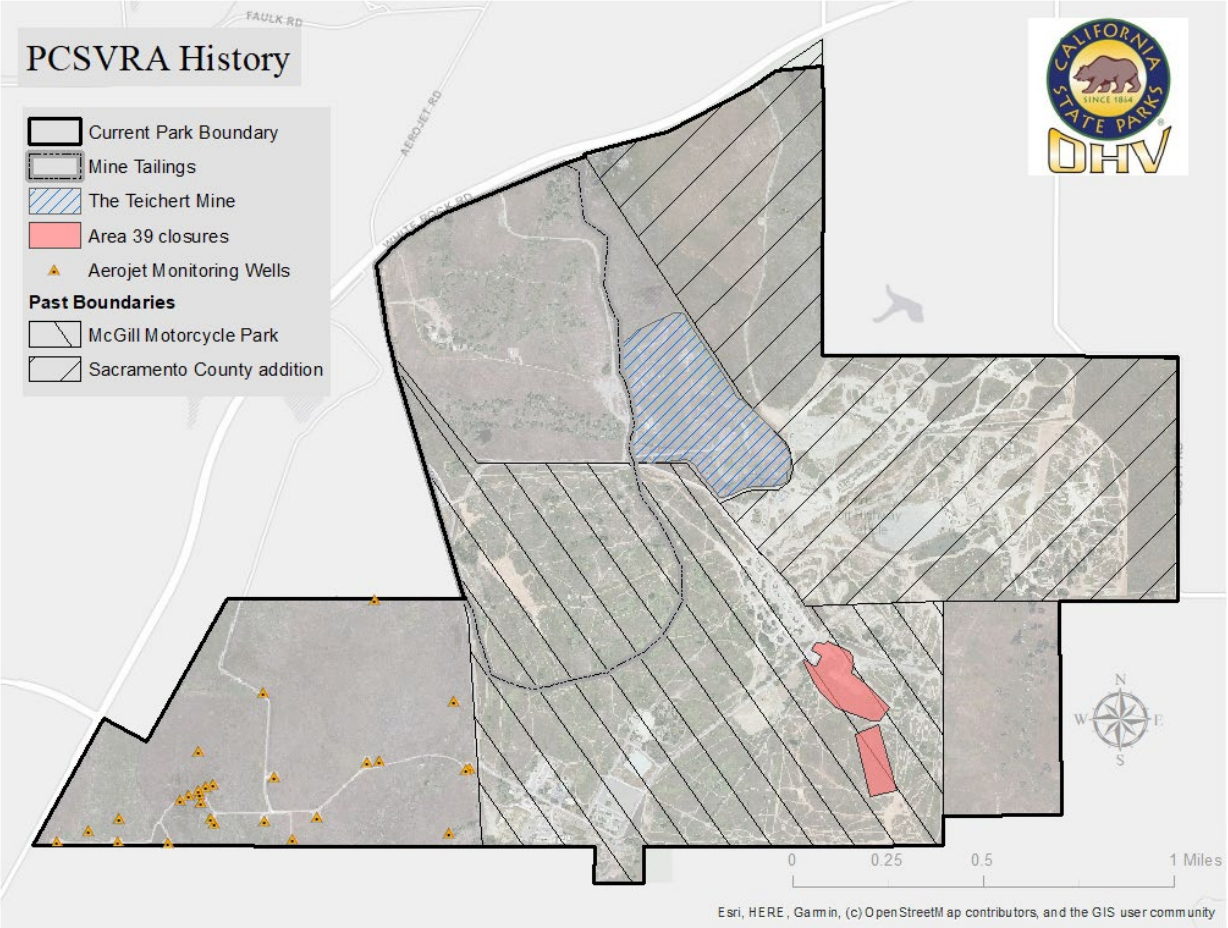

Figure 3. Physical Remnants of Historic Use within Prairie City SVRA

In 1972, Aerojet sold 435 acres of property to Roy and Mary McGill, who established a private motorcycle park. Sacramento County purchased the Park in 1975, using funds from the

OHMVRD Grants and Cooperative Agreements Program, and purchased an additional 401 acres in 1976. When OHMVRD purchased the land in 1988, it inherited existing facilities and a network of dense user-created trails and tracks not designed with the mindset of natural resource sustainability.

Since that time, the OHMVRD has purchased a few of the surrounding properties along with associated existing and new easements or leases such as the Teichert conveyor belt on Barton, the Teichert Gravel Mine, or "The Pit," on Yost, and the Aerojet test and extraction wells on Ehnisz (Figure 3). The current size of the Park is approximately 1,350 acres.

3.3 Regional Land Use

Prairie City SVRA is mainly surrounded by private land owned by Aerojet Rocketdyne Holdings Inc. (Aerojet), Teichert, and Barton Ranch (CDPR 2016a). The land use designations within these properties are mostly General Agriculture, except the properties to the north designated as Extensive Industrial in the Aerojet Planning Area and Community Commercial in the Folsom Plan Area (CDPR 2016a). Aerojet owns the property to the west and north of the SVRA (approximately 8,000 acres) and uses the property for industrial operations and aerospace and defense product testing. There is also a ground-mounted, 6-megawatt solar electric system. The Teichert-owned property located east and south of the SVRA is used for mining, and the Barton Ranch property, also located to the east and south, is used primarily for cattle grazing. Portions of the General Agriculture land use designation to the northeast and southeast of Prairie City SVRA have a Resource Conservation Area combining designation that identifies areas with special resource management needs. Such needs may include vernal pool management, wetland creation, waterfowl management, peat soil conservation, and blue oak woodland harvesting (CDPR 2016a). There are multiple land use designations within the East Planning Area, Grant Line West Planning Area, and the Folsom Plan Area Specific Plan Area (Figure 4).

The East Planning Area, Grant Line West Planning Area, and the Folsom Plan Area all have residential and community commercial components and are expected to include roughly 24,000 dwellings of various densities between the three of them. The East Planning Area adjacent to the Park is designated as General Agriculture and Extensive Industrial although there is conceptual planning for Community Commercial further south than what is shown in Figure 4 (CDPR 2016a). The City of Rancho Cordova has started construction within the Grant Line West Planning Area and has initiated an EIR for a new housing development, called the Preserve, in the area. Construction has already started within the Folsom Plan Area on the east side and is moving west towards the Park. Folsom Plan Area updates can be found here. For more detailed information on these planning areas and nearby regional recreation facilities, see Section 2.1 of the 2016 GP.

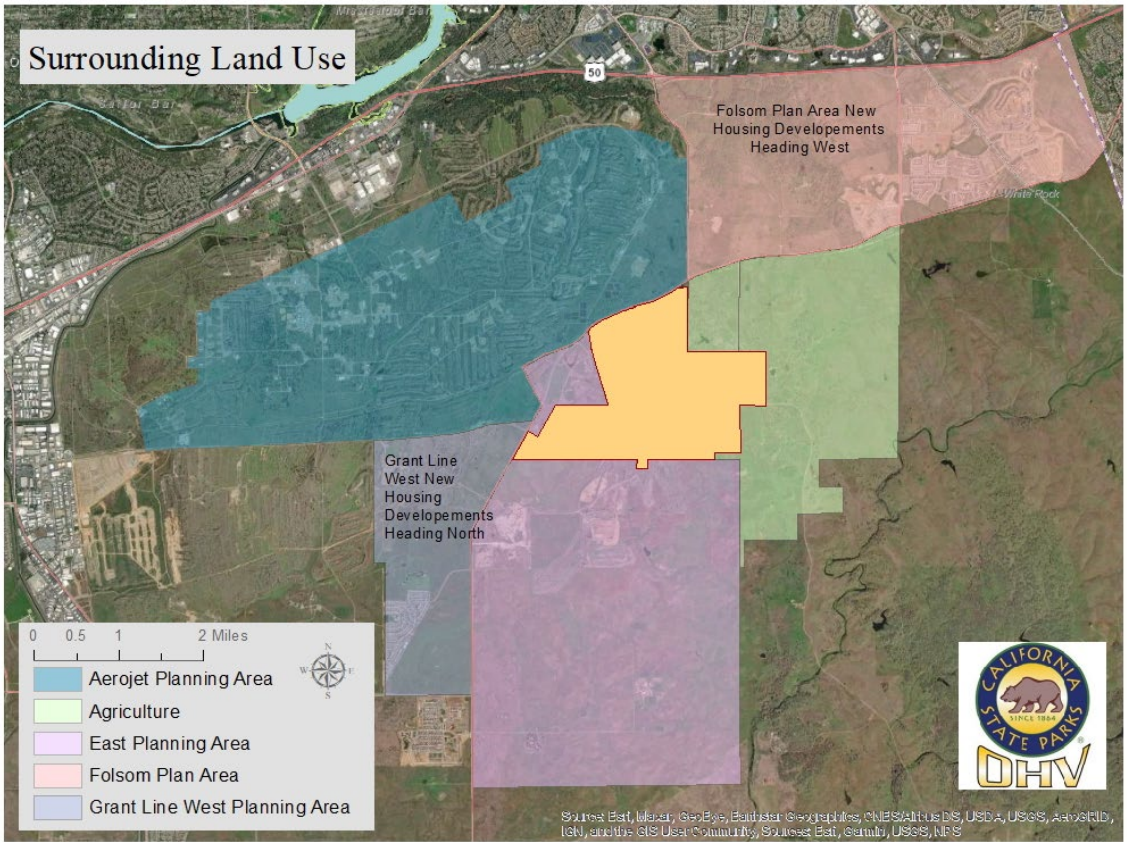

Figure 4. Regional Land Use around Prairie City SVRA

There are various easements across the Park. Several are for utility providers, such as Pacific Gas and Electric Company (PG&E) and Sacramento Municipal Utility District (SMUD), to allow transmission lines to run through the site and to maintain electric poles (Figure 5). Teichert owns a 100-ft exclusive easement for a conveyor belt located within Barton in the Park's southeastern corner. In addition, a 150-ft haul road easement under Barton Moser LLC for mining operations is located along the southern boundary of the SVRA into Ehnisz, connecting to Grant Line Rd. On the Ehnisz property, there are numerous groundwater monitoring and extraction wells owned/operated by Aerojet to capture and treat contaminated groundwater generated from past disposal practices.

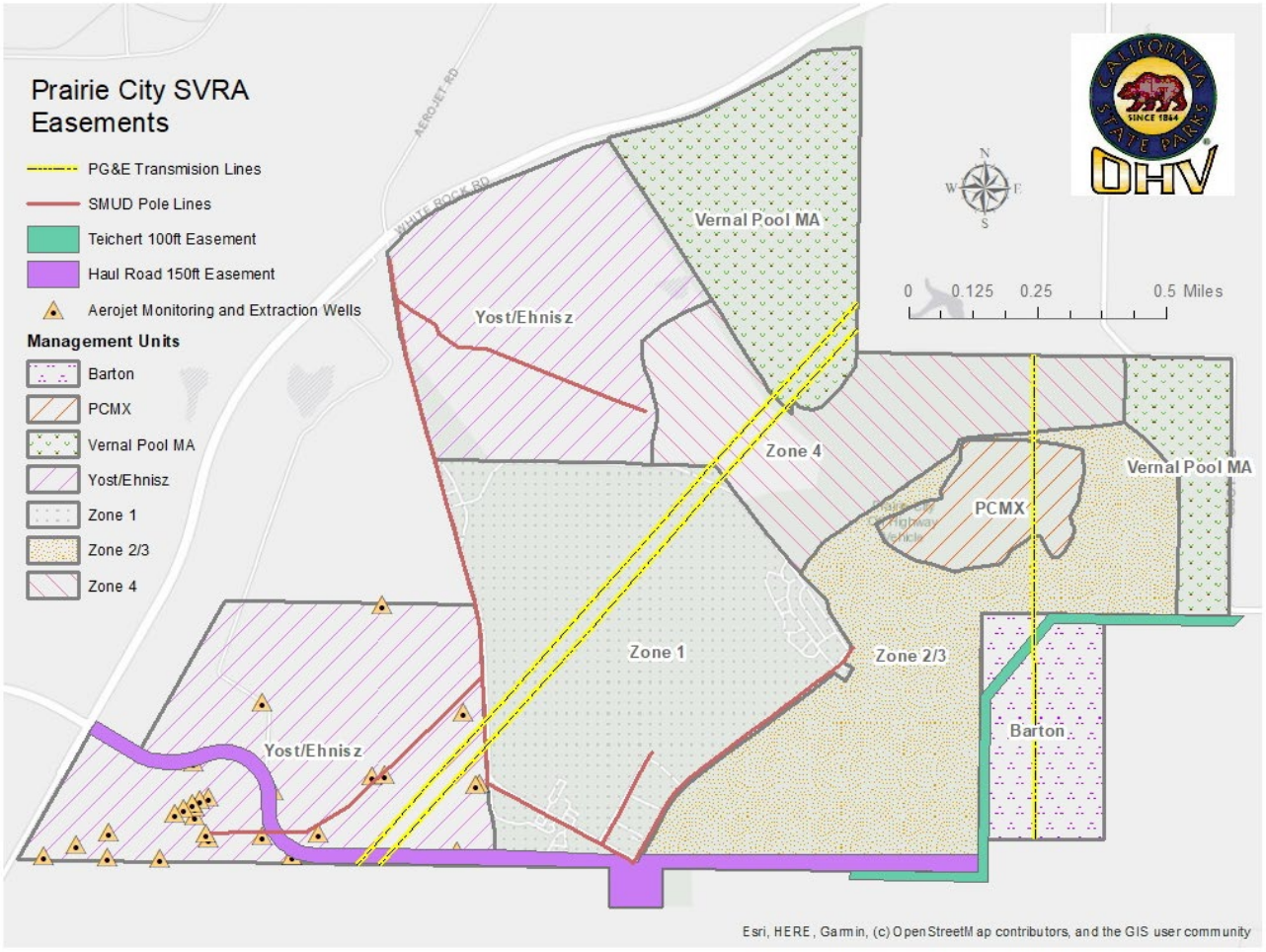

Figure 5. Easements within Prairie City SVRA

3.4 SVRA Land Use

Prairie City SVRA has been used for OHV recreation since the early 1970s. Although the first recreationists to ride in the area were primarily motorcycle riders, today the SVRA offers a variety of recreational opportunities that include trails and tracks for motorcycles, all-terrain vehicles (ATVs), four-wheel-drive vehicles (4x4s), recreational off-highway vehicles (ROVs), trial bikes, go-karts, and quarter midgets. The SVRA is also used by mountain bikers from March until June when the Park is closed on Wednesdays to OHV recreation for maintenance.

Prairie City SVRA operates from 8 a.m. to sunset. Prairie City SVRA is busiest from October through April. Typically, the annual Hangtown Motocross Classic is held in June and the annual Visitor Appreciation Day is held in October. The Hangtown Motocross Classic is the largest special event held at the SVRA and has hosted up to 30,000 attendees in the past. The race is

part of a national championship motocross series and is put on by the Dirt Diggers North Motorcycle Club (part of District 36 of the American Motorcyclist Association Motorcycle Sports Committee Corporation) and has been held at this location for over 40 years.

Existing facilities include the staff offices, maintenance facilities, ranger station and visitor services kiosk, the environmental training center, various practice tracks, staging areas, obstacle course area, 30 miles of roads and signed trails, 40 miles of historic user-created trails and 4x4 area special event route (Figure 6). For more details on these facilities see the 2016 GP Section 2.2.3 (CDPR 2016a).

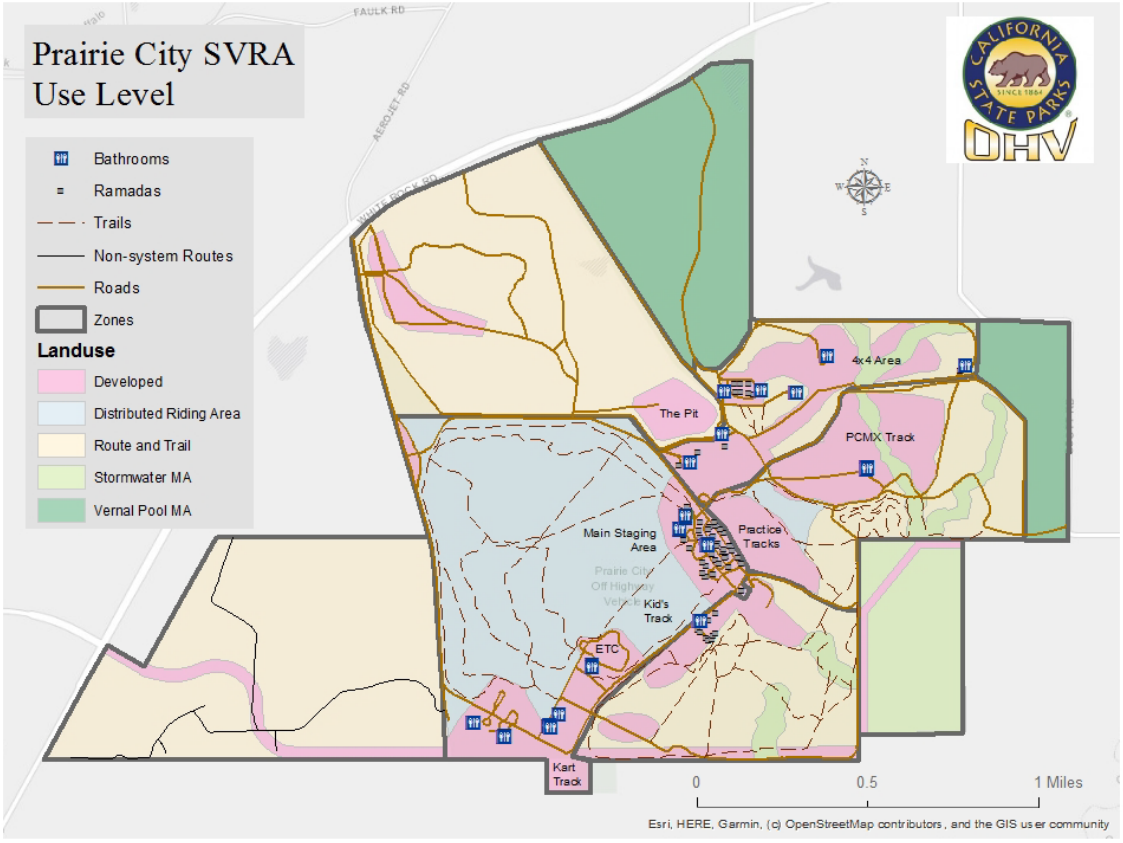

Figure 6. Land Use and Zoning within Prairie City SVRA.

The GP determines land use designation within the Park and is divided into five land-use types: Developed Use Area, Distributed OHV Recreation Use Area, Route and Trail System Use Area, Stormwater Management Use Area, and Vernal Pool Management Use Area (Figure 6). The following provides a short description of each use type. Prior to the adoption of the GP, the park was operated as an open ride park similar to the distributed riding use area described

below. Some areas of the park are still undergoing transition between this open ride riding and route and trail system use riding. The bullets below are definitions for these use areas as written in Table 4-1 of the General Plan. For more information, see the GP Section 4.3 (CDPR 2016a).

- Developed Use Area: An area that accommodates the more intense recreational and administrative uses and includes existing and future-built facilities. This area provides vehicle access, structured recreation, and visitor services and supports operational needs.
- Distributed Riding Area: An area where OHV recreation is not confined to identified routes and trails. Vegetation is protected in the distributed OHV recreation use area in accordance with CVC Division 16.5.
- Route and Trail System Use Area: An area where OHV recreation is allowed only on identified routes and trails.
- Stormwater Management Use Area: An area used to treat SVRA stormwater runoff, improve water quality, and incorporate water quality improvement facilities and stormwater control features.
- Vernal Pool Management Use Area: An area with a high concentration of vernal pools, which are seasonally ponded wetlands that occur on soils with a restrictive hardpan or claypan layer. Vernal pools are typically characterized by a unique set of plant species and often provide habitat for specially adapted plants and animals, including several species listed under the California and federal Endangered Species Acts. Vernal pools are protected by federal law under the Clean Water Act and many vernal pools plant associations are considered sensitive natural communities by CDFW.

3.5 EXISTING CONDITIONS ASSESSMENT

The purpose of assessments and reassessments is to document soil conditions within the SVRA and to identify maintenance/repair needs, evaluate trail performance, and establish a process for future monitoring (CDPR 2020b). The following assessments are based upon a comprehensive survey and review of multiple sources or types of information. Information is assembled and available for future reference. Data is current, geographically comprehensive, and data collection methods are well documented. Much of the following information is adapted from the GP (2016).

3.5.1 Climate and Air Quality

The region has a Mediterranean climate with dry, hot summers and mild winters. Precipitation occurs mostly from November through April, averaging around 25 inches per year (CDPR

2016a). Typically, little or no precipitation falls during June, July, and August. The region's intense heat and sunlight lead to high ozone concentrations from May to October. In the summer and early fall, a layer of warm air in the atmosphere, called a temperature inversion, traps in pollutants and can cause higher ozone concentrations (CDPR 2016a). Regional wind patterns affect air quality by moving pollutants downwind of sources.

3.5.2 Topography, Hydrology, and Wetlands

The Park is within the 12-digit Hydrologic Unit Code watersheds of Upper American River, Upper Morrison Creek, and Carson Creek (CDPR 2016a). The USGS developed the Hydrologic Unit Code to subdivide and classify increasingly smaller watersheds across the United States. It uses eight levels of watersheds identified by two to 16-digit codes based on the level: two-digits are the largest watershed and 16 the smallest (USGS 2021). Two ephemeral streams and one intermittent stream flow southeasterly through the Park into Coyote Creek. An ephemeral stream runs northwesterly through the northeast corner of the SVRA and is a tributary to Buffalo Creek (CDPR 2020a). Local surface water features in the Park include seasonal drainages (swales, human-made ditches, and ephemeral drainages), ponds, and vernal pools. The on-site drainage features appear to intercept groundwater in several locations. In general, rolling hills are bisected by drainage swales feeding north-south–oriented tributaries flowing into Coyote Creek (Figure 7).

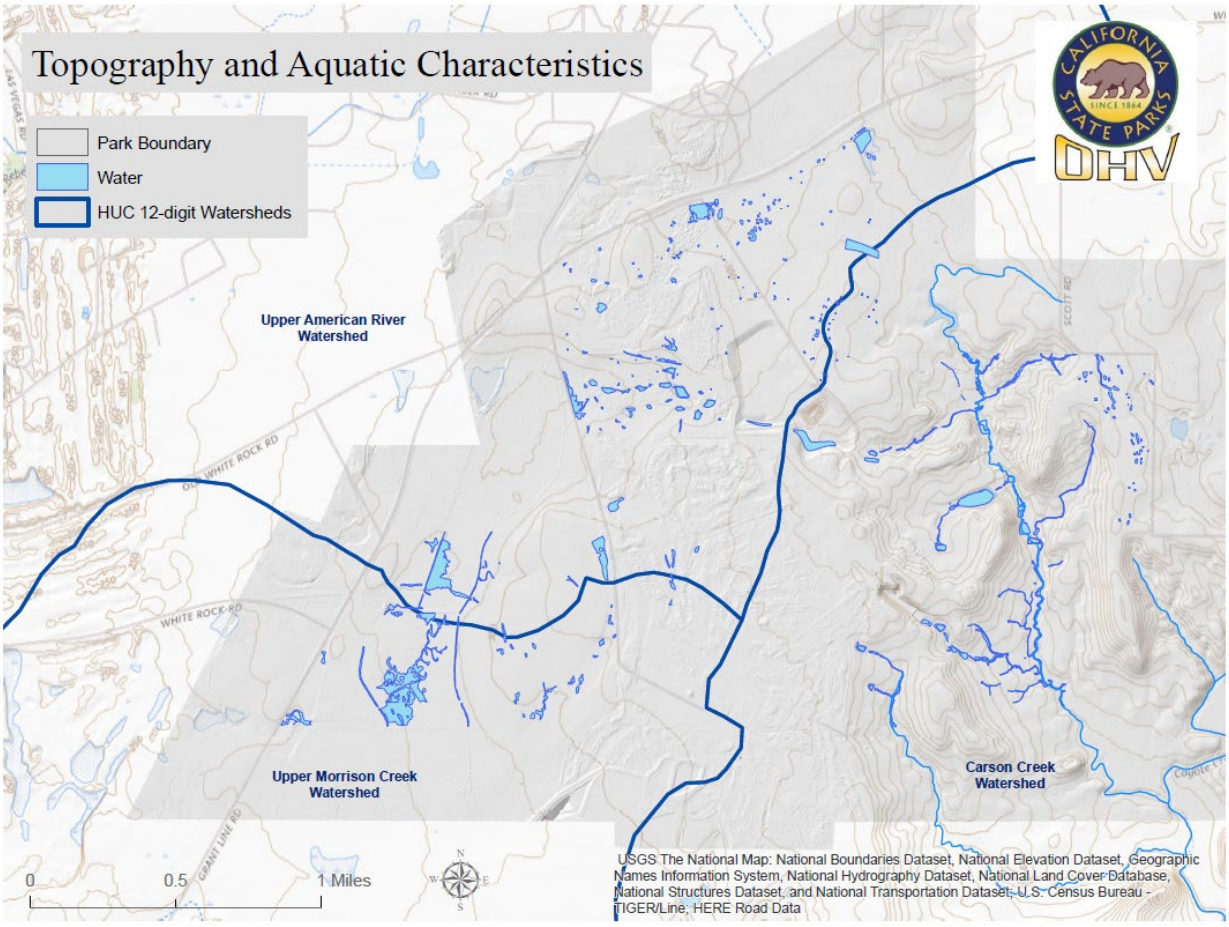

Figure 7. Topography and Surface Water Characteristics at the Park.

Figure 8 shows all currently known sensitive aquatic resources within the Park. These may support special status aquatic plants and animal species and/or be under the jurisdiction of another agency such as the Army Corp of Engineers or CDFW for project-related activities. There are 0.98 acres of an intermittent stream, 2.6 acres of ephemeral stream, 11.2 acres of vernal pools and swales, 9.4 acres of general wetlands, and 13.4 acres of man-made ponds and ditches. Sediment basins make up 4.1 acres of the last category. These basins are cleaned annually of any accumulated sediment under a Lake and Streambed Alteration Agreement (LSAA) 1600-2016-0154-R2 (For more information on this maintenance see Section 6.4).

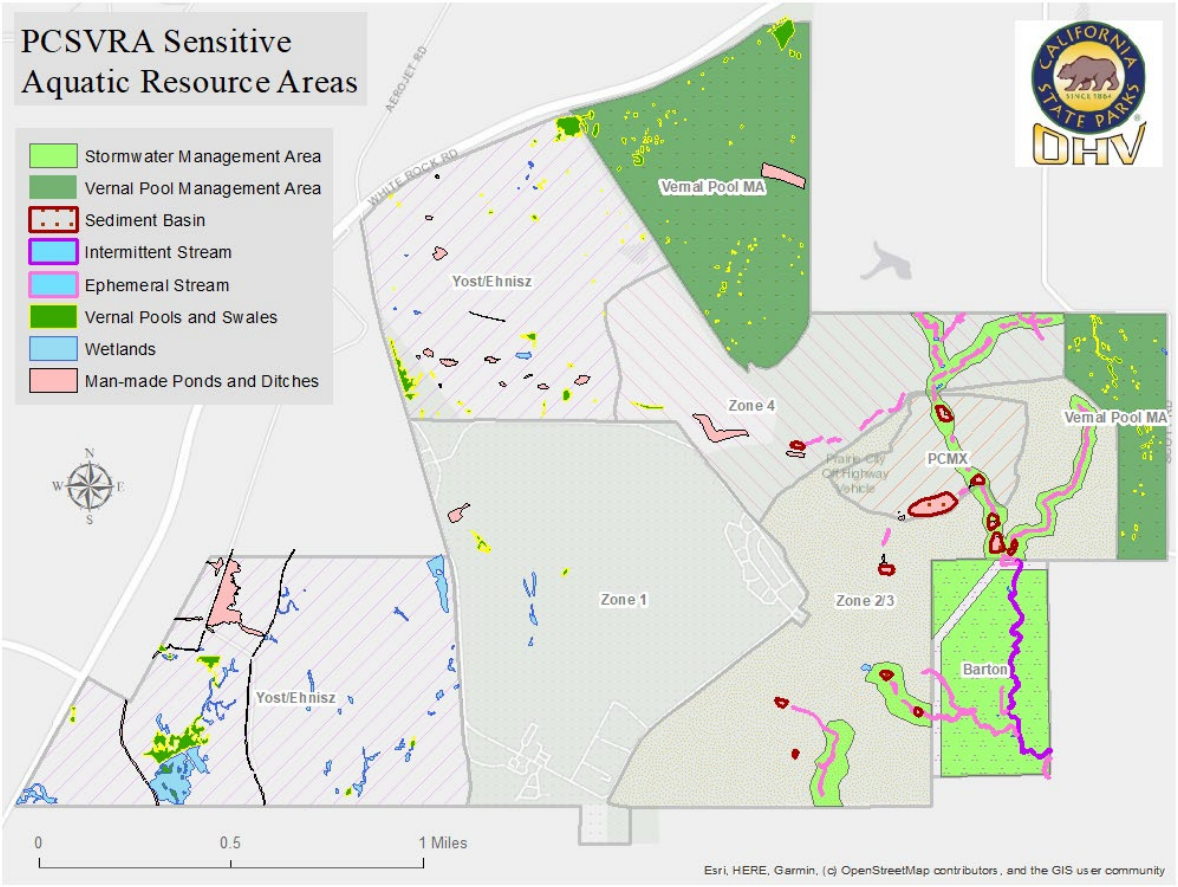

Figure 8. Sensitive Aquatic Resource Areas within Prairie City SVRA.

The Stormwater Management Area land use designation from the GP provides for some run-off treatment and filtration before the water hits the sensitive waterways (Figure 8). The Standards recommend more specific watercourse and lake protection zones based on watercourse type and the surrounding slope. There is only one intermittent stream, or Class II watercourse based on the definition in the Soil Conservation Standard and Guidelines, within the Park. It is located on the Barton property, which is closed to motorized recreation and already within a stormwater management area. The ephemeral streams, or Class III watercourses, run through Zone 4 MU, Zone 2/3 MU, and PCMX MU. Most of these features are already within the Stormwater Management Area, allowing limited OHV recreation while instituting stormwater management measures to prevent water quality degradation and soil loss, such as a vegetation buffer along the drainages. Additional protections are determined as needed to protect wetlands and ephemeral streams not within the stormwater management areas.

3.5.3 Geology and Soils

The Park is located within the USGS Buffalo Creek 7.5-Minute Quadrangle. The northern and western portion of the Park ranges from 280 to 300 feet above mean sea level (CDPR 2016a). This area generally consists of gently rolling to nearly level topography. The topography in the eastern portion of the Park is variable, with elevations ranging from 240 to 300 feet above mean sea level. The Park also contains gold dredge mine tailings, which consist of low mounds (5−10 feet high) of cobbles, silt, and sand. In the northern section of the Park there is a reclaimed gravel quarry that is generally bowl-shaped, with the top rim of The Pit being approximately 48 acres in area and the bottom approximately 26 acres in area and roughly 80-feet deep.

Prairie City SVRA consists of the following geologic formations (Figure 9):

- Dredge tailings consist of piles of cobbles, silt, and sand from former gold dredge mining activities. The tailing piles lie within the northwestern portion of the Park area and generally consist of low mounds ranging from 5 to 10 feet high.
- The Laguna Formation, which is of Pliocene age, consists primarily of reddish to yellowish brown silt to sandy silt and clay with minor lenticular gravel beds, deposited on broad floodplains by meandering, slow-moving streams.
- The Mehrten Formation is of Pliocene-Miocene age. It is a thick deposit consisting predominantly of lahar (volcanic mudflow) deposits with occasional beds of volcanic ash. The Mehrten Formation within and near Prairie City SVRA consists predominantly of weakly to strongly cemented, fine to medium-grained andesitic sandstone.
- The Ione Formation was formed from fluvial, estuarine, and shallow marine deposits of Eocene age. These deposits consist of quartzose sandstone, conglomerate, and claystone and are generally soft and deeply eroded. The Ione Formation contains beds of kaolinite clay that formed from weathering and chemical decomposition of Sierran granitic rocks rich in feldspar minerals.

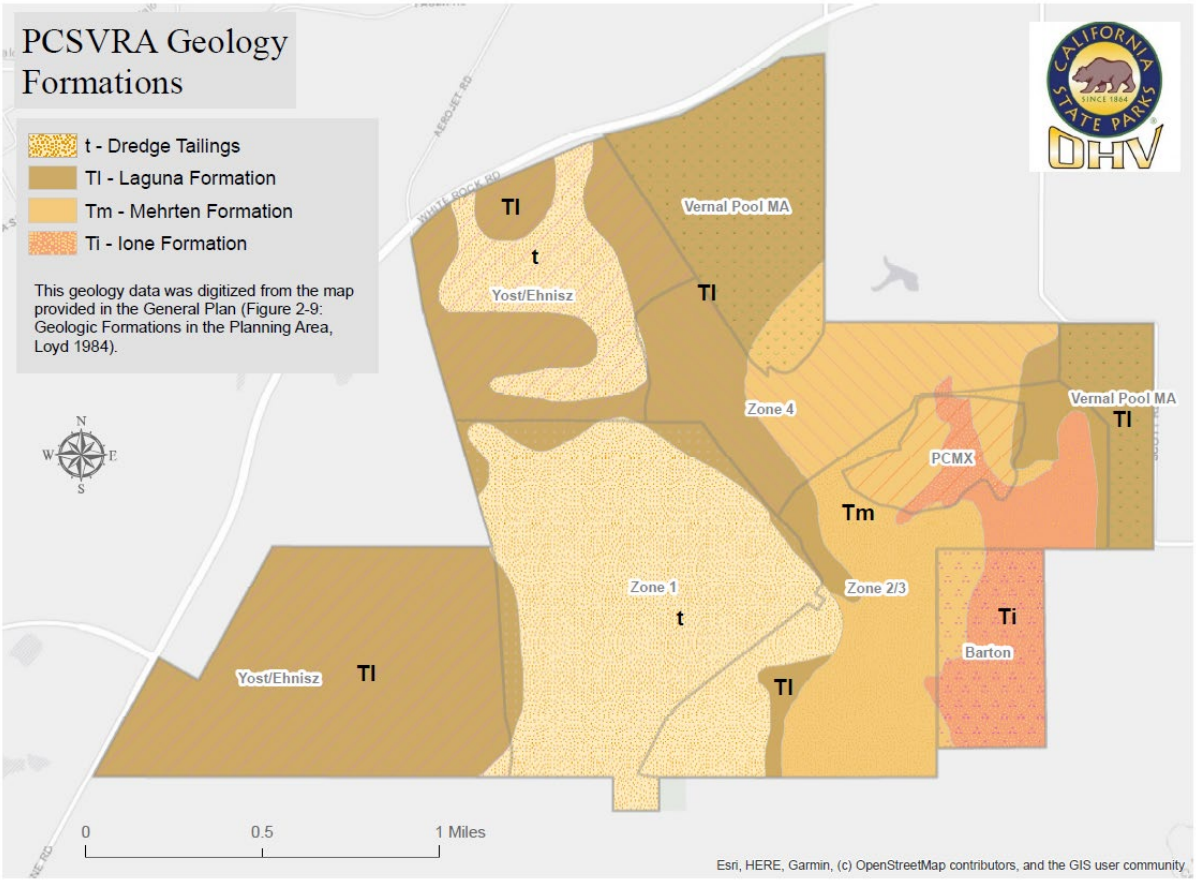

Figure 9. Geological Formations within Prairie City SVRA.

There are 14 different soil types within the Park (USDA 2021). The US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey is the authoritative national source of soil survey information and uses the best available soil taxonomy (USDA 2021). Figure 10 groups these soils into four different categories based on soil texture type for ease of understanding. All soil types are moderately susceptible to water erosion, while sandy clay with silt is the only soil type particularly suspectable to wind erosion. Many existing facilities and historically user-created trails and the main drainages are within this sandy clay with silt soil type. These areas are currently undergoing dust emissions management actions such as track and road watering and annual dust suppressant application. Gravely sand with silt and clay and sandy silt with clay types have moderate shrink-swell potential. These soil types have high clay content and are thus likely to undergo substantial volume changes as soil moisture content increases or decreases. Many wetlands and oak woodland habitats fall within these areas. Isolated wetlands and pockets of riparian or cottonwood forests can be found within the dredge tailing areas. See GP Section 2.3.1.1 for more detailed information on geology and soils.

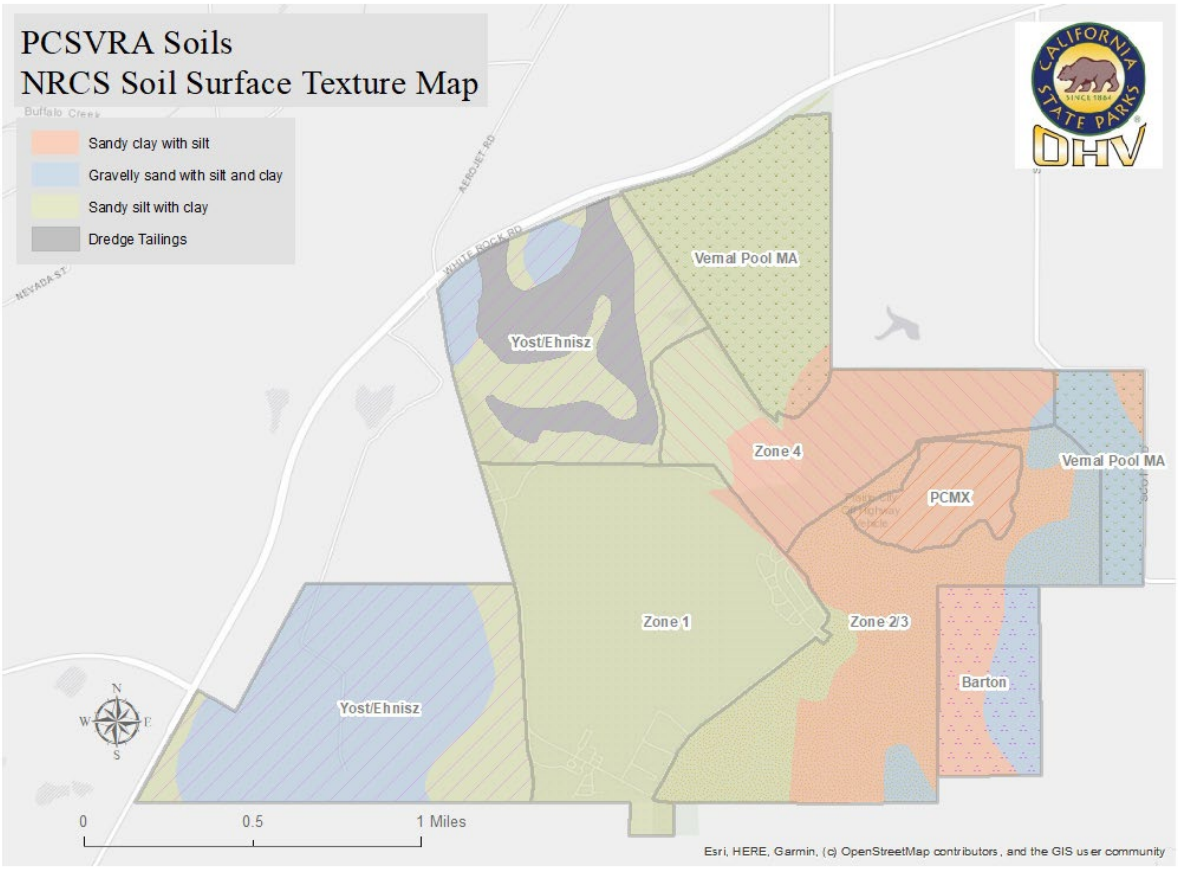

Figure 10. USDA Soil Surface Textures within Prairie City SVRA.

3.5.4 Assessment of Erosion

An assessment of erosion potential at Prairie City SVRA identifies areas which may be inherently more prone to erosion and consequently may need specific drainage and erosion control design considerations. Road and trail erosion evaluations, water quality assessments, and examining the amount of exposed ground outside of managed facility areas can help determine the areas that need additional maintenance or rehabilitation.

Road and Trail Erosion Evaluation

Roads and signed trails were mapped in 2018 and 2019 through initial planning of the RTMP using Field Guide for Road and Trail Assessment (CDPR 2014) and training from the Strategic Planning and Recreation Services Division. During the initial assessment, unique segments were created and mapped for all signed roads and trails within the Park as described in Section 5.1. An overall erosion severity rating was given to each road trail segment (Figure 11).

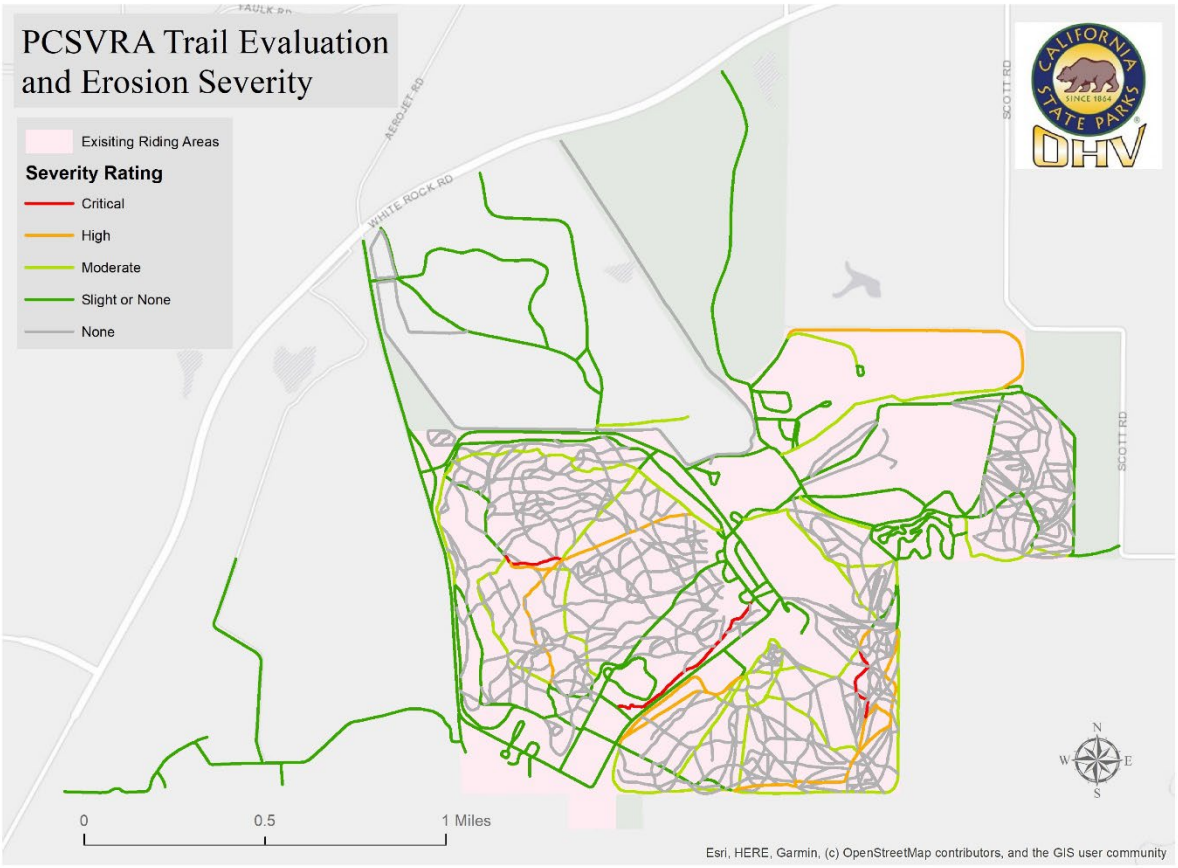

Figure 11. Erosion Severity and Trail Evaluations at Prairie City SVRA.

This map and ratings will serve as the baseline for future road and trail monitoring (See Section 5.1 for more detail on monitoring methodology). Any new official road or trail, created after the baseline will be added and evaluated in the same fashion. This map will be a planning tool to decide which trails to preserve, modify, or restore when transitioning from distributed riding to route and trail system areas in the Park.

Water Quality Assessment

Water quality is monitored during storm events at sampling sites within Prairie City SVRA. Sampling points were selected as part of a Capital Outlay Project to determine erosion control BMPs within the main drainages of the Park. These points are sampled for turbidity during storm events and indicate high priority areas in need of maintenance, repair, or restoration and where the greatest impacts to soils and aquatic resources impacted by soils are occurring.

Remote Sensing and Imagery Analysis

Vegetation cover and the inverse, bare ground/developed cover, are analyzed every two years using aerial imagery and a Geographic Information System (GIS) analysis (See Section 5.2 for more detail on monitoring methodology). Bare ground is more likely to experience soil loss due to wind, water, and mechanical erosion. As of 2020, the bare ground areas (brown) outside of facility and developed areas is 67 acres which is 5% of the total Park acres (Figure 12, CDPR 2021c). This number is essentially the percentage of eroded areas that can be restored in the future. However, the acreage does not account for the footprints of future sustainable trail creation through the RTMP. The total bare areas including these facilities and development areas make up 20% of the total Park acre (See Section 5.2 for more details).

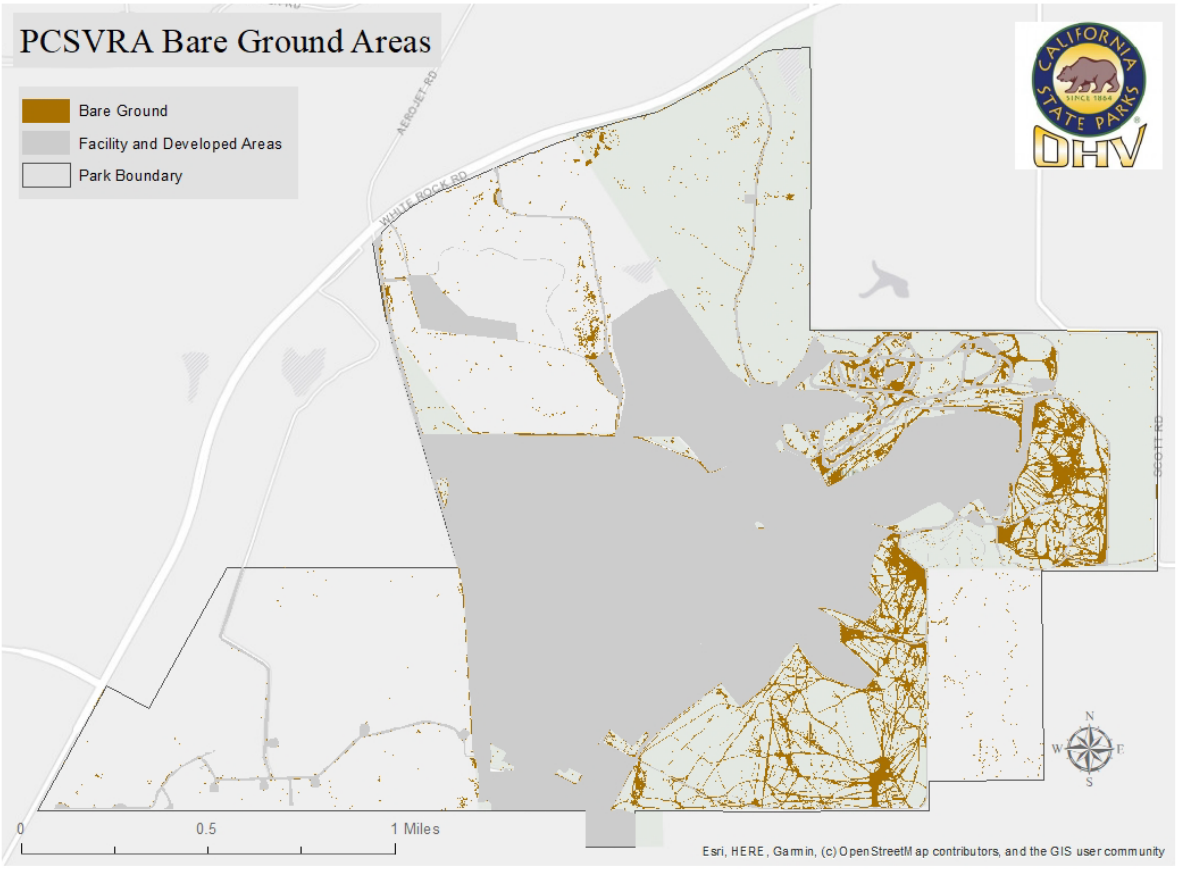

Figure 12. Bare Ground Outside Developed Areas in the Park

Analysis of Watercourse Crossings

Part of soil management is assessing erosion along trials, within waterways, and at watercourse crossings. Erosion of soil by wind, water, or vehicle use can increase airborne dust and reduce

water quality which can impact vegetation, habitats, wildlife and visitors within the Park and the surrounding area. To conserve soils, analyses of watercourse crossings along roads and trails were conducted using computer GIS analysis and past stormwater infrastructure, trail, and water quality monitoring (Figure 13). The analyses established maintenance priorities where low priorities have a minimal potential impact on soils, such as where existing culverts or articulated concrete block are in place to reduce sedimentation, and high priorities have the potential for increased impacts due to the proximity to sensitive aquatic resources or do not have existing crossing infrastructure in place. Management actions and projects will be designed to target these high priority areas first.

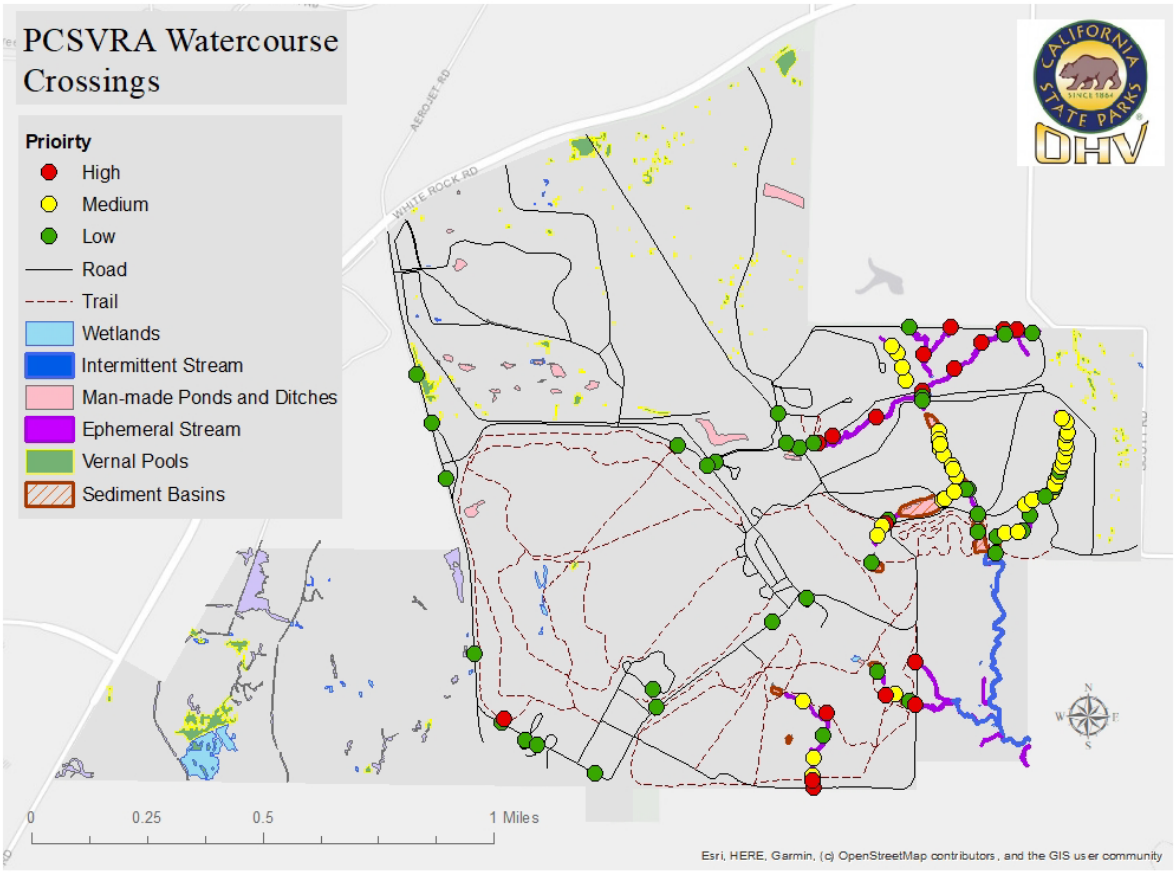

Figure 13. Analysis of Watercourse Crossings within Prairie City SVRA.

A hydrology study was completed in 2016 by Michael Baker International to establish baseline flow conditions through the Park (CDPR 2016b). The ephemeral drainages in the eastern portion of the Park were split into sub watersheds using GIS modeling and aerial imagery (Figure 14).

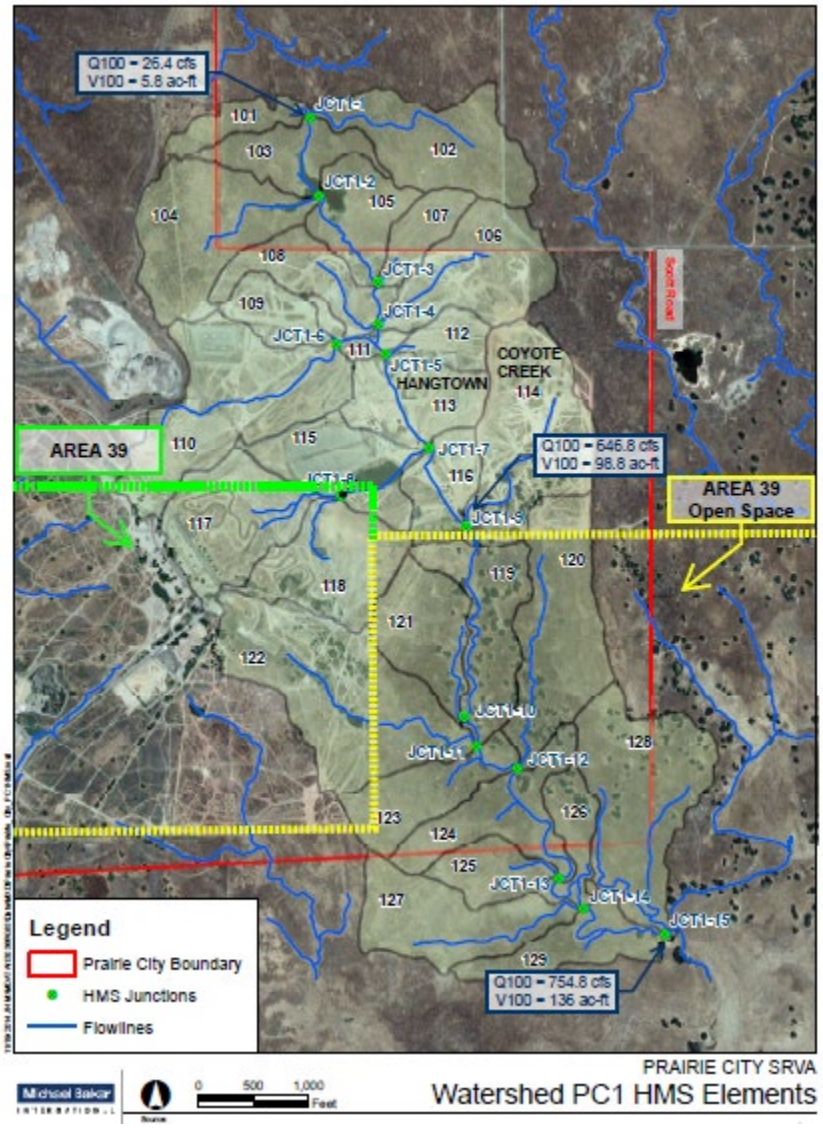

Figure 14. Hydrology and Sub-Watershed Report from 2016

Flows were modeled using low points on these sub watersheds and data from 2-, 10-, and 100-year storm events (Table 1). This volumetric data will be used to design proper watercourse crossings in areas where they are lacking.

Table 1. Flow Rates at Low Points of Sub Watersheds in Prairie City SVRA.

HMS Model Results

Hydrologic Element	Description	Drainage Area [acres]	2-year, 24-hour		10-year, 24-hour		100-year, 24-hour	
			Peak Discharge [cfs]	Volume [ac-ft]	Peak Discharge [cfs]	Volume [ac-ft]	Peak Discharge [cfs]	Volume [ac-ft]
JCT_PC1-1		36.8	1.4	0.9	8.1	2.4	26.4	5.8
JCT_PC1-2	Off-Property Reservoir Overflow	84.0	5.8	2.5	24.5	6.1	73.7	14.2
JCT_PC1-3		108.8	8	3.3	32.8	8.1	95.3	18.9
JCT_PC1-4		151.1	24.4	6.7	65.9	14.4	161.8	30.7
JCT_PC1-6		52.5	42.6	5.6	74.4	9.6	131.1	16.9
JCT_PC1-5	Upstream of Hangtown	215.8	74.2	13.7	147.2	26.2	300.5	51.5
JCT_PC1-8		52.0	43.9	5.3	78.5	9.2	140.8	16.4
JCT_PC1-7	Downstream of Hangtown	307.6	156.4	24.7	282.8	44.4	530.1	82.5
JCT_PC1-9	Downstream of Coyote Creek and OHV Area	357.9	194.2	30.1	349	53.6	646.8	98.8
JCT_PC1-10		377.2	188.9	30.7	338.3	55	625.2	102.1
JCT_PC1-11		451.0	198.4	33.1	368.1	60.7	705.3	115
JCT_PC1-12		503.7	193	33.9	370.3	63.2	737.6	121.7
JCT_PC1-13		535.1	189.7	34.8	360.5	65.4	746.6	127
JCT_PC1-14		570.7	187	35.2	363.6	66.7	749.4	130.7
JCT_PC1-15		626.0	178.7	35.6	362.5	68.3	754.8	136

3.6 Management Units

Resource Management Units (MUs) provide a structure for implementing natural resource management activities. MUs are defined areas of land with unique identifiers which constitute manageable-sized areas for organizing and scheduling management work (CDPR 2020b).

MUs were established at Prairie City in 2020 to provide a structure for implementing and organizing maintenance and natural resource management activities. Delineation of Prairie City SVRA MUs was based on vegetation community differences, OHV use type, and the similar regime of routine maintenance and management needs (Figure 15).

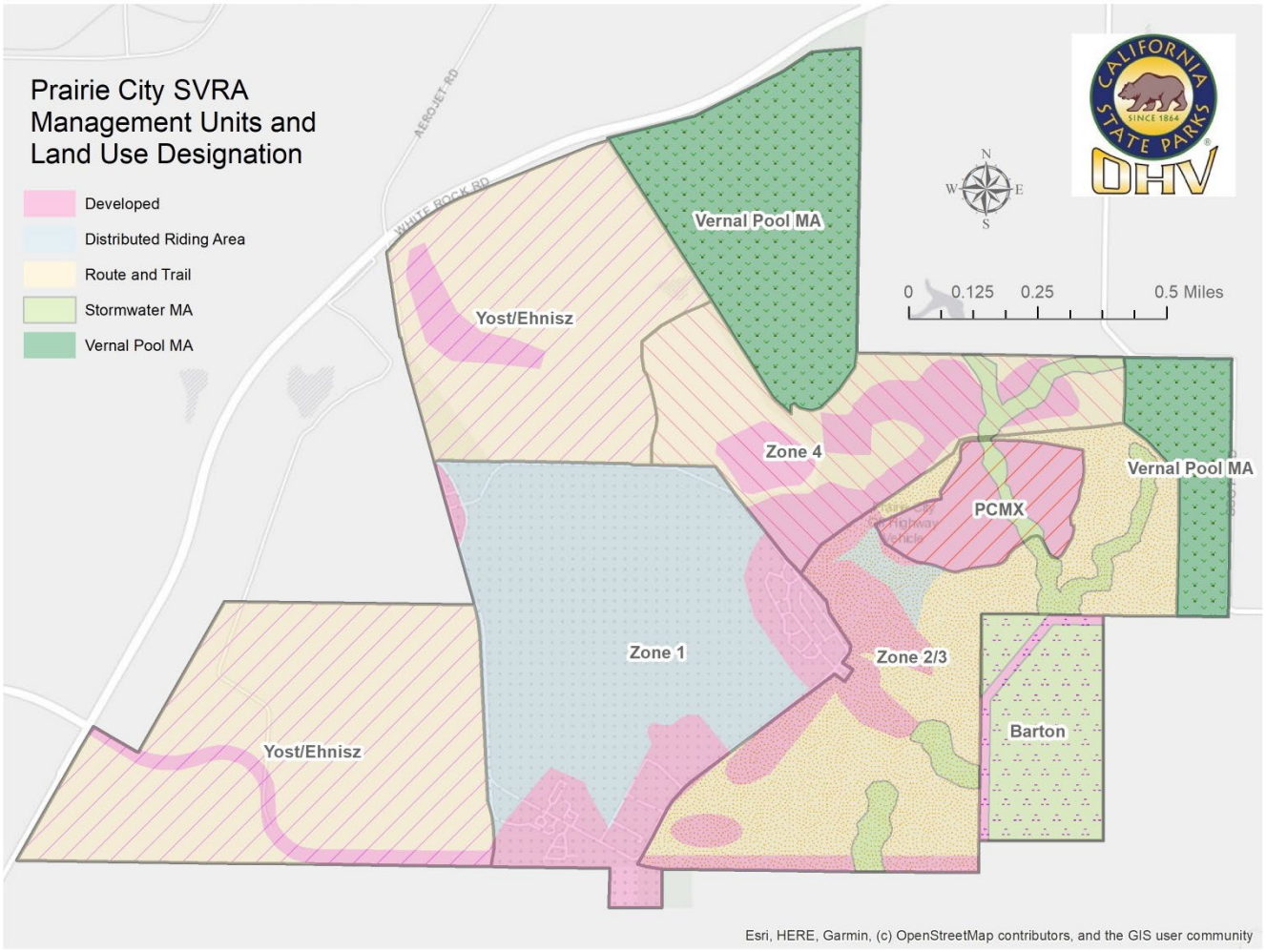

Figure 15. Management Units at Prairie City SVRA

Zone 1 MU (Figure 16) is characterized by dredge tailings that support Mediterranean California naturalized annual and perennial grassland interspersed with elderberry, coyote bush, and cottonwoods. A few signed trails exist in the area as well as numerous user-created trails. This MU currently allows the following vehicle use types: motorcycle, trials bikes, ATVs, and ROVs. The zone is designated as a distributed riding area in the GP, meaning visitors may use any existing trails, signed or not, but may not create new trails. A few isolated wetlands can be found in the western portion of Zone 1.

Most of the trails within Zone 1 are on top the dredge tailings with very shallow topsoil, if present. As such, most of the area drains well and provides few erosional issues. In areas where more topsoil is present, the trail tread can become very compacted and hold water for long periods of time during the rainy season. Management activities include storm water infrastructure and trail maintenance, special event monitoring and possible restoration and/or resource projection projects.

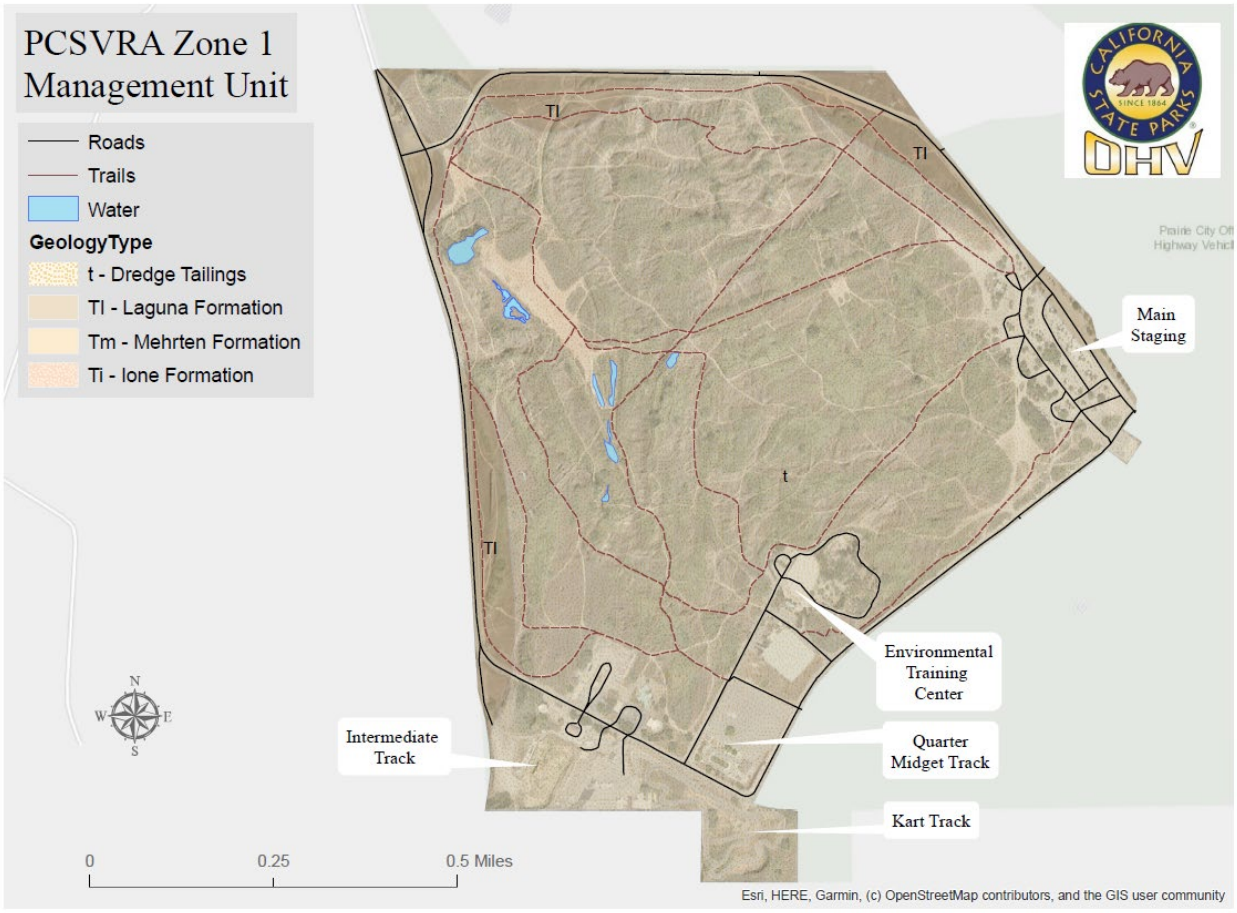

Figure 16. Soil Related Resources within Zone 1 MU.

Zone 2/3 MU (Figure 17) is an area of rolling hills composed of Mediterranean California naturalized and perennial grasslands with two main ephemeral drainages. This area has the most diverse geology of the management units. As with Zone 1, dredge tailings areas have very little erosion. Most of the roads and trails here are on compacted sandy loam that can become dusty in the summer when it's warm and susceptible to ponding during the rainy season. If off-trail riding or widening occurs to avoid flooded areas, then the saturated ground outside the trail tread can become greatly impacted - manifesting as vegetation loss and deep ruts that can further channelize water resulting in exacerbated erosion. This MU currently allows the following vehicle use types: motorcycle, trial bikes, ATVs, and ROVs.

Zone 2/3 MU is in the process of shifting from "open riding" to a designated route and trail system use area as identified in the General Plan. The 2017 Oak Hill Trail Project within the MU was the first project to lead this shift. For example, the 9-acre Oak Hill area, which was previously used for "hill climbing" and contained a multitude of user-created trails, was heavily eroded due to vehicle use and stormwater. After collecting public and stakeholder input, a trail plan was created that supported both responsible, sustainable stewardship of the land and appealed to park users. Oak Hill then underwent vegetation restoration, and three new, sustainable single-track trails were installed. The Oak Hill Trail Project will be used as a model for future restoration and trail design projects when transitioning this MU from "open riding" to "trails only" riding. Management activities in this MU include storm water and trail maintenance and additional restoration and new trail design in the future.

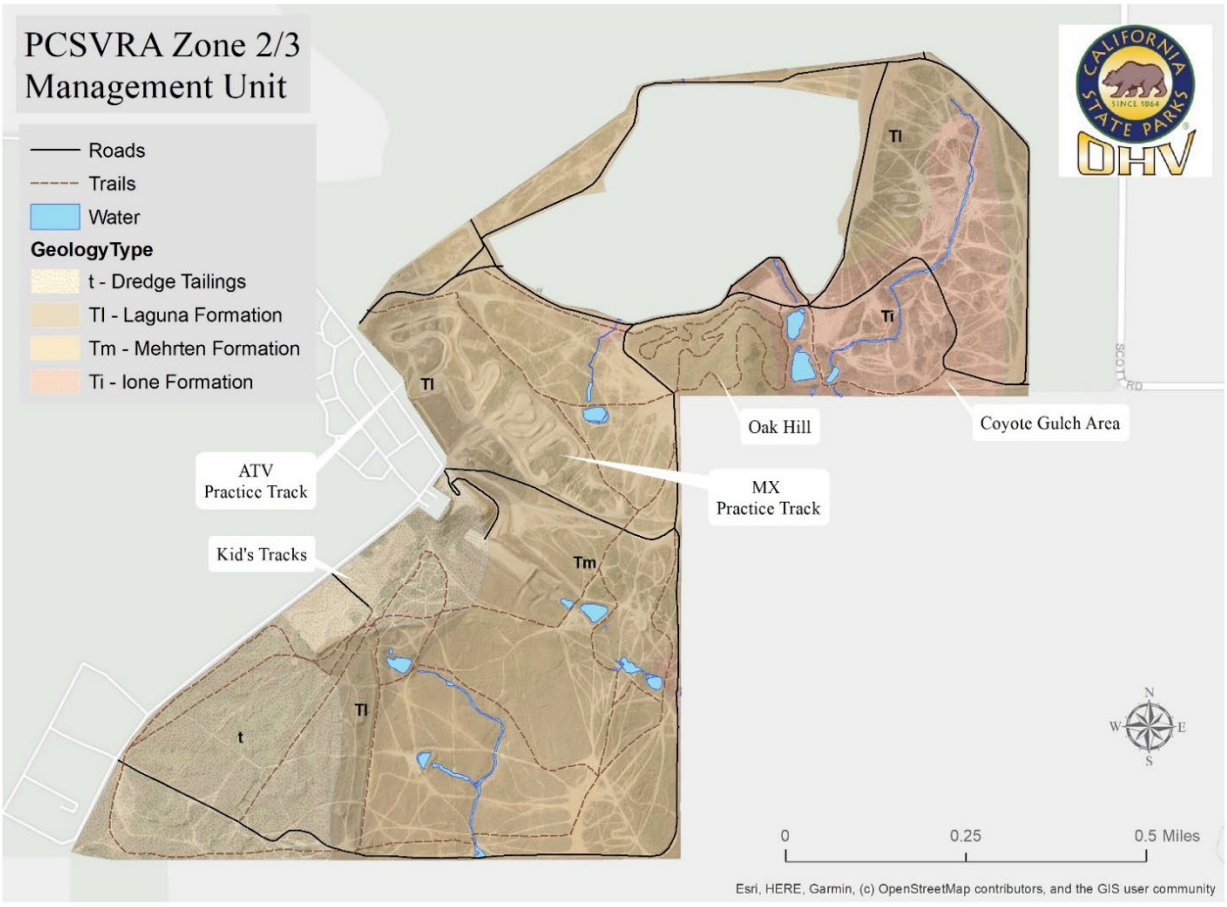

Figure 17. Soil Related Resources within Zone 2/3 MU.

Zone 4 MU (Figure 18) includes the northern portion of one of the Park's main ephemeral drainages. Most of the roads and trails here are compacted clay with silt that can become dusty in the summer when it's warm and susceptible to ponding during the rainy season. If off-trail riding or widening occurs to avoid flooded areas, then the saturated ground outside the trail tread can become greatly impacted - vegetation loss and deep ruts that can further channelize water resulting in exacerbated erosion. This is a unique area for 4x4s, ROVs, and trials motorcycles that includes a mixture of obstacles, a 4x4 track, special event facilities, and transitional areas of "open riding" to route and trail systems only area. The Teichert Reclaimed Mine, aka "The Pit", is approximately 48 acres at the top and approximately 26 acres in area at the bottom and roughly 80-feet deep. The Pit has undergone environmental review to add a seasonal 4x4 and ROV track, and construction is expected to start in summer of 2024. Zone 4 MU is in the process of shifting from "open riding" to a designated route and trail system use area as identified in the General Plan. Management activities include maintaining storm water infrastructure and trails and possible restoration projects. Future facilities, obstacles and trail design will be 4x4, trials motorcycles, and ROV specific.

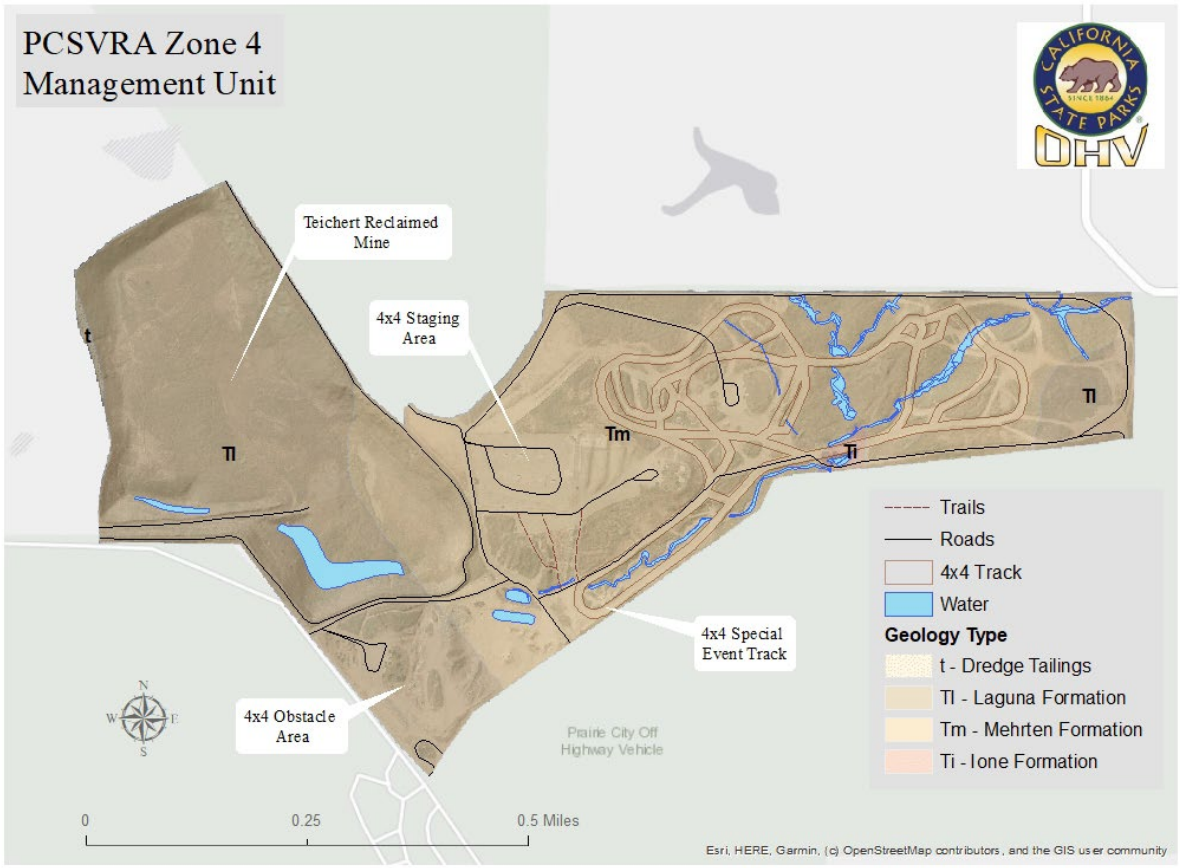

Figure 18. Soil Related Resources within Zone 4 MU.

Prairie City Motocross Track MU (PCMX MU) (Figure 19) is an area within the SVRA that is managed as a concession area for professional motocross practicing and small special events through most of year and hosts the annual Hangtown Motocross Classic Race every June. This is a nationally televised event with food trucks, traffic control, extra security detail and on average 12,000 attendees and up to 30,000 attendees in the past. Other concession areas were omitted in this Plan as specific management units as they are relatively small and without distinguishing characteristics warranting special management actions.

An ephemeral drainage runs through the middle of the track. The native material in this area is sandy clay, but the track itself is amended with decomposed granite, sand, and rice hulls to retain moisture and improve the riding experience. Management activities include storm water infrastructure maintenance and special event monitoring, and possible restoration projects.

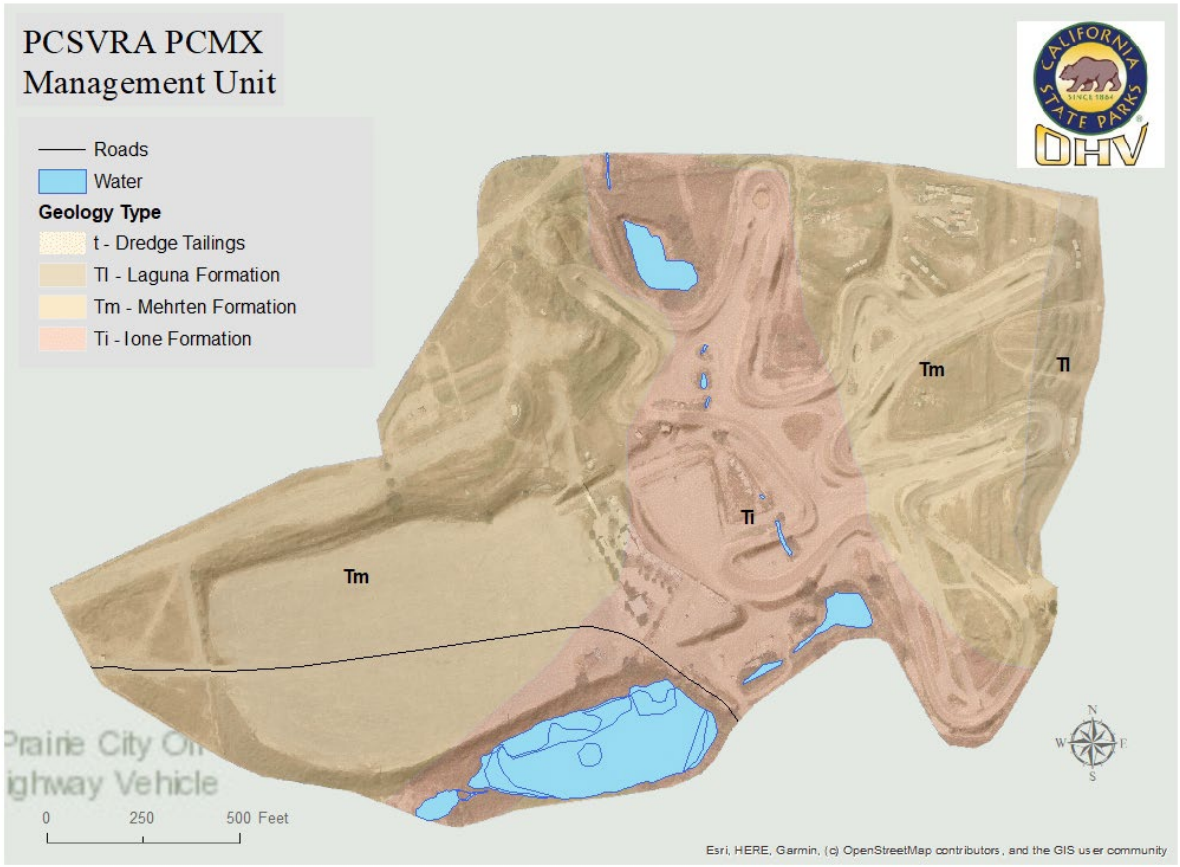

Figure 19. Soil Related Resources within PCMX MU.

Barton MU is designated as a stormwater management area and not open for recreation. A tributary to Coyote Creek runs through the center which supports blue oak woodland surrounded by annual grassland and the occasional vernal pool (Figure 20). This area consists mainly of sandy loam and only compaction generated from past cattle grazing. A 100' easement for Teichert's conveyor belt abuts the northern and western boundary. Management activities include storm water maintenance and possible restoration projects.

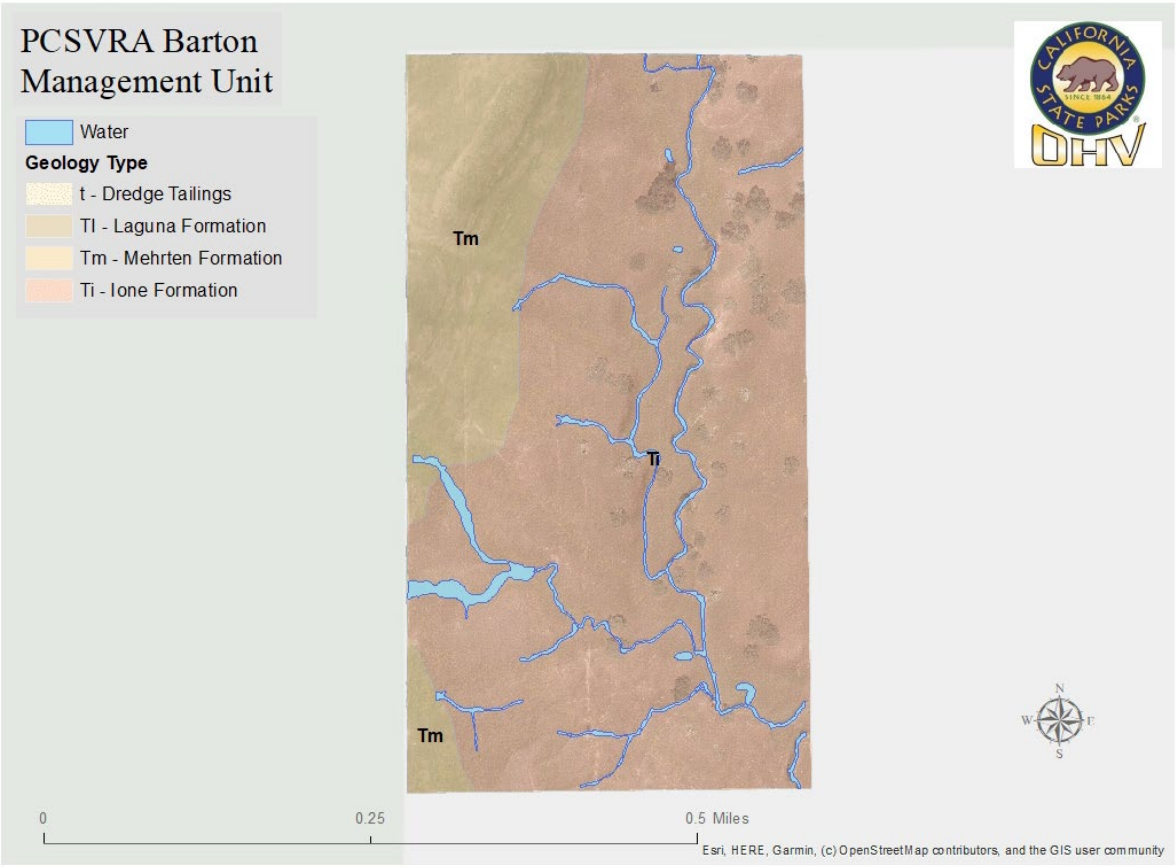

Figure 20. Soil Related Resources within the Barton MU.

Yost/Ehnisz MU is a relatively flat annual grassland area with some dredge tailings, vernal pools, and cottonwood woodlands. This area consists mainly of sandy loam and only compaction generated from a few roads. This area is currently closed to OHV recreation but is designated as a Route and Trail System Use Area in the GP and will be opened in the future after planning is completed.

Vernal Pool MU is composed of annual grassland interspersed with vernal pools and is closed to motorized recreation. Two fenced roads pass through the Vernal Pool MU which lead to entrances/exits to the park during some special events.

4 GOALS AND OBJECTIVES

Setting goals and objectives provides clarity around the outcomes to be achieved through implementation of annual management activities related to soils as well as protection, conservation, and improvement of other natural resources as required by law (CDPR 2021b). In addition, well-crafted goals and objectives can identify targeted resource conditions while also allowing for flexibility to apply innovative techniques to achieve desired conditions. This section provides a description of the goals and objectives developed for adaptative soil management at Prairie City SVRA.

The 2024 SCP objectives tier directly from the goal as defined from the Standard (See Section 2.2), consider objectives from relevant state and regional conservation documents, and incorporate the best available science. In addition, the 2024 SCP objectives are consistent with the 2016 Prairie City GP and EIR (CDPR 2016a). The objectives follow S.M.A.R.T. format principles and inherently conform to best available science and adaptive management. S.M.A.R.T. refers to objectives which are "specific", "measurable", "achievable/attainable", "realistic" and "timely". The objectives are based on information gathered from the existing conditions assessment and are the priorities over the next five years.

Objective 1: Improve soil conservation within Route and Trail System Use Areas through 2029.

S.M.A.R.T. Target(s):

O1T1: Reduce tire to water contact and erosion by installing new or improving existing BMPs in 6 water crossings by 2027 (Baseline 5 hardened crossings and 6 culverts need replacing [Table 4]).

O1T2: Repair all areas of significant soil erosion along trails ("Red" rated trail segments) annually through 2029 (Baseline .7 miles in 2023, subject to monitoring results).

O1T3: See a reduction in annual sediment yield from the sediment basins as a result of BMP implementation (best available baseline data provided in Section 5.3.1).

Improvement and conservation of soils through management actions and maintenance programs can directly and indirectly improve and conserve other aspects of the ecosystem. Installation and maintenance of trails and BMPs follow the principles of hydrologic invisibility so that trails and roads are less susceptible to erosion (See Section 6.4 Maintenance Plan for more details on maintenance of roads and trails). Presumably, if the BMP measures implemented are succeeding at conserving soil, then the amount of sediment removed from the basins should

also decrease. Baseline data will be collected to establish trends and to determine a measurable target for reduction in annual sediment yield. Baselines were calculated from road and trail assessments and stormwater infrastructure monitoring during the existing conditions assessment (See Section 3.5, 5.1 and 5.3 for more details on how baseline data was collected). Target parameters were chosen based on baseline data and necessity within the timeframe.

Objective 2: Improve areas that have experienced substantial erosion from surface water runoff, as determined by annual inspections, to reduce erosion and sedimentation through 2029.

S.M.A.R.T. Target(s):

O2T1: Restore 2835 linear ft of stream channel within Coyote Gulch by 2027 (Baseline 2835 linear ft).

O2T2: Restore 7.25 acres of bioswale or vegetative buffer along ephemeral stream corridors within the stormwater management use areas by 2028 (Baseline 7.25 acres of eroded area [Figure 24]).

Past owners and policies allowed for open riding within the park, including some ephemeral stream channels, that were not barricaded or fenced off from use. Within the Coyote Gulch area of the park, a project is planned for restoring the channel and adding a vegetative buffer along the stream corridor (See Section 6.4.6 Development Projects for more details on this project). Vegetation is important for sediment control because it slows storm water and consequently settles out sediment from the water column. Keeping the sediment from reaching the drainages and conveyances will greatly improve the storm water quality of the park. Baselines were calculated from stormwater infrastructure assessments and remote sensing and imagery analysis during the existing conditions assessment (See Section 3.5, 5.2 and 5.3 for more details). The target two parameters were selected for work from the total amount of bare ground within stormwater management use areas.

Objective 3: Improve vegetation coverage in areas with the potential of accelerated erosion through 2029.

S.M.A.R.T. Target(s):

O3T1: Restore or rehabilitate 20 acres of eroded areas within riding areas of the park by 2027 (Baseline 67 acres of bare ground areas outside facilities [Figure 25]).

Baselines were calculated from remote sensing and aerial analysis during the existing conditions assessment (See Section 5.2 for more details). Adding vegetation to eroded areas

will stabilize soils, filter run-off, provide energy dissipation, and create sheet flow on slopes. Any vegetation added will be native and appropriate for the existing project site vegetation communities and purchased from a local vendor or grown on site from locally collected seed. The target parameter was chosen based on baseline data, including known opportunities for restoration activity and restoration implementation feasibility within the next five years.

5 MONITORING PLAN

The discussion below includes current and future planned monitoring related to soils at Prairie City SVRA and is summarized in Table 2. The Prairie City SVRA monitoring plan provides evaluation of the condition of resources and informs adaptive management within the Park to evaluate compliance with the Standard. The monitoring described below established baselines and provided input for selecting specific objectives to achieve in this compliance period.

Table 2. A Summary of Monitoring Activities at Prairie City SVRA. Due dates are the end of the year.

Monitoring Activity	Frequency	Due	Protocol Used
Road and Trail Assessment	Annual	2025	CDPR Road and Trail Evaluations
Remote Sensing and Imagery Analysis	Every other year	2026	Prairie City Remote Sensing and Imagery Analysis Protocol
Stormwater Infrastructure Monitoring	Annual	2025	Monitoring from the 2007 OHV BMP Manual
Special Event Monitoring	As needed	--	Prairie City Special Event Monitoring Protocol

Appropriate selection and training of monitoring staff will ensure that data is collected in a consistent manner. Park natural resource staff conducting the monitoring described below will undergo annual refresher training before the start of the season. If a situation arises where staff are not qualified for specific monitoring, outside sources such as consultants or OHMVRD or Natural Resource Division (NRD) staff, may be asked to provide training or conduct the monitoring directly.

Monitoring data will be collected through ESRI GIS applications such as *Field Maps* and *Survey 123* or using excel forms that can be integrated with these apps. Data will be entered concurrent to fieldwork or shortly thereafter. Data will be managed in a GIS database or excel table that can be related back to the geodatabase for future access.

5.1 ROAD AND TRAIL ASSESSMENTS

The purpose of road and trail assessments is to identify route segments that need more focused maintenance or to evaluate past maintenance activities for success. The baseline parameter was calculated using the protocol described in Section 5.1.1 and future monitoring protocol is described in Section 5.1.2. A single S.M.A.R.T. objective (See Section 4 Goals and Objectives, O1T2) can be measured for success using this monitoring.

> **O1T2:** Repair all areas of significant soil erosion along trails ("Red" rated trail segments) annually through 2029 (Baseline 0.7 miles in 2023, subject to monitoring results).
>
> The Park will meet the objective if at least 0.7 miles of "red" rated trail segments are repaired by 2026, and target amounts as determined by monitoring for sequent years.
>
> If the targeted miles of "red" trail segments are not repaired by a given year, then the park will repair them the following year. Trail maintenance records will be included in the annual report along with reasoning of why all red trails weren't repaired.

5.1.1 Baseline

Roads and signed trails were mapped in 2018 and 2019 through the RTMP using Field Guide for Road and Trail Assessment (CDPR 2014) and training from the Strategic Planning and Recreation Services Division. Each road and trail were divided into segments with start/end points where the segments intersect each other, and each segment was given a unique identifier. The unique identifier is made up from a combination of Park unit, road or trail name, and segment number. The unique segment ID is used as a link between the GIS map, where the geographic information is stored, and the Statewide Road and Trails Program Access Database where additional qualitative and quantitative data is stored, tracked, and queried.

During the initial field inventory each road and trail was walked with a GPS and measuring wheel. Start and end points were captured with the GPS unit, as well as every 1000 feet, for calibration points. Evaluators stopped at any road infrastructure feature, such as signs, culverts, utility box and erosional features such as dips and rilling observed and made an entry into the database regarding the feature's location, dimensions, and functionality. Route type, designation, use, and surface condition, width, and other features were also determined. The existing erosion severity rating will be the baseline for future monitoring (Figure 21 and Table 3).

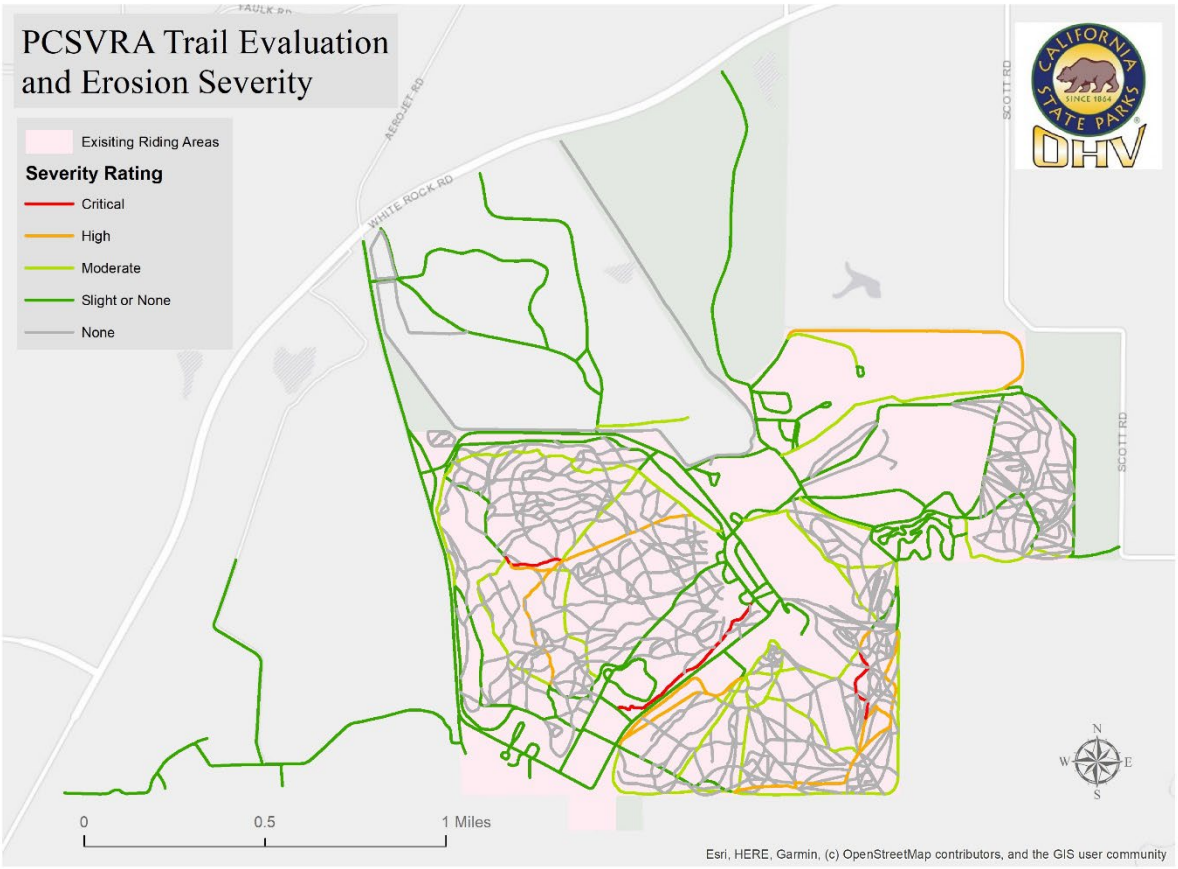

Figure 21. Road and Trail Erosion Severity Rating Map.

Table 3. Baseline Erosion Severity Ratings for Signed Road and Trail Segments

Erosion Severity	**Trails – Segment(s)**	**Miles**
Critical	Shale Trail- 1 and 2, Cobble Loop - 4, Gold Pan Trail - 1	0.7
High	Placer Trail – 1 through 3, Clay Trail - 2 and 3, Cobble Loop - 5, Pyrite Trail - 1 and 4, Sandstone Loop-3, Flume Trail -2 and 3, Zone 4 Loop – 2, Miners Trail -2	2.8

Erosion Severity	Trails – Segment(s)	Miles
Moderate	Cobble Loop -2, Cougar Trail 1,2, and 5, El Dorado Trail -2, Feldspar Trail -1, Flume Trail -4, Miners Trail -1, Pyrite Trail 2 and 3, Quail Trail -1, Quartz Route -3, Rattlesnake Route -2, Red Tail Route -2, Sandstone Loop -2, 4, and 5, Sedimentary Trail -1 through 4, Sluice Box Trail -3, Yost Mine Road-1, Zone 4 B Road -1	6.4
Slight or None	All other signed trail segments	25
Not Monitored	Unnamed user-created trails	35

5.1.2 Methods

Trail assessments will be performed in the spring and summer and as needed throughout the year. The map of roads and signed trails will be loaded onto *Esri Field Maps*. This layer includes segment geometry and location, vegetation and soil type surrounding the trail, trail difficulty, and vehicle use type. The routes will be walked or ridden and assessed for erosional issues through the using the *Survey123 Prairie City SVRA Road and Trail Assessment Form* (Figure 22) and the cause codes and ratings from the OHV Trail Condition Evaluation Code Key (Figure 22). The *Survey 123* form can be exported to Excel and linked to the Field Maps data as a related table using segment ID. The form contains all the data from the Key, is focused on route segments, and can collect multiple spot issues in one submission.

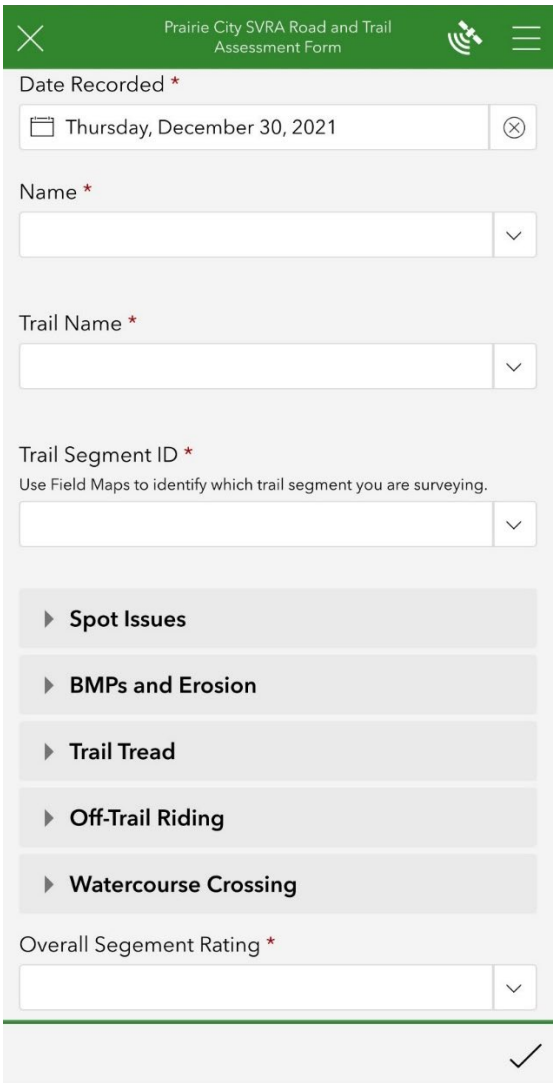

Figure 22. Prairie City SVRA Road and Trail Assessment Form on Survey123

OHV Trail Condition Evaluation Code Key

Green		Yellow		Red	
G1	**Water control** is provided by enough functional water breaks to divert runoff from the trail before it has the volume and velocity to cause erosion. Where present, rills occur on less than 1/3 of the distance between water breaks.	Y1	Water breaks do not divert all runoff from the trail because they are nearly filled to capacity and/or are partially breached, or spaced too widely. Where present, rills occur on more than 1/3 of the distance between water breaks	R1	Water breaks no longer divert runoff from the trail because they are full and/or have been breached, or are absent or spaced too widely. Gully or rill erosion may be present.
G2	No accelerated **erosion off-trail.** Runoff at water break outlets and on slopes adjacent to the trail is dispersed effectively. Vegetation or litter filters all sediment.	Y2	Rill erosion and/or sediment deposition occurs at water break outlets and/or on slopes adjacent to the trail. All sediment is filtered or deposited before it reaches a watercourse.	R2	Gully erosion occurs at water break outlets or on slopes adjacent to the trail and/or sediment is transported to a Type I or Type II watercourse.
G3	**Sediment traps**, where present, are functional and have adequate capacity for at least one season of use. Trapped sediment can be retrieved during normal maintenance.	Y3	Where present, most sediment traps are full or nearly full, but still functional. Most trapped sediment can be retrieved during normal maintenance.	R3	Where present, sediment traps have been breached and have a plume of sediment and/or a gully below the breach. Most sediment cannot be retrieved.
G4	**Tread wear** is minimal. Tread is generally incised less than 6 inches. Tread wear is generally evident on less than 1/3 of the distance between water breaks or on less than 1/3 of the tread width.	Y4	Tread wear is evident. Tread is generally incised 6 to 12 inches and tread wear is generally evident on more than 1/3 the distance between water breaks and on more than 1/3 of the tread width.	R4	Tread wear is severe. Tread incision is generally greater than 12 inches deep and tread wear is generally evident on the entire distance between water breaks.
G5	**Tread width** is generally no greater than 1.5 times the design width for the designated use.	Y5	Tread width is generally greater than 2 times the design width for the designated use and appears to be increasing.	R5	Tread width is generally greater than 3 times the design width for the designated use and has caused or is causing erosion, sedimentation, and damage to vegetation.
G6	**Off-trail travel is** limited to single tracks or single passes generally less than 300 feet long. Tracks are not eroded and have little effect on water control.	Y6	Off-trail travel is common, well defined, and generally greater than 300 feet long. Water control is inadequate and some erosion is apparent.	R6	Off-trail travel has caused severe resource damage, gully erosion, eroded hill climbs, or extensive damage to vegetation and/or sensitive habitat.
G7	**Approach to watercourse crossing** is short and has a gentle gradient. Tread is stable, shows little evidence of erosion, and is at design width. No damage to riparian vegetation outside the tread.	Y7	Approach to watercourse crossing is short and steep or long and gentle. Tread may show some evidence of erosion and may show evidence of widening. Minimal damage to riparian vegetation.	R7	Approach to watercourse crossing is both steep and long and/or tread is unstable and shows evidence of accelerated erosion. Approach may be widening and damaging riparian vegetation.
G8	**Channel Section** has only minor channel widening, minor bank erosion, no bars.	Y8	Channel Section has widened moderately, modest bank erosion, modest lateral and/or mid-channel bars.	R8	Channel Section has widened significantly, extensive bank erosion, large lateral and mid-channel bars.
G9	**Outboard Fill** is stable. Exhibits minor surficial sloughing without sediment transport	Y9	Outboard Fill is distressed. Exhibits cracking and Moderate sloughing w/ limited sediment transport.	R9	Outboard Fill has failed and sediment is moving down slope.

	CAUSE CODES		CAUSE CODES
C1	Water breaks not constructed to design standards	C11	Rocks or roots exposed in tread
C2	Water break spacing is too wide for conditions	C12	Barriers (natural or constructed) to control traffic are lacking
C3	Cascading runoff from a trail or road upslope	C13	Mechanical erosion makes maintenance ineffective
C4	Cascading runoff from an impervious surface upslope	C14	Storm intensity unusual or unique for the area
C5	Wet area caused by a seep or spring	C15	Design / layout /construction prevents effective drainage
C6	Excess soil moisture at time of use	C16	Uncompacted sidecast on outboard slope
C7	Trail section is poorly located (describe)	C17	Berms, Whoops, and stutter bumps
C8	Trail gradient is too steep for the type and/or amount of use occurring	C18	Crossing alters channel dimensions and/or stream gradient.
C9	Segment is not ~~designated or~~ designed for the type or amount of use occurring	C19	Rutting or vegetation damage to meadow, spring, wet area, riparian area
C10	Trail Blockage, e.g. brush, logs, rockfall, landslide	C20	Segment is not designed for the type and amount of use occurring

Figure 23. OHV Trail Condition Evaluation Code Key

Each route segment will be given an erosional rating using a color scaled rating of green, yellow, On the code key there are nine survey questions which are grouped into four categories on the *Survey123* Form: BMPs and Erosion, Trail Tread, Off-Trail Riding, Watercourse crossing and one additional category for cause code points. Each survey question has a description for a color scaled rating of green (1 point), yellow (2 points), and red (3 points). Once the trail segment is evaluated, the categories will be summed and an overall rating will be given to the segment-green (0-9 points), yellow (10-18 points), and red (19-27 points). Calibration cards will be made for each rating before the start of monitoring to ensure consistent data collection. A red rating means the assessed feature needs attention due to severity of observed erosion. The road or trail segment may need increased or improved maintenance, a possible redesign of the observed feature, or a possible restoration and reroute project. A yellow rating indicates attention warranted in the form of improved maintenance to avoid excessive and possibly increased erosion. A green rating indicates the maintenance regime is appropriate for that feature. The ratings will generate maintenance priority and will be documented in work orders for maintenance and in the Annual Report.

Data is collected and initially is stored on ArcGIS Online servers. Records of maintenance and other trail repairs will be kept as attributes to the trail data. Once All road and trail assessments and maintenance are completed for the year and the data has been double checked for accuracy, the data will be copied to the Park's geodatabase for long-term storage.

Uncertainties

Since most of the signed trails were selected from user-created trails, they may not be made sustainable just through trail tread maintenance alone. Part of the road and trail assessment will be to identify the signed trails that are not sustainable and target them for rehabilitation or restoration through small annual restoration projects or through the RTMP.

In addition, not all signed trails are clearly marked along the whole length of the trail. This makes it difficult for users to identify if they are on an allowed trail when user-created trails intersect. Trail signs and markers will be added as new trails are developed or existing trails are modified in Route and System Use Areas. Trail markers will be added in Distributed Riding Areas during trail maintenance projects.

5.2 Remote Sensing and Imagery Analysis

This monitoring measures acres of bare ground/developed cover within the Park using the normalized difference vegetation index (NDVI) tool on ArcMap for Desktop by analyzing aerial imagery flown every two years. Baseline acreage was determined using the 2020 analysis described below and discussed in Section 3.5.4. Adaptive management will also be applied to

this monitoring methodology to attempt to improve the analysis each time it is completed. Multiple S.M.A.R.T. objectives and management actions can be measured for success using this monitoring.

O2T2: Restore 7.25 acres of bioswale or vegetative buffer along ephemeral stream corridors within the stormwater management use areas by 2028 (Baseline 7.25 acres of eroded area [Figure 24]).

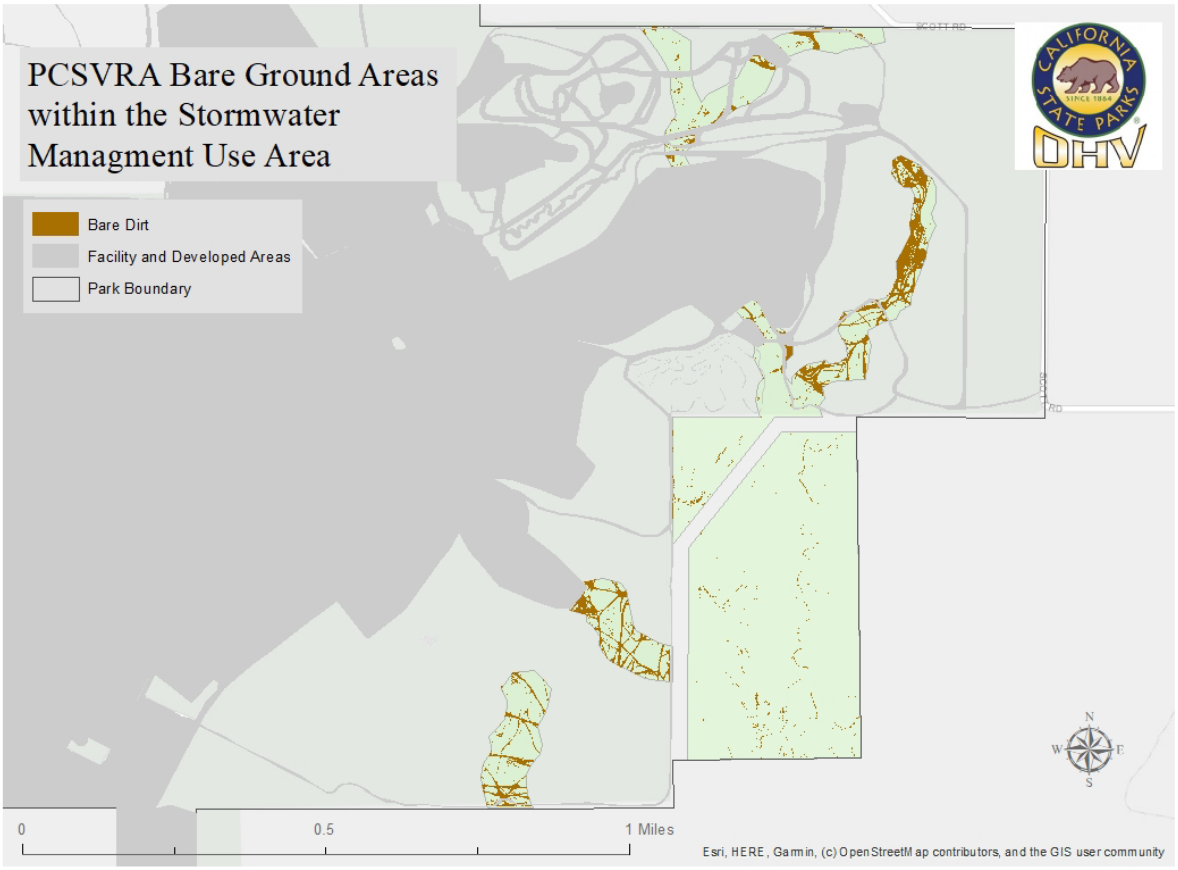

Figure 24. Bare Ground Areas within the Stormwater Management Use Area

This objective should be met by completing the Coyote Gulch project discussed in Section 6.4.6. As with previous projects, a pre/post vegetation vs bare ground cover change analysis will be completed using the most recent aerial imagery from before and after project completion and when vegetation is established. The stormwater management use area is a roughly 75ft buffer around the stream corridor within Coyote Gulch. This distance will be used to calculate the acres of bioswale restored or rehabilitated.

The Park will meet the objective if at least 7.25 acres of bioswale are added with stormwater management use areas by 2028.

If 7.25 acres of bioswale are not added during the Coyote Gulch project, then the park will complete a different restoration improvement project within a stormwater management use area by 2029 to meet the objective.

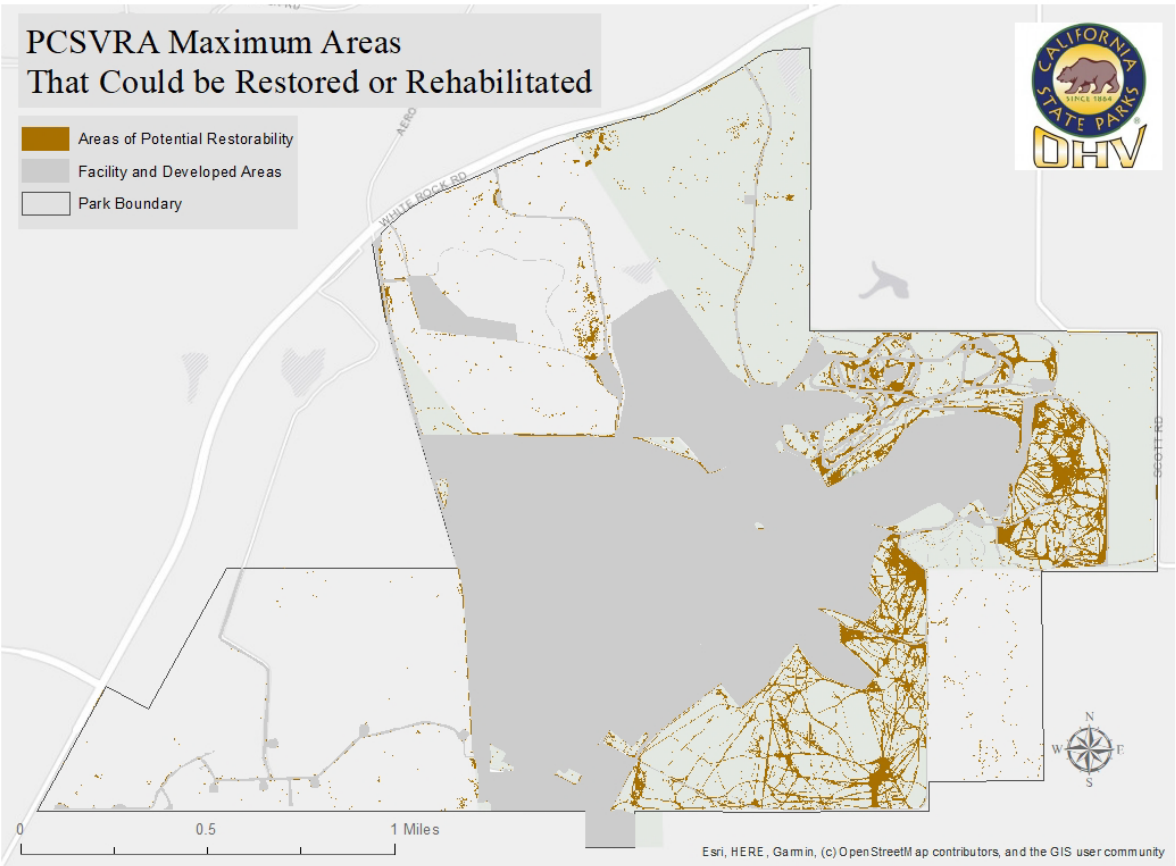

Figure 25. The Maximum Area where Restoration or Rehabilitation Could Occur within Prairie City SVRA.

O3T1: Restore or rehabilitate 20 acres of eroded areas within riding areas of the park by 2027 (Baseline 67 acres of bare ground areas outside facilities [Figure 25]).

This objective should be met by completing the Coyote Gulch project discussed in Section 6.4.6. As with previous projects, a pre/post vegetation vs bare ground cover change analysis will be completed using the most recent aerial imagery from before and after project completion and when vegetation is established.

The Park will meet the objective if the Coyote Gulch project restores at least 20 acres of eroded areas based on a bare ground cover change analysis.

5.2.1 Baseline

The 2020 analysis concluded the bare ground/developed area is 261 acres which is 20% of the total Park acres (Figure 26) (CDPR 2021c). Only 67 acres or 5% are outside of facility areas and have the potential of being restored or rehabilitated in the future (Figure 25). Facilities areas were digitized on ArcMap 10.8 at a scale of 1:500. All facilities, shown in grey, cover 490 acres.

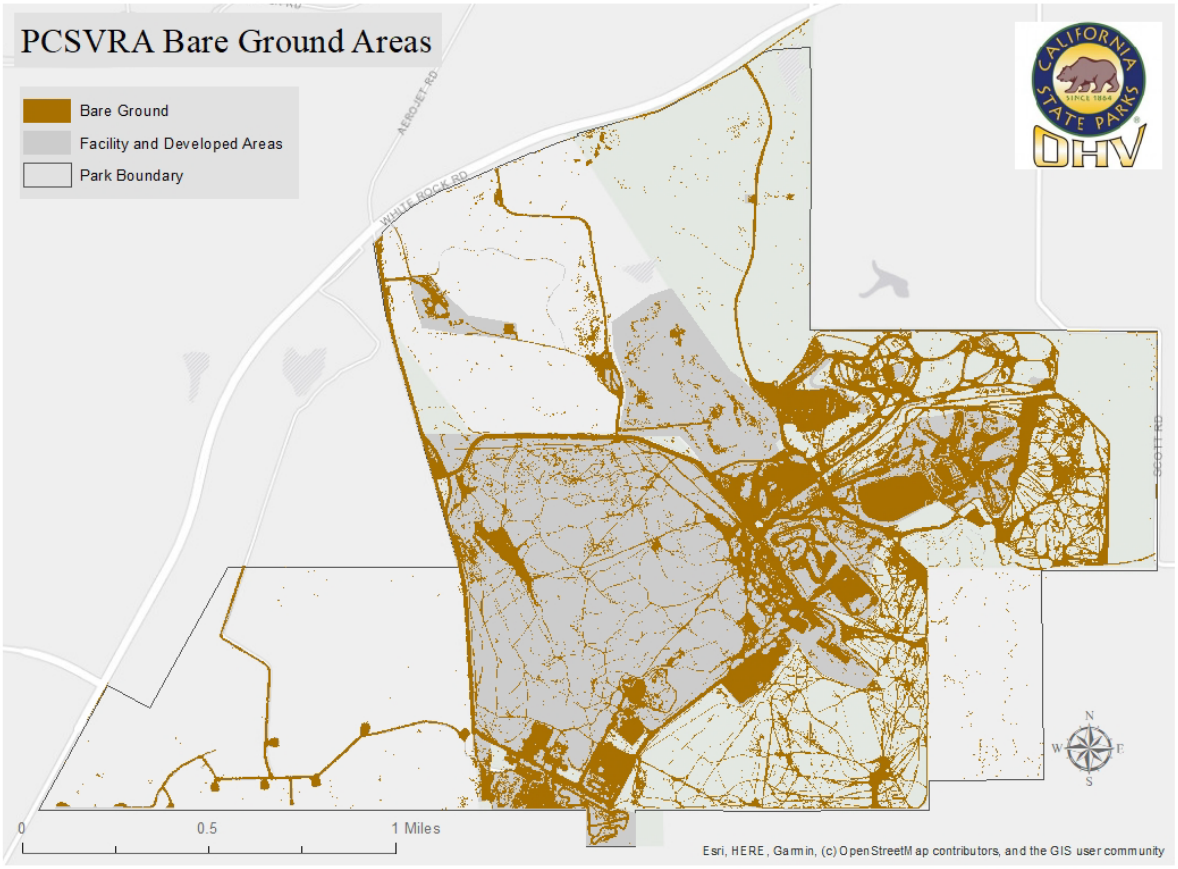

Figure 26. Bare Ground Inside and Outside Facilities within Prairie City SVRA.

5.2.2 Methods

NDVI analyzes are performed using ArcMap 10.8 to measure the annual change in vegetation cover using aerial imagery flown every two years. NDVI measures the amount of near infrared (NIR) light versus red light being reflected from the earth's surface. The equation is:

NDVI = (NIR-Red)/(NIR+Red)

A NDVI value that is close to one micrometer indicates a greener, healthier plant. Zero indicates no vegetation and a negative value, water or buildings. All aerial imagery is analyzed with the NDVI tool in Imagery Analysis window.

The NDVI raster results are then classified into two classes - vegetation and non-vegetation - first using the Natural Breaks (Jenks) method and then adjusting by hand until the outcome matched the aerial image for each year. New raster datasets are generated using these thresholds and the raster calculator. Polygons are created from these raster datasets to calculate areas of vegetation and no vegetation. Water can be erased from the non-vegetation layer to calculate the acres of bare ground and developed land within the Park. Vegetation cover is analyzed through the WHPP.

A field survey estimating vegetation cover using quadrats is conducted in conjunction with the above model to validate the accuracy of the model. Twenty-four points are surveyed; twelve are randomly selected and the other twelve are selected from potential problematic areas within the model such as in mowed areas or along edges of roads and trails. The northwest corner of each quadrat is mapped using *Field Maps* and the north edge aligned so the northeast corner pointed directly east. Matching polygons are drawn on ArcMap to compare to the NDVI model. A chi square analysis is performed using the observed (actual) and estimated (NDVI) data.

Uncertainties

There are errors associated with using NDVI analysis. Shadows or objects may sometimes be misidentified as vegetation or water and buildings as bare ground. Also, the aerial images were taken during different times of the day, or at different angles- shadows, soil reflectance, stretching of objects, or precipitation variation can affect the results. To attempt to reduce variables in difference of the image, the imagery was flown as close to the previous dates as possible. The chi square analysis will help determine how well the NDVI model fits the observed data.

Additionally, because this is still a novel program for the SVRA. There is expected to be a learning curve in finalizing the methodology, timing, and techniques for the surveys as well as accumulating and analyzing the information and data.

5.3 STORMWATER INFRASTRUCTURE MONITORING

This monitoring determines stormwater infrastructure that needs cleaning or replacement using the protocol below. Multiple S.M.A.R.T. objectives and management actions can be measured for success using this monitoring.

> **O1T1:** Reduce tire to water contact and erosion by installing new or improving BMPs in 6 water crossings by 2027 (Baseline 5 hardened crossings and 6 culverts need replacing [Table 4]).
>
> This objective should be met by completing the Coyote Gulch Project and Goose Pond Stormwater Improvement Project discussed in Section 6.4.6. Five box culverts will replace existing hardened crossings as part of the Coyote Gulch Project and two new raised culvert crossings will be added as part of the Goose Pond Project.
>
> **O1T3**: See a reduction in annual sediment yield from the sediment basins as a result of BMP implementation (best available baseline data provided in Section 5.3.1). Each year, the sediment yield removed will be measured along with the capacity of the basin. Presumably, if the BMP measures implemented are succeeding at the maximum extent practicable, then an annual reduction in sediment yield should follow (as controlled by precipitation). Additional baseline data will be collected to establish trends.
>
> The Park will meet the objective if sediment yield is reduced below baseline each year.
>
> If a reduction is not observed, then more restoration projects, stormwater infrastructure, or additional wet weather closures may be warranted.

5.3.1 Baseline

Much of the stormwater infrastructure was mapped during the initial road and trail inventory as part of the RTMP in 2019. Features were monitored in winter of 2021. Maps and descriptions of infrastructure can be found in Section 6.4.4.

Table 4. Stormwater Infrastrucuture Baseline Cleaning Data.

Infrastructure Type	Needs Cleaning	Needs Replacement	Total Number
Culverts	5	6	65
Armored Channel and Ditches	6	--	~6,000 LFT

Infrastructure Type	Needs Cleaning	Needs Replacement	Total Number
Un-armored Ditches	0	--	~15,500 LFT
Hardened Crossings	8	5	22

When the sediment basins are cleaned (See Section 5.3.2 and 6.4.4 for more information), the amount of sediment excavated is recorded. We started collecting this information in 2022. Table 5 below shows the current baseline for amount of sediment excavated for each basin.

Table 5. Best Available Baseline Data for Sediment Basin Yield.

Basin name	Cleanout Frequency (years)	Cleanout Events	Average yards
Goose Pond	5	1	3900
South Hangtown	2	1	231
North Hangtown	2	1	495
Coyote	1	1	253
Practice Track	5	1	176
North Oak Hill	2	1	100
South Oak Hill	2	1	176
4x4 Area	1	1	20

5.3.2 Methods

Inspections of stormwater infrastructure will be completed annually in early summer. Critical infrastructure, such as features along the main drainage that experience higher water flow velocities, will be inspected after large rain events in addition to the annual inspections. These methods were taken, in part, from the 2007 OHV BMP Manual (CDPR 2007).

Culverts: Culverts will be uniquely labeled with a number fastened to a blue Carsonite driven into the ground a few feet of the inlet or outlet. Inspect culverts for sedimentation, undercutting at the inlet or outlet, slope destabilization, damage to the culvert, riprap, or

energy dissipaters, and debris and vegetation blocking inlets or outlets. Inspect culverts for under sizing including damming, pooling, flooding upstream.

Channels and roadside ditches: Riprap in armored channels and ditches will be inspected for scouring, bank destabilization, dislodged rocks, sedimentation that reduces function of the riprap, and vegetation growth that reduces function. Roadside ditches without riprap shall be inspected for erosion and/or sedimentation (plugging). If the ditch is grass-lined, inspect for erosion and re-establish grass if necessary. Observe if any large vegetation may be causing plugging.

Hardened crossings: Hardened crossings will be inspected for sedimentation, scouring around the edges, and for damage.

Sediment basins: Inspect sediment basins for gullies and rilling at the edges, sedimentation at the inlets, and flooding if the basin is undersized. Basins should have effectiveness monitoring, such as turbidity testing, during storm events to ensure effectiveness or indicate corrective actions that may need to be taken. The amount of sediment yield will be recorded separately for each basin as they are cleaned. Some basins may not be cleaned on an annual basis so the baseline will be determined from the most recent time cleaned or averaged over the amount of times cleaned.

A map of stormwater infrastructure will be loaded in *Field Maps* with fields for inspection date, inspector's name, observed issues, photos, and recommended repair. A report of all the areas needing repair will be sent to maintenance staff to generate Work Orders to be cleaned/repaired as described in Section 6.4.4. An example maintenance checklist record can be found in Appendix 3.

Uncertainties

There may be additional features remaining from previous landowners that are not yet known and located on unmonitored user-created trails. As trails are evaluated as part of projects to transition into Route and Trail System Areas, any new infrastructure identified will be mapped and evaluated for removal or modification as part of the project. Projects will be included in the Compliance Report/Action Plan.

5.4 Special Event Monitoring

Monitoring is conducted before and after special events held at Prairie City SVRA. In addition to monitoring, special events are planned to preemptively avoid or minimize impacts to natural resources. People wishing to hold a special event within the Park must first complete a special

event permit application which also includes natural resource conditions that the permittee must agree to before the permit can be approved. Once approved, there are pre-event planning meetings that ensure the conditions will be met to protect resources or reduce unforeseen impacts.

The special event permit also requires permittees to have access to a water truck during the dry season to minimize dust due to wind or mechanical erosion. If the event cannot comply with special event permit conditions, the event may be shut down. Prairie City SVRA recently announced a wet weather closure policy that is also applicable to special events (See Section 6.2 and Appendix 2 for more details). DPR staff may postpone special events in the event of inclement weather and/or status of current soil conditions. Promoters may select an alternate rain date on the Special Event Application. Special event promoters that use available tracks are required to recondition the track to pre-event conditions such as grading and pulling back berms. All special event promoters that use temporary barriers and trail markers are required to clean up after the event. Permittees are also required to inform the special events coordinator of the special event routes and/or stations ahead of the event so monitoring can be completed to avoid impacts to natural and cultural resources.

5.4.1 Baseline

Baselines will be determined for each special event during the pre-event monitoring.

5.4.2 Methods

The routes or stations will be monitored on foot or by vehicle to note any potential impact to natural or cultural resources. If possible, the course will be rerouted to avoid impacts. If it is not possible to reroute the course, flagging will be installed to keep participants and spectators away from the identified resource. Event coordinators will be notified of any changes and impacts to avoid. After the event, the monitoring will be repeated, and damage, if evident, will be documented in a report with pictures from before and after the event. Depending on the event, different impacts are possible but the most common are routing a course on an unauthorize trail or through vegetation, within the 20ft buffer of an elderberry, or through a puddle that may cause trail widening. Mitigation may be required by the permittee if any damage occurred. When possible, resource staff may act as event course monitors and stationed at areas of potential impact such as select watercourse crossings during events to ensure that adverse impacts are avoided.

6 MANAGEMENT ACTIONS AND MAINTENANCE PLAN

Management actions are responses that can be taken to improve soil conditions, reduce impacts to soils, respond to triggers, and attempt to reach success criteria, all to move toward soil conservation and improvement goals and objectives (CDPR 2020i). These actions are informed by the Park's resource objectives, success criteria, and monitoring results. In addition, these management actions are consistent with goals from the GP and EIR (CDPR 2016a). The management actions described in this section are meant to help meet S.M.A.R.T. objectives and are not intended to fit the S.M.A.R.T. model themselves.

6.1 DEVELOP A RTMP BY 2025

The RTMP, currently being developed, describes the existing road and trail conditions in the Park and provides direction for their future management (CDPR 2017b). The RTMP examines the SVRA's existing system of routes and provides specific direction for their long-term construction, maintenance, and management. It considers current and potential public use, park operations, and the protection and enhancement of cultural and natural resources to ensure recreational trail opportunities are made available at their fullest potential. Comprehensive trail planning also considers regional recreational opportunities and connectivity and includes extensive public outreach and input into the design of new trails and experiences. Sound trail management requires implementing a variety of actions, including:

- maintaining trails that provide interesting and environmentally sustainable places for the public to recreate;
- conserving and protecting natural and cultural resources by applying soil conservation standards and other BMPs to sustain lands for OHV recreation;
- educating the public in safe and environmentally responsible OHV use and land management;
- restoring sensitive ecological areas that have been impacted and damaged by OHV use; and,
- restoring trails and areas that do not meet the Standards and the OHV BMP Manual.

Many of the trails within the network were created years ago, prior to the creation of the SVRA. These trails had no land use planning and lack the appropriate design needed to minimize soil loss. Sustainable trails are needed to ensure that natural resources and water quality are protected. A trail is sustainable when minimal erosion occurs. Properly designing and constructing these trails to withstand weather and OHV use is critical, as well as designing trails to be fun and challenging so the user is not tempted to go off trail. The OHMVRD is committed to providing the highest quality trails for a diverse group of recreational users by planning and

developing trails pursuant to California State Parks Trails Policy. The Plan will outline a matrix to determine project level priority and implementation. For more information see the Prairie City SVRA RTMP website.

6.2 Implement Wet Weather Closures

Wet weather closures were implemented in mid-January 2023. Implementing wet weather closures prevents avoidable soil erosion and degradation of trail tread during and after storm events. Wet weather closure policy is implemented based on soil conditions, weather conditions and forecast. Recommendations for closures are made by the Prairie City SVRA Staff.

The team makes a recommendation to the Sector Manager who will make the final closure decision. Interpretation staff will post the closure information on social media.

Criteria for Wet Weather Closure

The team will make recommendations on wet weather closures based on current conditions and weather forecast. Factors considered will include seasonal precipitation totals to date, soil type, soil saturation and soil conditions, presence of standing water, safety, and the imminent weather forecast.

Wet Weather Closures and Special Events

Promoters will have the option of identifying an alternate rain date for their event when they submit a Special Event Permit Application. Depending on the soil conditions and location of the event, the team may identify alternative areas or reroutes instead of resorting to a rain date.

In the event of a potential wet weather closure or reroute suggestion, the team will conduct site visits to key areas and make a recommendation on wet weather closure by noon on the Wednesday before the event. The special event coordinator will notify the event promoter of the closure decision.

Wet Weather Closures Locations

Only portions of the park will be subject to wet weather closures (Figure 27). Zone 1, portions of Zone 2 and 3, and the 4x4 Obstacle Area will remain open to the public and special event use. Zone 4, portions of Zone 3, and the Oak Hill Trail Area will be closed. The attached map depicts proposed fencing to further control closures of highly saturated areas in the future. These location decisions were determined from past water quality monitoring and observing special event monitoring during rain events. These areas are typically steeper with a higher sand and clay content which makes them more likely to erode with rain or OHV use when

saturated compared to other areas of the park. Closure signs will be placed at the entrance of roads and trails when wet weather closure has been determined. Any closures will be posted on social media and links to these can be found on the Prairie City SVRA Website. A message board will also be utilized at the entrance kiosk to inform visitors of closures when they enter the park. Once a wet weather closure is enacted, the team will assess conditions daily until the closure is lifted.

Adaptive Management

"Adaptive management" is a common strategy and fundamental component of implementing the best available science in natural resource management. As this is a new policy for the park, details and execution of the policy may change in the future based on monitoring or observations during implementation in the field.

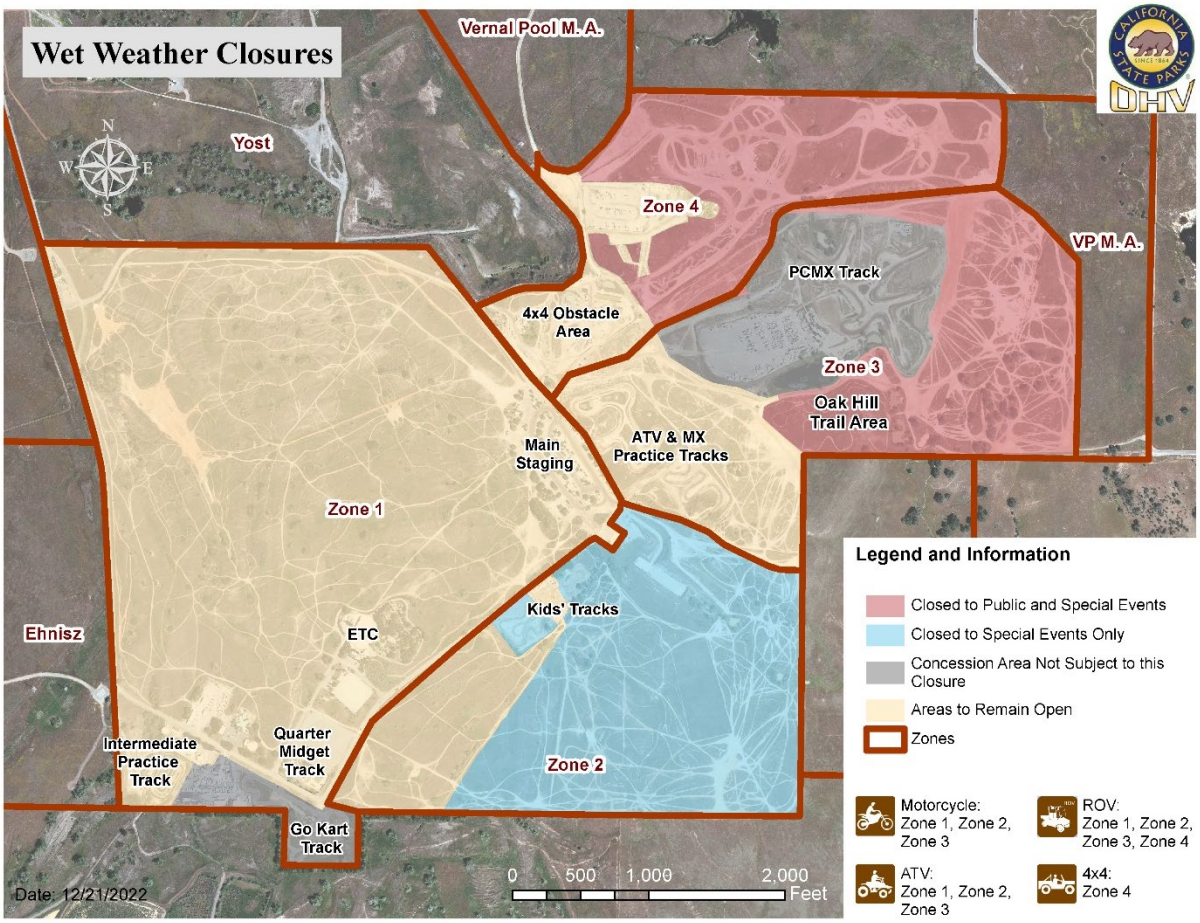

Figure 27. Map of Wet Weather Closures Areas

6.3 Interpretation and Outreach Programs Related to Soils

The OHMVRD works to ensure quality recreational opportunities remain available for future generations by providing for education, conservation, and enforcement efforts that balance OHV recreation impacts with programs that conserve and protect cultural and natural resources. Through hands-on interactive programs at special events, community outreach and Interpretive programs at the park, Prairie City SVRA's interpretive team informs visitors about responsible OHV use, safety, rider ethics, and awareness and protection of the parks natural and cultural resources through regular outreach and education.

Interpretative programs include:

- showcasing ongoing and upcoming projects that have a nexus with soil conservation objectives at the project site using interpretative signage, during special events, social media, the Park's website, public meetings.
- Handouts and active outreach about soil conservation at the interpretation booth during special events or through social media, through fun events such as guided tours, or using exhibits and models.
- Teaching "Tread Lightly!" concepts during ATV, ROV and other safety classes held at the Park as well as by using scaled down remote control vehicles on specially designed courses. These principles include staying on designated roads and trails, avoiding sensitive areas, properly disposing of waste, avoiding the spread of invasive species, and repairing degraded areas.
  Teaching safe and environmentally responsible OHV recreation practices at the Environmental Training Center such as importance of staying on the trails and staying in control, so that new riders learn to minimize their impact on the environment.

Prairie City SVRA's interpretive team also strives to develop partnerships with other public, private, and nonprofit organizations, which often lead to collaborative events and interpretive programs. Volunteers also support SVRA interpretation and education. Visitor understanding may be measured through anonymous polls during our quarterly public meetings or on social media.

6.4 Maintenance Plan

The maintenance plan described below has been developed from the existing conditions assessments and ongoing Park maintenance work to ensure consistent, appropriate maintenance is conducted at Prairie City SVRA in accordance with the Soil Conservation Standard (CDPR 2020) and the 2007 OHV BMP Manual for Erosion and Sediment Control (CDPR 2007). The maintenance plan may be modified in the future to address areas requiring

excessive chronic maintenance, or to accommodate changes in maintenance protocol in direct response to monitoring from the previous year. Maintenance activities will be documented in the Compliance Report and Action Plan portions of the 2024 SCP (See Section 7 for more details). Currently, most of the MUs are managed similarly regarding the SCP. As such, maintenance activities are described below by type rather than separated by MU.

6.4.1 Prioritization Matrix

Funding of maintenance needs and project development is an incremental, annual process, so no single year budget can fund all planned improvements. Setting maintenance priorities facilitates allocation of limited resources and provides a focus for budgeting efforts. To make prioritization less subjective, maintenance projects should be categorized based on the routes or facilities' deficiencies. These deficiencies are also compared to a route's significance to recreation or transportation, with more significant trails receiving priority over lesser ones. The five categories of projects are shown in Table 6 below.

Table 6. Prioritization Matrix for Road and Trail Maintenance

Priority	Type of Project	Example
Essential	Visitor Safety	Route or facility conditions that represent a threat to the safety of park visitors, usually severe enough to warrant barricades, warning signs, or temporary to permanent trail closures.
Essential	Resource Protection	Route or facility conditions that represent a threat to the park's natural or cultural resources, usually severe enough that critical resources are being damaged.
Essential	Preservation of Investment	Route or facility conditions that, if not repaired, will result in total loss of the structure.
Nonessential	Visitor Convenience	Route or facility conditions that make it uncomfortable to use the route or facility.
Nonessential	New Route Construction	The development of an entirely new route.

Projects that address visitor safety, resource protection, or protection of existing facilities take priority over projects that provide a visitor convenience. For example, failing to maintain trail drainage can result in unsafe trail conditions and eventually the loss of the entire facility; a

visitor request to add a bench along a trail is a convenience and does not represent a loss of the investment or a direct threat to visitor safety.

Table 7 lists the priority and frequency for essential trail maintenance activities.

Table 7. Priority and Frequency for Maintenance Projects

Road and Trail Maintenance	Priority	Example Maintenance Occurrence
Emergency drainage	1	Major Water Runoff
Structure construction/reconstruction	1	As needed
Bridges, culvert crossings, boardwalks, and causeways	1	15–20 years
Obstacle courses/trail features	2	As needed
Drainage facility construction/reconstruction	2	As needed
Structure repair	2	Annually or as needed
Trail reroutes	3	As needed
Clearing	4	Annually or as needed
Tread repair	5	Annually or as needed
Brushing	6	Annually or as needed

6.4.2 Ongoing Maintenance of Existing Roads, Trails, and Tracks

The purpose of road, trail, and track maintenance is to keep a route in a sustainable condition and maintained to a level appropriate for their difficulty designation that ensures visitor enjoyment and protects resources. A description of road, trail and track maintenance is provided below. Roads and trails are maintained to follow the principles of hydrologic invisibility and disconnection discussed in the Standard so that trails and roads are less susceptible to erosion. Design features which promote hydrologic invisibility include techniques such as outsloping, rolling tread profiles, rolling dips, and frequent changes in grade. If there is any excess dirt and other materials after maintenance, they will be stockpiled on-site away from water bodies and re-utilized for track and trail maintenance and/or restoration projects

within the Park. Stockpile management BMPs can be found in PO-5 of 2007 OHV BMP Manual for Erosion and Sediment Control (CDPR 2007).

Trail maintenance: Routine maintenance is completed as needed based on trail monitoring results (See Section 5.1 for more detail on monitoring methodology) and generally includes:

- removal of encroaching vegetation, fallen trees, limbs, and rocks,
- shaping the trail tread to maintain the intended drainage design and hydrologic disconnection; and
- repair of damaged or failed structures or those structures that have reached the end of their useful life.

Adequate soil moisture is required for shaping and grooming activities. If activities occur in a dry season, water is hauled to the site within the park to be worked into the soil. If activities occur during the wet season, appropriate BMPs will be implemented and monitored. Maintenance may be done by hand crews or mechanized equipment, depending on the nature of the task, the amount of material to be moved, or the width of the trail. Mechanized equipment that may be used for trail repair includes the following: bulldozer, road grader, skip loader with box scraper, mini excavator, or Sweco trail dozer. Maintenance activities for trails will be avoided during wet periods if activities would likely damage the road drainage features or result in increased soil erosion.

Track Maintenance: Routine maintenance is to be done as needed, but no less than once per week as determined by one of the Heavy Equipment Operators. Maintenance includes watering, ripping, reshaping with dozer or grader, disking or dragging with wheel tractor. Maintenance may also include cleaning of stormwater culvert inlets and outlets and removal of vegetation as needed. Additional annual or biennial maintenance may be completed in late summer or early fall by 1) adding material collected from the sediment basins or imported from a weed free facility to build up the track, 2) adding sand to improve rideability, and/or 3) adding rice hulls to retain soil moisture. These maintenance activities are done with the dozer, grader, water truck and wheeled tractor with disk attachment.

Road maintenance: Routine maintenance is done based on trail monitoring results (See Section 5.1 for more detail on monitoring methodology) to maintain road quality and restore proper drainage. Maintenance is done with a grader, wheeled tractor with drag box, water truck and roller. This work may include removal of vegetation as needed. Maintenance activities for roads will be avoided during wet periods if activities would likely damage the road drainage features. Annual maintenance is done in late spring to improve roads and to prep for dust suppression using the grader, wheeled tractor with drag box, water truck and roller. At this time, new

aggregate base is added as needed. Emergency access roads are graded with dozer, grader or wheeled tractor with drag box as needed to ensure emergency vehicle access.

6.4.3 Ongoing Maintenance for Dust Suppression

Tracks, roads, and trails are watered throughout the day as needed for dust suppression. In the summer when the soil is dry, watering is completed more frequently. Each May and September, a dust suppressant application, such as Dust Off ®, is applied to heavily used dirt roads and parking areas to minimize dust throughout the rest of the year.

6.4.4 Ongoing Maintenance of Stormwater Infrastructure

Ongoing stormwater infrastructure maintenance preserves functionality of existing culverts, armored channels, armored and un-armored roadside ditches, hardened water crossings, and sediment basins within the SVRA (Figure 28). Stormwater infrastructure is designed to reduce sediment transport in run-off and protect the water quality of Coyote Creek and its receiving waters. Over time, eroded sediment and debris accumulates within the infrastructure causing reductions in storage capacity and water retention resulting in flooded areas. Flooding presents a hazard to visitors and facilities and may cause further erosion and vegetation cover loss when visitors try to avoid flooded areas. To prevent functional failures and subsequent high levels of turbidity in downstream waters, regular cleaning and occasional replacement of damaged infrastructure is required. This maintenance is anticipated to recur based on infrastructure monitoring results (See Section 5.3 for more detail on monitoring methodology). Prairie City SVRA has an existing NOE and LSAA (1600-2016-0154-R2) with CDFW to clean the sediment basins which expires in March 2027. Staff are currently in the process of updating CEQA documentation and obtaining a new 10-year LSAA prior to initiating any work described below.

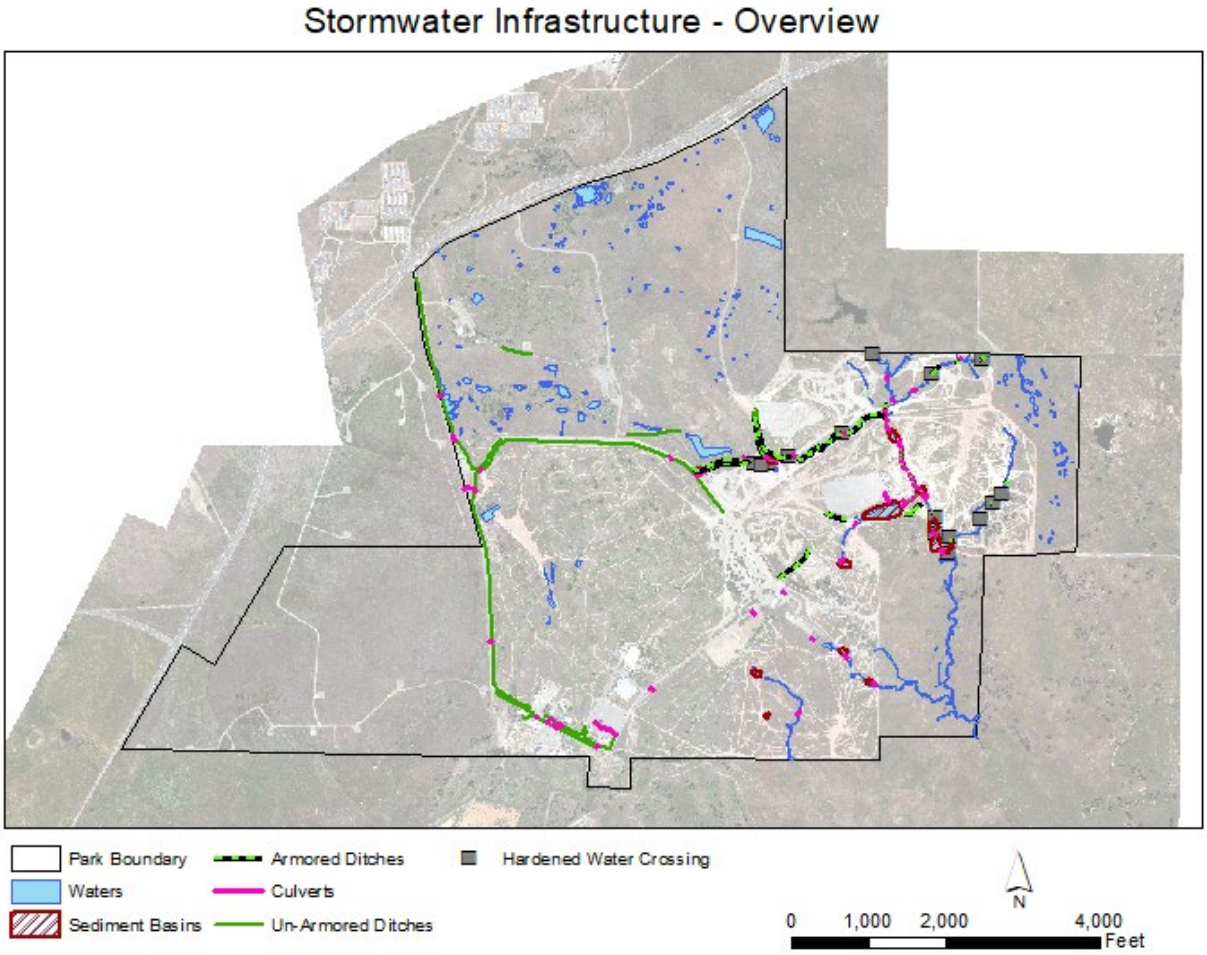

Figure 28. Map of All Stormwater Infrastructure at Prairie City SVRA.

Culverts: Currently, there are approximately 65 culverts within the Park (Figure 29). Culvert lengths range from 3 to 30 feet, and culvert diameters range from 12 to 36 inches. Several of the culverts are part of the road infrastructure and provide drainage to roadside ditches. The area immediately around the culvert's inlet and outlet are cleared of debris to maintain flow and original design capacity. Timing and frequency of maintenance is based on infrastructure monitoring results (See Section 5.3 for more detail on monitoring methodology). Additional permitting and CEQA documentation may be required and will be acquired, if applicable, prior to any maintenance activity. Damaged infrastructure may be replaced in kind or with a larger size if needed when the water features are dry. Culvert inlets and outlets shall be maintained free of vegetation to prevent debris back up and flooding.

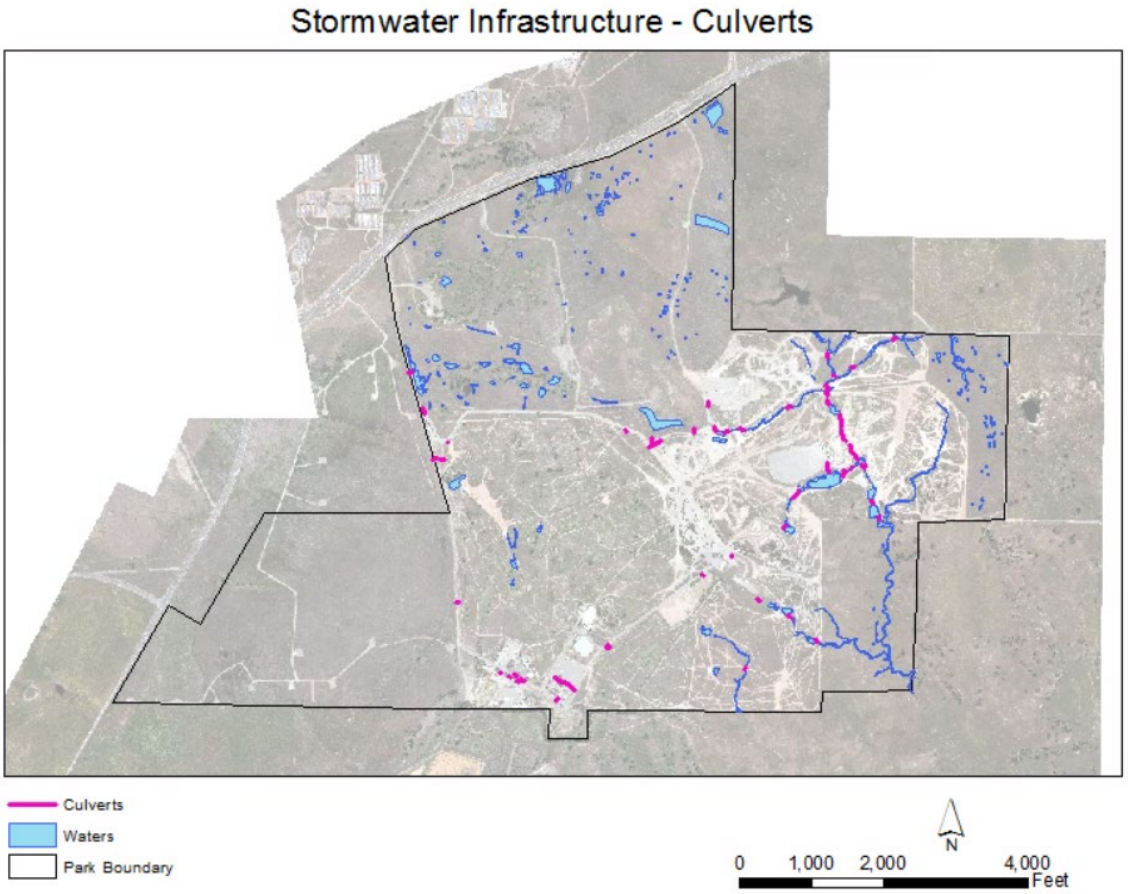

Figure 29. Map of Culverts within Prairie City SVRA.

Armored Channels: Armoring consists of six- to eight-inch minus rock and large boulders placed within the channel which prevents scour and limits erosion. Sediment is also captured within the spaces of the rock acting as sediment control. Currently, there are approximately 2,400 feet of armored channel in the Park (Figure 30). Channel depths range from two to four feet.

The cleaning of armored channels will include removing rock using an excavator or backhoe, cleaning/screening the rocks with a grizzly bar, removing sediment within the channel, and replacing the cleaned rocks within the channel. Larger rocks will be “re-keyed” in, so they remain stationary during higher flow events.

The amount of sediment removed depends on the size and fullness of the channel and a bulldozer may be needed. Removed sediment will be used to amend the motorcycle, ATV, or 4x4 tracks and trails. This maintenance could take up to five weeks to complete and would occur during the dry season as needed based on infrastructure monitoring results (See Section 5.3 for more detail on monitoring methodology). Vegetation may also be removed in and along

armored channels during maintenance. The minimum amount of vegetation would be removed to regain functionality of the armoring. If applicable, additional permitting and CEQA documentation will be acquired prior to any maintenance activity.

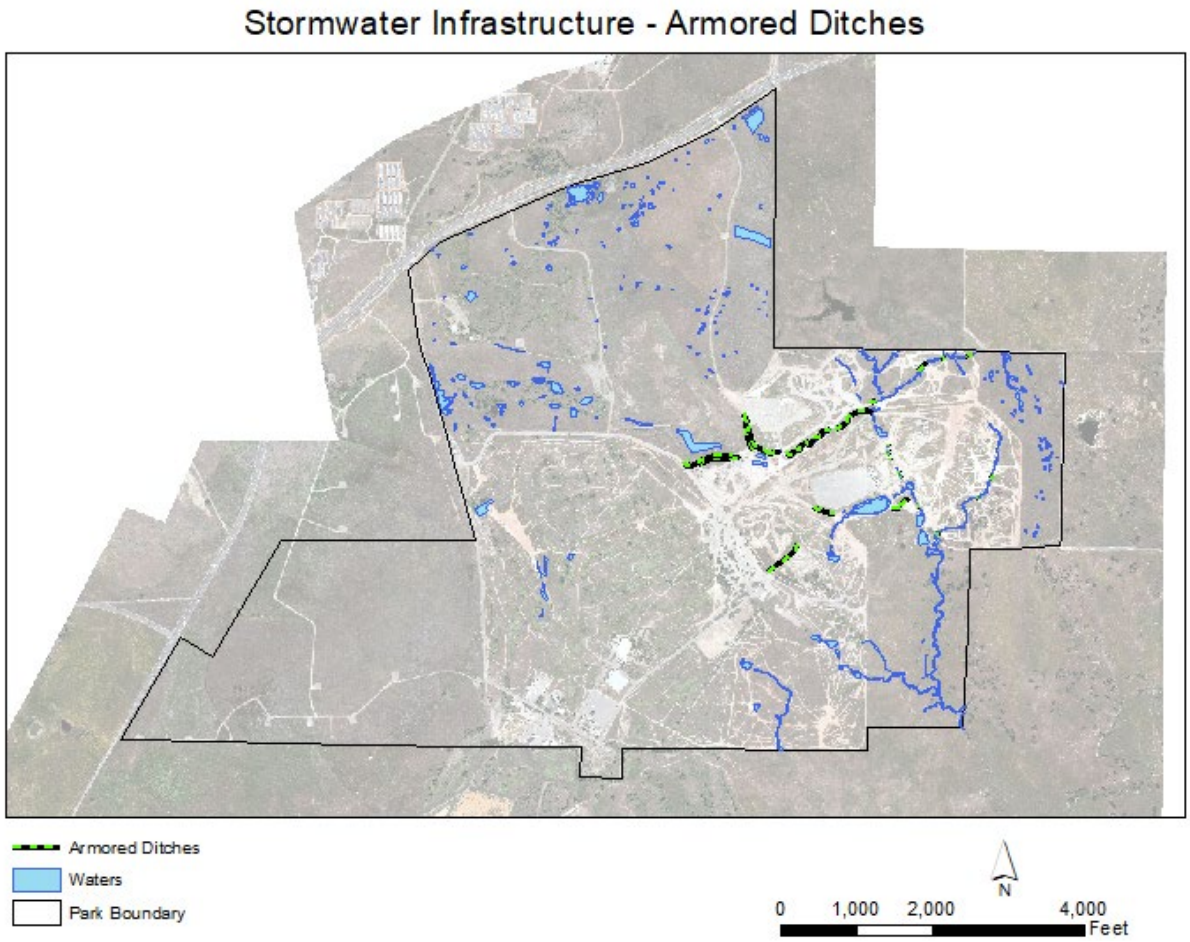

Figure 30. Map of Armored Ditches with Prairie City SVRA.

Armored Roadside Ditches: Armoring consists of six- to eight-inch minus rock placed within the roadside ditch which prevents incising of the drainage and limits erosion. Sediment is also captured within the spaces of the rock acting as sediment control. There are approximately 3,600 feet of armored roadside ditch in the Park (Figure 30). Ditch depths range from two to four feet.

Cleaning of armored ditches will include removal of rock using an excavator or backhoe, cleaning/screening the rocks, removing sediment within the ditch, and placing the cleaned rocks back into the ditch. Additional rock of a similar size may be placed within the ditch. The amount of sediment removed depends on the size and fullness of the channel and a bulldozer may be needed. Removed sediment may be used to amend the motorcycle, ATV, or 4x4 tracks

and trails. Vegetation may be removed in the same manner as armored channels. This maintenance work would take up to two weeks to complete and would be conducted during the dry season as needed based on infrastructure monitoring results (See Section 5.3 for more detail on monitoring methodology).

Un-armored Roadside Ditches: There are roughly 15,500 feet of un-armored roadside ditches throughout the Park (Figure 31). Maintenance activities would involve removing sediment and reconfiguring the ditch back to its original design. The sediment will be used within the Park for land rehabilitation activities, road/trail repair, or on the tracks.

Roadside ditches shall be maintained free of shrubs or trees to prevent debris backing up and flooding. This maintenance work would occur during the dry season based on infrastructure monitoring results (See Section 5.3 for more detail on monitoring methodology).

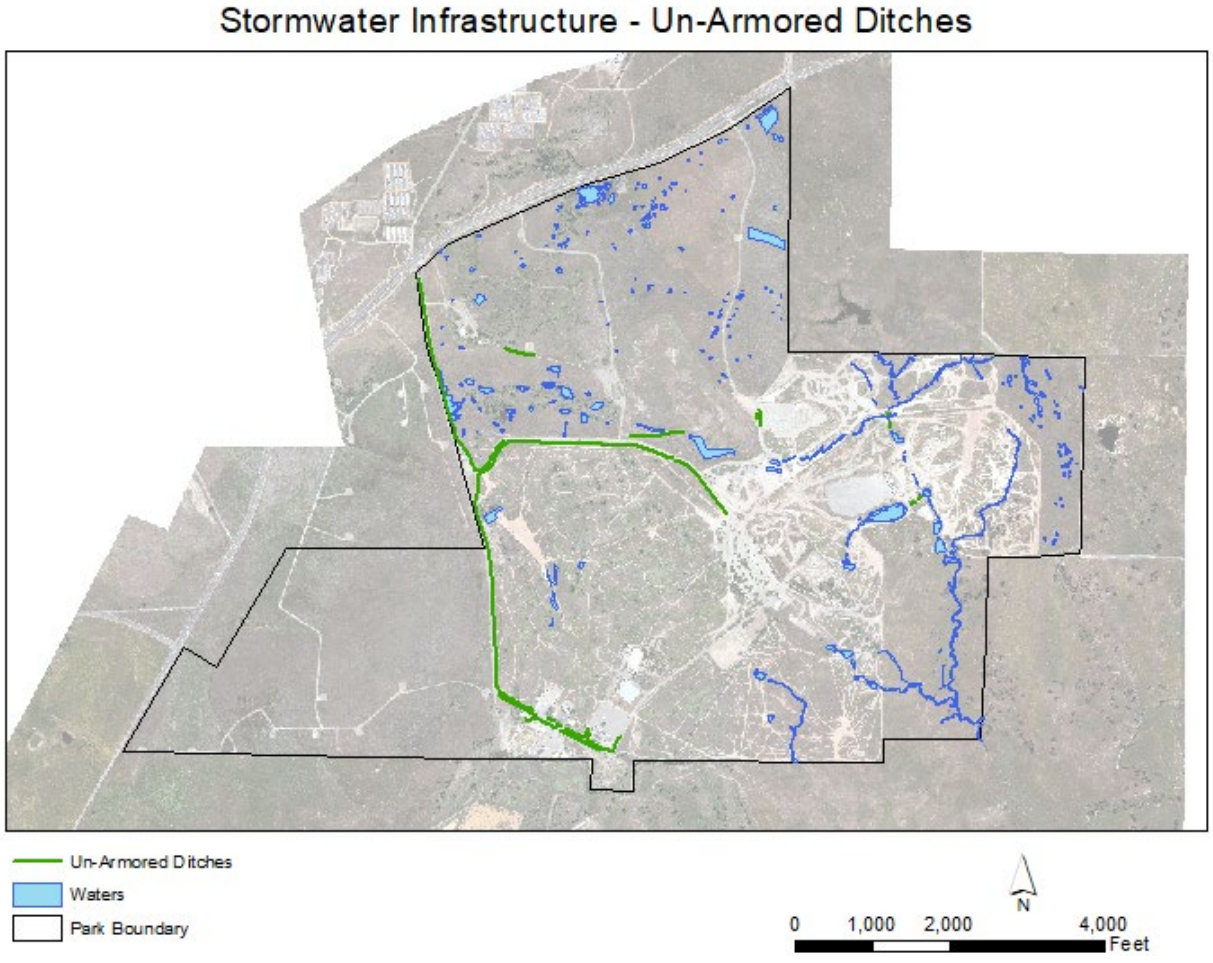

Figure 31. Map of Un-Armored Ditches within Prairie City SVRA.

Hardened Water Crossings: Currently, there are 22 hardened water crossings in the Park (Figure 32). Typically, these features consist of precast articulated concrete blocks which are placed where trails and roads cross water channels to minimize erosion. Over time, sediment accumulates on the top of these features reducing their effectiveness. Cleaning the crossings will require a backhoe and/or a dozer or road grader to clear the sediment off the surface as needed. The sediment would be placed back on the trail/track. The cleaning of one crossing would take approximately two hours. Damaged infrastructure may be replaced in kind. Hardened water crossings will be maintained free of vegetation to prevent crossing impediment, debris back up and flooding. Work would occur during the dry season. If it was determined that articulated concrete block needed to be replaced with a raised culvert, that would be considered a separate project from regular maintenance work and the appropriate permits and CEQA would be completed before work began.

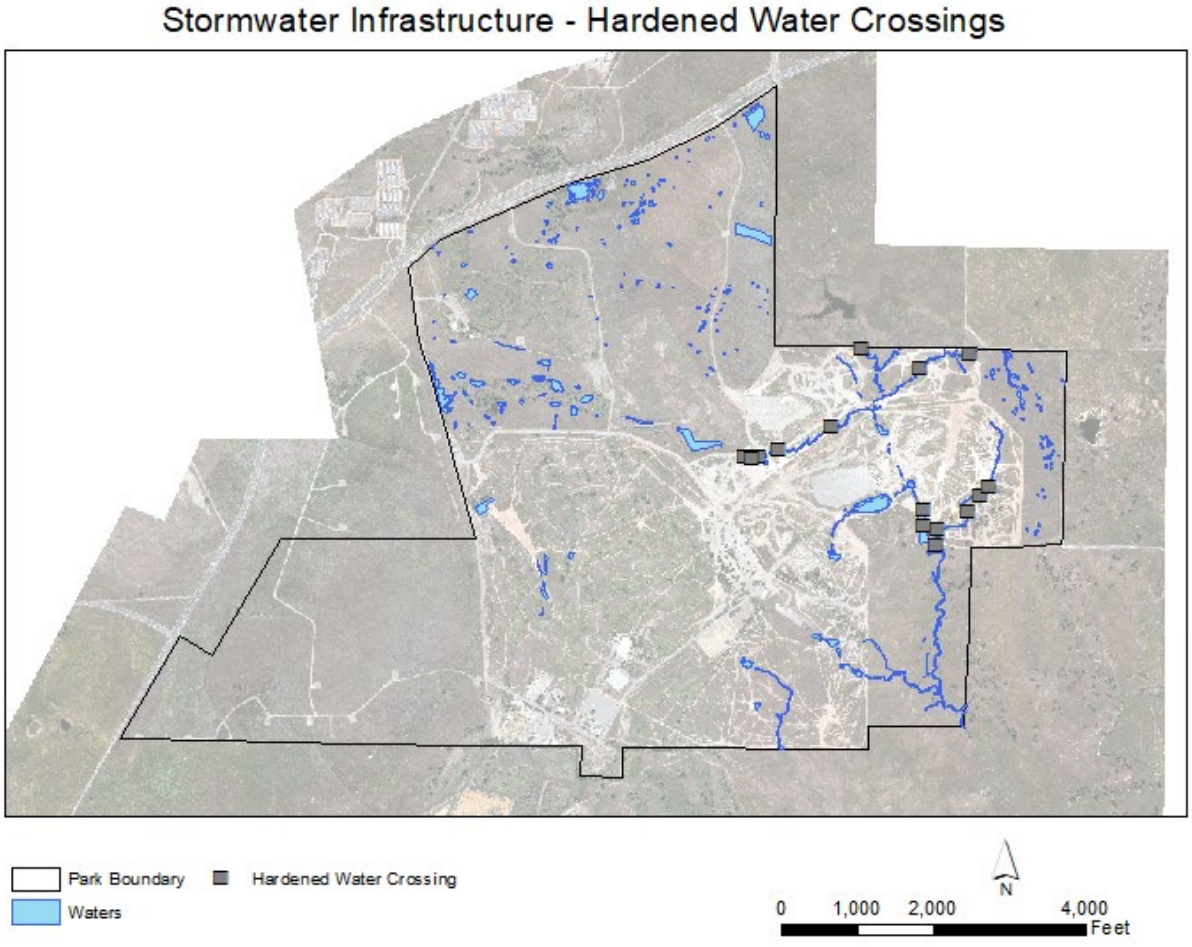

Figure 32. Map of Hardened Water Crossings within Prairie City SVRA.

Sediment basins: Twelve sediment basins are maintained within the Park (Figure 33). Each basin has an established access area for maintenance. Sediment captured by the basins settles out of the water column and accumulate at the bottom and walls of the basins. Over time, accumulated sediment reduces the storage capacity of a basin, and so must be periodically cleaned out.

Sediment basins are cleaned in two phases- dewatering in the early summer and excavating in the late summer or early fall. The total process of pumping, drying, and excavation occurs over the course of a few months. Once dry, excavation of the sediment basins typically is conducted in a few weeks. Because basins vary in storage capacity, runoff water received, and location in the watershed, basins fill at different rates. As a result, some require maintenance annually while others are cleaned less frequently.

During the summer, any water that has accumulated in the basins scheduled to be cleaned is pumped into a water truck and used for dust suppression on Park roads and tracks, used for vegetation watering purposes, or is pumped into other basins with additional holding capacity. In some cases, water will be pumped out of a basin and sent downstream once turbidity has settled. These discharges will be monitored for turbidity and shall be in compliance with the standards listed in the Water Quality Control Plan for the CRWQCB for the Sacramento River Basin and the San Joaquin River Basin July 2016. If standing water is not manually removed, captured sediments within the basins may not dry out adequately enough for heavy equipment to remove it before the next rainy season. Equipment to be used includes a “trash” pump, hoses, and a water truck. Table 8 provides a summary of volumetric data based on a 2017 bathometry analysis (CDPR 2017a). The volume was determined using basin boundaries digitized from aerial imagery and depth measurements taken during the spring of 2017 when the basins were at maximum capacity. The sediment load in the bottom of the basins was unknown at the time of the field surveys; however, the depth measurements were taken at the bottom elevation (at refusal) so volume calculated would estimate the gallons at empty (CDPR 2017a).

Table 8. Area and Volumetric Data of Sediment Basins

Basin Name	Area (acres)	Total Estimated Volume (gal) at empty
2A	.390	280,449
2B	.253	234,908
2C	.133	114,082
2D	.062	27,262

Basin Name	Area (acres)	Total Estimated Volume (gal) at empty
3A – Practice Track	.168	85,501
3B – Goose Pond	1.587	1,706,534
3C – South Hangtown	.153	89,426
3D – North Oak Hill	.283	317,096
3E – South Oak Hill	.462	545,405
3F – Coyote	.126	N/A
4A – 4x4 Area	.148	N/A
4B – North Hangtown	.254	329,037

Once the basins selected for maintenance are dried completely in late summer or early fall, the sediment will be removed using an excavator, backhoe, dozer, and dump truck. Excavation would occur to a depth of up to 6 feet below the existing bottom elevation of these features. Most facilities would only require excavation to 2-4 feet below grade. Accumulated sediment may also be scraped from the sides of basins. This action would alter the shape and structure of the basins but would be limited to restoring the original design capacities of these features. All ground disturbing activities will occur when the basins are dry. Excavated sediment would be stockpiled on-site away from water bodies and re-utilized for track and trail maintenance and/or restoration projects within the Park. Stockpile management BMPs can be found in PO-5 of 2007 OHV BMP Manual for Erosion and Sediment Control (CDPR 2007).

Vegetation may also be removed along the edge of sediment basins to bring the shape back to its original design. The minimum amount of vegetation would be removed to regain functionality of the infrastructure. Once cleaned, vegetation around sediment basins will be allowed to grow until the basin needs additional cleaning.

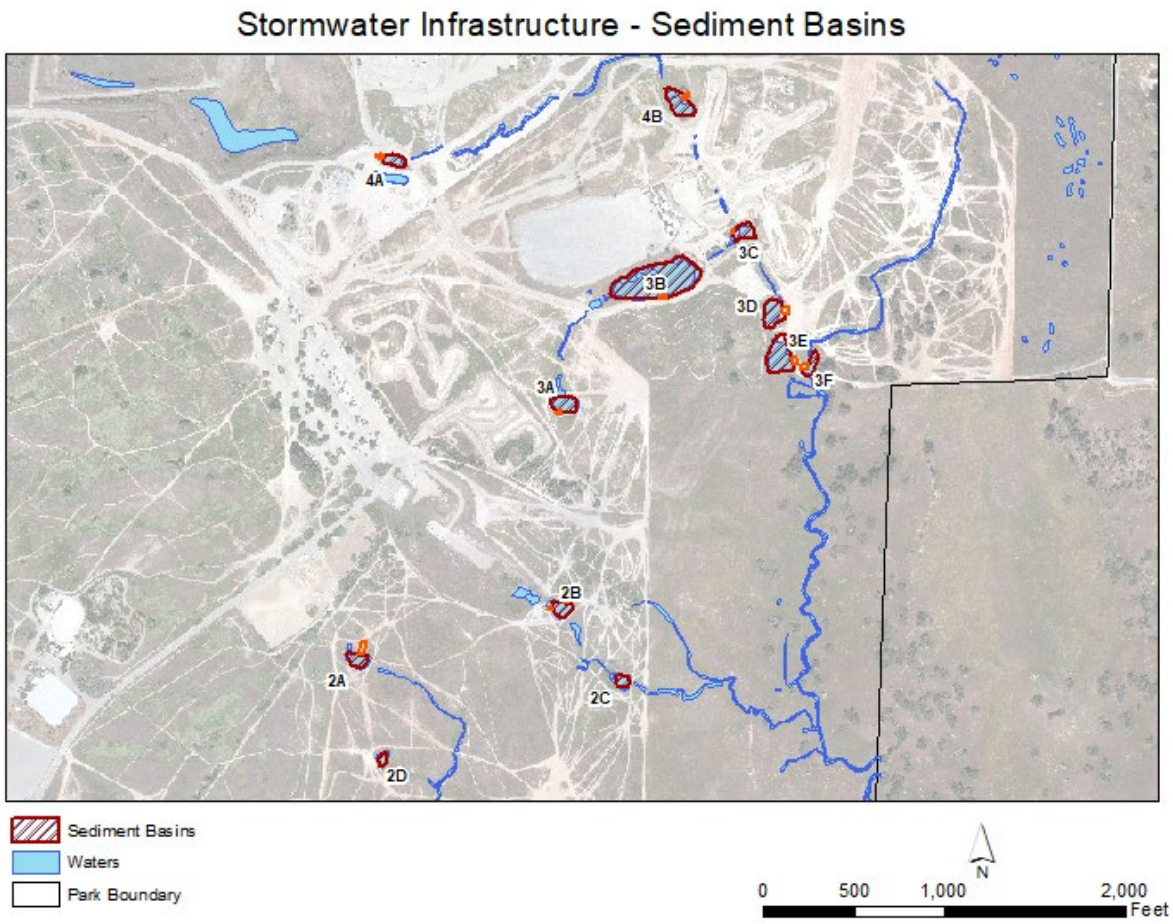

Figure 33. Map of Sediment Basins within Prairie City SVRA.

6.4.5 Special Event Related Maintenance

Special events and races at an OHV facility can strain the infrastructure and natural environment at the facility because concentrated numbers of people congregate for the events, and aggressive, repeated runs on the event courses by competitors may cause unnatural erosion and dust if not managed sustainably. These special events and races may be either point-to-point routes or closed-loop routes. Competitions include cross-country races, enduros, dual sports, hare scrambles, hare-and-hound races, trials riding, rock racing, obstacle course contests for four-wheel-drive vehicles, and motocross races on closed-loop courses.

Most impacts from special events are avoided or minimized through pre-event planning and monitoring (See Section 5.4 for more detail); however, sometimes maintenance is required after the event. The amount of impact is calculated during monitoring. Generally, maintenance includes grading, removal of berms, and revegetation to pre-event trail width. Trail

maintenance may be done by hand crews or mechanized equipment, depending on the nature of the task, on amount of material to be moved, or the width of the trail. The promoter may be charged a maintenance fee if the repair work is completed by Park staff. Sometimes the promoter completes hand work themselves under supervision of Park staff.

6.4.6 Development Projects

This section describes development projects related to transition into the new land use designations described in the General Plan. Some projects only include restoration while others include new trail design related to the RTMP. Once a project or action has been selected for implementation, it will undergo assessment using the CDPR Project Evaluation Form (PEF) to determine the necessary documentation for compliance with the California Environmental Quality Act (CEQA).

Annual Restoration Projects

In most years, Prairie City SVRA plans a restoration or rehabilitation project in an area shifting to a Route and Trail System Use Area. Focus is on user-created areas or trails with excessive erosion. Sediment collected from the sediment basins is used to fill in incised trails and re-contour the grade to produce sheet flow and the slopes are stabilized with a hydroseed mixture of native grasses and forbes. If new trails are planned, the trails will be cut in after the ground has stabilized and vegetation established. If there is any excess dirt and other materials after the project, they will be stockpiled on-site away from water bodies and re-utilized for track and trail maintenance and/or hillside restoration projects within the Park. Stockpile management BMPs can be found in PO-5 of 2007 OHV BMP Manual for Erosion and Sediment Control (CDPR 2007). Restoration and improvement projects will be presented during quarterly Prairie City Improvement Group meetings to stakeholders and the public before implementation.

Coyote Gulch Project

This project is part of a Major Capital Outlay project headed by the Acquisition and Development Program with CDPR with the purpose to design and develop BMPs to reduce sediment and improve water quality within the Prairie City SVRA and to protect downstream receiving waters. In 2016, the planning effort focused on the main drainages running through Zone 4 MU, PCMX MU, Zone 2/3 MU, and Barton MU. However, in 2018, focus shifted to just the Coyote Gulch area of Zone 2/3 MU due to funding limitations. Coyote Gulch is about 43 acres of 236 total acres in Zone 2/3 MU and is concave bowl shape with one ephemeral drainage (Figure 34). Heavily eroded user-created trails, numerous unprotected watercourse crossings, and natural bowl-shaped topography made this area a priority for restoration.

Figure 34. Map of the Coyote Gulch Project Footprint.

The trails and hillsides will be restored to a "clean slate" – recontoured to original line and grade and hydroseeded with a native seed mix. A few existing routes will remain open for access during maintenance. The channel will be contoured into a twelve-foot-wide vegetated swale with five raised box culvert crossings strategically placed along the stream (Figure 35). The sediment basin will be removed. Trail design and use will be handled separately through the RTMP and will avoid impact to oak resources. Trail design and construction will be in accordance with the Standard and Guidelines (CDPR 2020B). A notice of determination was filed in December 2019 (State Clearinghouse # 2013032008) tiered to the General Plan. The Northern Service Center has received a 1602 LSAA (SAC-17340-R2), a 401 Water Board Notice of Applicability for coverage under Small Habitat Restoration Projects (#5a34CR00823) and is currently waiting on approval for the 404 permit. Once all permits are approved and received, construction is anticipated to start in spring/summer of 2024.

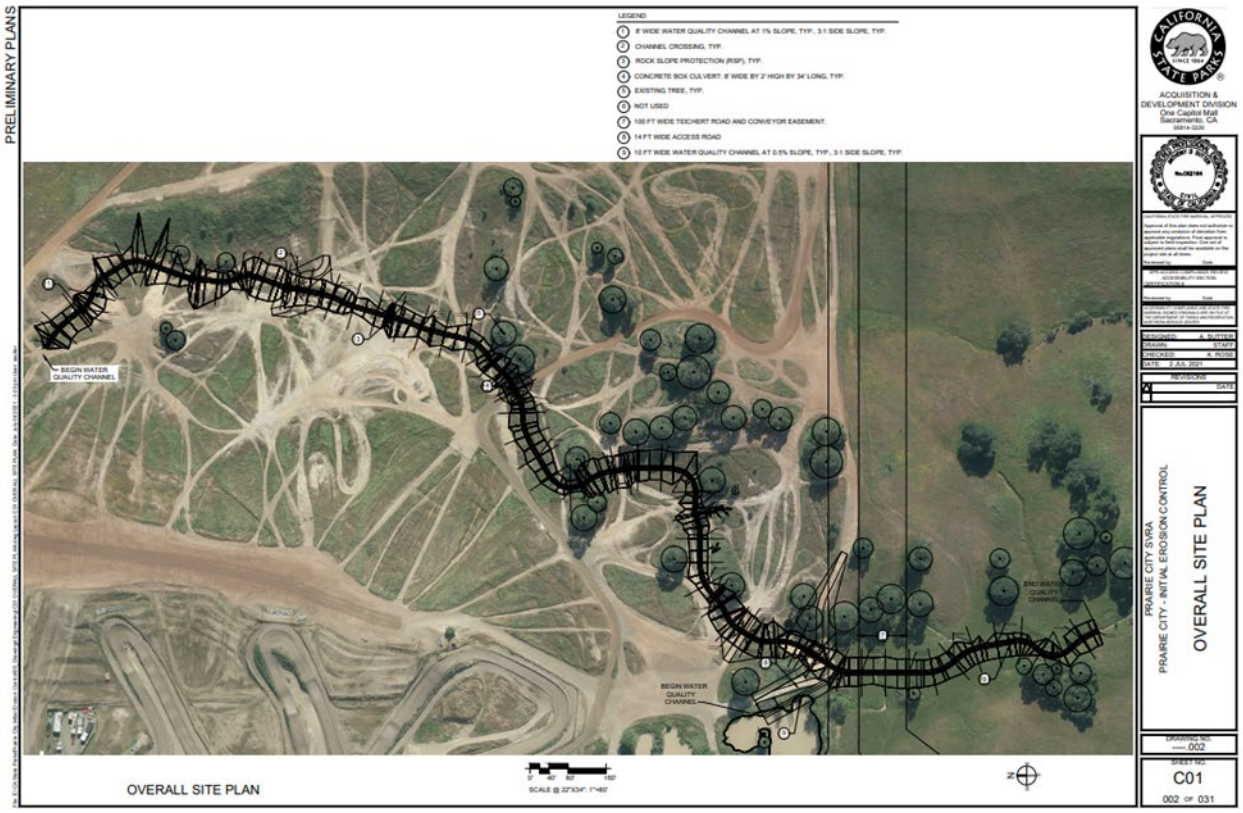

Figure 35. Draft Site Plan of the Coyote Gulch Project.

<u>Goose Pond Stormwater Improvement Project</u>

The purpose of the Goose Pond Stormwater Improvement Project is to prevent ponding at the service entrance to the Oak Hill Trail system and between Bobcat and Rattlesnake Trails (Figure 36). A PEF has been completed for this project and is currently undergoing review to determine what permits and additional CEQA may be needed. Any permits needed will be acquired before the start of construction.

During the rainy season, if Goose Pond reaches its holding capacity, continued rainfall will cause the pond to overflow. Water from the pond then flows back into the wetland area at the west end of the pond, which can cause ponding to extend to the west edge of Oak Hill.

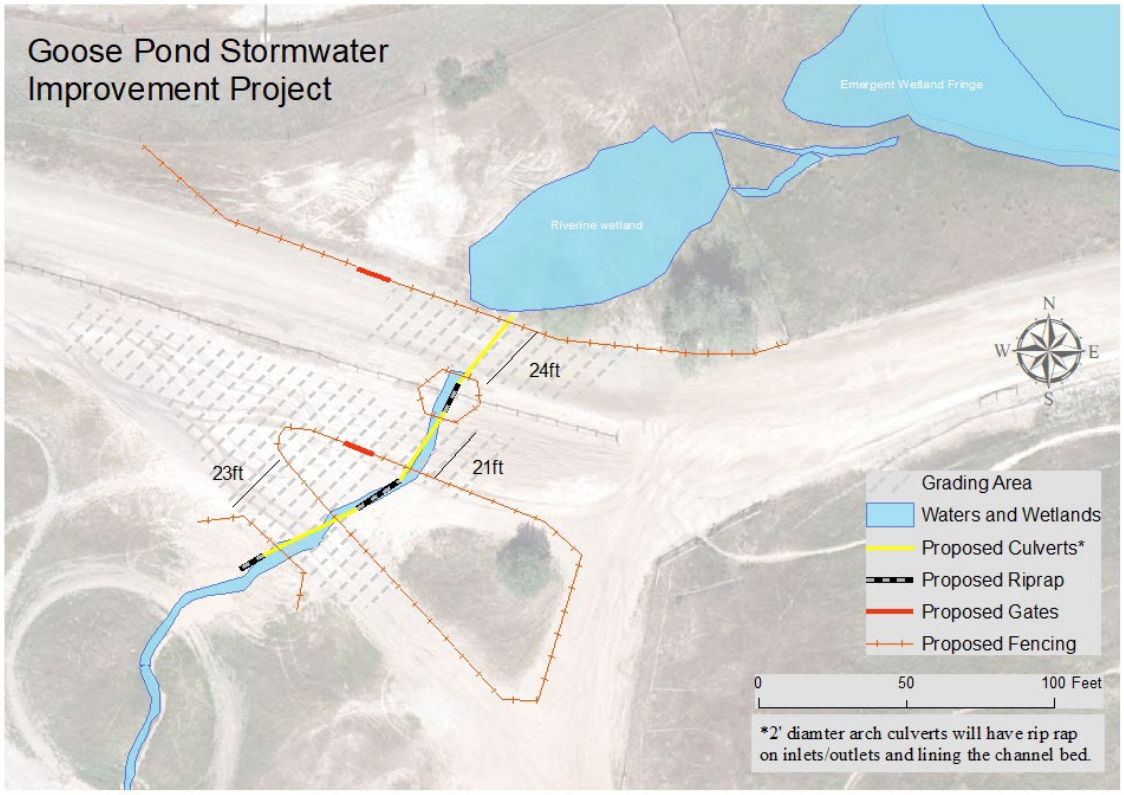

Figure 36. Conceptual Map of the Goose Pond Stormwater Improvement Project.

This project will include the installation of arched culverts to allow greater flow capacity so that drainage through the area is maintained and excessive water ponding is minimized.

The road grade will be raised where the arched culverts will be installed, which will eliminate the direct tire-to-water contact and associated mechanical erosion. The riverine wetland area will be fenced off as part of this project, allowing for native vegetation enhancement in an area that has been open to OHV riding. Construction will take place when the channel is dry and will take place over several weeks. BMPs will be used to manage fugitive dust and erosion. An estimated 200sqf of non-native and invasive grasses may be impacted when grading to build up the roads. Any exposed soils at the end of construction will be seeded with native grass and the fenced enclosed areas will naturally fill with grass so there will be a positive impact to vegetation.

6.4.7 Procedures for Documenting Maintenance Activities.

The Prairie City SVRA maintenance plan is designed to document the projects and practices that will be employed annually to correct deficiencies and unsustainable impacts to trails and

facilities. Work orders will be generated from monitoring programs and have a preferred repair explained. Site visits will be needed at times to ensure all staff understand the project scope and timeline. Records will be maintained as projects are completed with consistent documentation that notes:

- Project type
- Project or management action (i.e. practice) location and spatial extent
- Project or management action (i.e. practice) timeframe
- Soil moisture and weather conditions at time of maintenance
- Photos will be taken during the repair and afterward

For specific maintenance activities such as road and trail maintenance and stormwater infrastructure maintenance, checklists will be completed during all phases of construction and included in the Annual Report as appendices. Examples of these checklists can be found in Appendix 3.

7 COMPLIANCE REPORT AND ACTION PLAN

After evaluating the year's maintenance and monitoring programs, the Park may need to respond by adjusting the next year's SCP program as part of the adaptive management process. This section outlines the adaptive management decision process and chain of command and the required Compliance Report to document those decisions and the full natural resource program of the previous year.

7.1 ADAPTIVE MANAGEMENT DECISIONS

Many adaptive management decisions are relatively straightforward changes to resource management activities or treatments approved and undertaken by program staff within afforded authorities. Others require changes to operational decisions, require additional resources, or include other factors which require SVRA management to be informed and engaged in assessing alternatives to address mandates. Thus, the approval process of decisions that grow out of adaptive management processes will necessarily engage a slightly different chain of command depending on the situation.

7.1.1 Standard Chain of Command

The standard chain of command for decisions and approval at Prairie City SVRA is described below. With resource-related issues, including decisions involving the SCP, the District Natural Resource Program Manager and the Natural Resources Division may have an increased role in the decision-making process dependent upon the scope of the issue.

In the standard chain of command, Environmental Scientists would notify the Prairie City SVRA Sector Manager of any situations which trigger management action. The Sector Manager would notify the Gold Fields Natural Resource Manager, Gold Fields District Superintendent, and/or OHMVRD. OHMVRD would be responsible for involving NRD and/or Northern Service Center as required. Each chain of command level uses their judgment on when to elevate an issue. Involvement may vary from a simple notification of a management action to inclusion in a more involved decision-making process. Results of any decision will travel back down through the chain of command for the field staff to implement appropriately.

7.1.2 First-Level Response Chain of Command and Approval Process

Most situations can be solved at the Park level with or without the additional involvement of the Natural Resource Manager.

Environmental Scientists are approved to take certain management actions already approved through the SCP process. They may only require notification to the Sector Management and/or the District Natural Resource Program Manager. Planting native plants within existing restoration or protected areas and other ongoing natural resource activities would fall under this level. Potential management actions not addressed within this SCP will be discussed with the Sector Manager and the District Natural Resource Program Manager. They would determine whether other parties in the chain of command need to be involved.

Some actions may require input from other programs at the Park, such as maintenance, law enforcement, cultural resources or interpretation. These actions would also include the Sector Manager as the final decision maker. An example of this type of management action is a small-scale restoration project to rehabilitate unauthorized trails requiring fence building, safety input from law enforcement, and public notification through interpretation. Many ongoing natural resource and maintenance activities fall under this level. Projects requiring additional CEQA, starting with the CDPR PEF or permits, would trigger the involvement of the Natural Resource Program Manager and potentially other levels within the chain of command.

7.1.3 Second-Level Response Chain of Command and Approval Process

Some management actions may require approval processes at the District level or higher due to the level of complexity of the issue, potential impact to other programs, funding needs, and availability, or additional actions outside the scope of the current SCP. In addition, many of the alternative pathways to addressing management actions triggered by adaptive management may also engage other divisions – including the OHMVRD, NRD, or the Northern Service Center. The Sector Manager and the District Natural Resource Program Manager are responsible for elevating a management action decision to the second-level chain of command.

Large scale projects such as Capital Outlay projects go through a District and a State-wide project planning process. It includes a review from all core programs at the District level and results in agreed-upon avoidance and minimization measures incorporated into the project to reduce impacts to natural resources. This standard process, including the PEF as the initial step in the CEQA process, will ensure appropriate management actions are taken before, during, and after a project to conserve and improve wildlife and habitat potentially impacted by the project.

Additional expertise and knowledge may be needed from the District, OHMVRD, or NRD to aid Park staff in implementing or developing management actions. Developing and interpreting policy or monitoring methods for programs such as wet weather closures may need additional outside sources of expertise.

The examples provided above are included to characterize the chain of command pathway related to the SCP. Changes in staff, management, or the chain of command will be updated within the SCP promptly. Additional changes requiring high levels of notification and decision-making will also be documented in compliance reports.

7.2 Compliance Report and Action Plan

The intent of the Compliance Report is to document any maintenance activities such as infrastructure repair or restoration projects, results of that year's monitoring program, and the resulting responsive Action Plan. The Action Plan represents a "to do" list of anticipated activities related to the 2024 SCP and indicates any likely upcoming projects involving ground disturbing activities to be conducted within the Park to ensure compliance with the Standard (CDPR 2020b). If a project as specified in the 2024 SCP is not completed in its entirety, an explanation detailing circumstances that prevented project completion is included in the Compliance Report. The incomplete project will then be added to the Action Plan for the following year.

The Report, at minimum, will include:

- The soil management goals, objectives and priorities for the prior year
- An analysis and review of the results of the prior year's monitoring data. This will include a comparative assessment of trail conditions.
- Documentation of maintenance activities within MUs at the Park.
- Documentation of MU(s) infrastructure improvements, such as installation or repair of watercourse crossings
- A compliance Action Plan which includes a list of maintenance actions planned for the following year and a description of area(s) where future projects are likely. This will include how we will determine the maintenance plan priorities for the following year.

The Compliance Report and Action Plan are to be reviewed at many different levels within State Parks' Chain of Command. These levels include Park, District, Division, and Department. After iterative review at the Park and District levels, Compliance Reports are to be sent to OHMVRD and NRD technical team staff for review to determine if the goals and objectives established by the Park's 2024 SCP are being met.

Report generation, Program review, and District review should be completed annually, with final reports submitted to OHMVRD and NRD by March 31st, following the year to which the annual report applies.

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APPENDICES

9 APPENDIX 1: SOIL TABLE FROM GP

Soil Map Unit Name	Surface Texture	Depth to Bedrock (inches)	Shrink-Swell Potential[1]	Permeability[2]	Water Erosion Hazard[3]	Wind Erodibility Group[4]	Drainage Class	Hydrologic Soil Group[5]	Off-Trail Erosion Hazard	Soil Suitability for Septic Systems	Limitations
Creviscreek sandy loam, 0 to 3 percent slopes	Sandy loam	57	Low	High	Moderate	3	Moderately well drained	B/D	Slight	Very limited	**Small Buildings and Shallow Excavations:** Very limited (shallow depth to saturated zone)
Hadselville-Pentz complex, 2 to 30 percent slopes	Fine sandy loam	7–16	Low	High	Moderate	3	Moderately well drained	D	Moderate (slope erodibility)	Very limited	**Small Buildings and Shallow Excavations:** Very limited (shallow depth to bedrock, steep slopes) **Embankments, Dikes, and Levees:** Very limited (thin soil layer, soil piping)
Mokelumne gravelly loam, 2 to 15 percent slopes	Gravelly loam	39–46	Moderate	Moderately high	Moderate	7	Well drained	D	Slight	Very limited	**Small Buildings and Shallow Excavations:** Very limited (steep slopes, shrink-swell potential) **Embankments, Dikes, and Levees:** Somewhat limited (thin soil layer, hard to pack)
Mokelumne-Pits, mine complex, 15 to 50 percent slopes	Gravelly loam	39–46	Moderate	Moderately high	Moderate	7	Well drained	D	Moderate (slope erodibility)	Very limited	**Small Buildings and Shallow Excavations:** Very limited (steep slopes, shrink-swell potential)
Pardee-Ranchoseco complex, 3 to 15 percent slopes	Gravelly loam	7–16	Low	Moderately high	Low	6	Well drained	D	Slight	Very limited	**Small Buildings and Shallow Excavations:** Very limited (shallow depth to bedrock, steep slopes)
Pentz-Lithic Xerorthents complex, 30 to 50 percent slopes	Fine sandy loam	16	Low	High	Moderate	3	Well drained	D	Severe (slope erodibility)	Very limited	**Small Buildings and Shallow Excavations:** Very limited (steep slopes, shallow depth to soft bedrock) **Embankments, Dikes, and Levees:** Very limited (steep slopes, shrink-swell potential)
Pits	Variable	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Red Bluff loam, 2 to 5 percent slopes	Loam	>70	Moderate	Moderately high	Moderate	6	Well drained	C	Slight	Very limited	**Small Buildings and Shallow Excavations:** Somewhat limited (shrink-swell potential)
Red Bluff–Redding complex, 0 to 5 percent slopes	Loam	>70	Moderate	Moderately high	Moderate	6	Well drained	C	Slight	Very limited	**Small Buildings and Shallow Excavations:** Somewhat limited (shrink-swell potential)
Red Bluff–Xerorthents, dredge tailings, complex, 2 to 50 percent slopes	Loam	>70	Moderate	Moderately high	NR	NR	Well drained	NR	NR	NR	NR
Redding gravelly loam, 0 to 8 percent slopes	Gravelly loam	>70	Moderate	Moderately high	Moderate	6	Moderately well drained	C	Slight	Very limited	**Small Buildings and Shallow Excavations:** Somewhat limited (shrink-swell potential)
Vleck gravelly loam, 2 to 15 percent slopes	Gravelly loam	50–53	Moderate	Moderately high	Moderate	6	Moderately well drained	D	Slight	Very limited	**Small Buildings and Shallow Excavations:** Very limited (steep slopes, shrink-swell potential)
Xerorthents, dredge tailings, 2 to 50 percent slopes	Fragmented material	NR	Low	Very high	NR	NR	Somewhat excessively drained	A	Severe	NR	NR

Notes: > = greater than; NR = not rated

Because the dredge tailings and pits have been disturbed and reworked, representative characteristics are not available and these soil types have not been rated

[1] Based on percentage of linear extensibility; shrink-swell potential ratings of "moderate" to "very high" can result in damage to buildings, roads, and underground utilities.

[2] Based on standard U.S. Natural Resources Conservation Service (NRCS) saturated hydraulic conductivity (Ksat) class limits; Ksat refers to the ease with which pores in a saturated soil transmit water.

[3] Based on the NRCS erosion factor "Kw whole soil," which is a measurement of relative soil susceptibility to sheet and rill erosion by water.

[4] The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

[5] Hydrologic soil groups are based on runoff characteristics: Group A = low runoff potential, Group B = low to moderate runoff potential, Group C = moderate to high runoff potential, Group D = high runoff potential.

Source: NRCS 2013

10 APPENDIX 2: DRAFT EXHIBIT B FROM SPECIAL EVENT PERMIT

Event and Course Layout

1) All course routes must be pre-approved by Department of Parks and Recreation (DPR) Staff at least 2 weeks before the event.

3) Permittee will use the provided Special Event Application Map to identify all routes and areas that will be utilized by the permittee and submitted to the Department of Parks and Recreation (DPR) no later than 2 weeks prior to the event.

4) All event courses are to follow approved routes. Driving over vegetation is prohibited. Changes to event course routes not approved by Sector Manager or designee may jeopardize the permittee's ability to hold future special events at Prairie City SVRA.

5) Permittees are required to have course set-up completed one (1) day prior to the event. In order to reduce last minute reroutes and corrections, please stick to the course layout you provided as closely as possible. An environmental scientist may be available to ride the course with the permittee before the event if needed.

6) Law Enforcement and Resource staff will travel all course routes 1 day before and directly after the event to ensure the approved racecourse was followed and any specific resource avoidance measures were followed.

7) DPR staff retains the ability to adjust event and course layouts at any time during course inspections or during the event.

8) Event layout shall avoid all waterways (e.g. creeks, drainages, ponds) excluding those pre-approved by DPR staff.

9) At Departments request, Permittee will cancel or omit sections of the race route due to inclement weather or unforeseen circumstance.

10) DPR staff will determine if the event should be postponed to the rain date agreed upon by DPR and the Permittee in the event of inclement weather or saturated soil conditions. DPR staff will notify the Permittee the Monday or Tuesday before the event if the event is postponed.

Plants, Animals and Cultural Resources

1) Alteration of any vegetation including cutting, trimming, or mowing must have prior approval by DPR Resources Staff.

2) Event activities and courses should remain 20 feet outside the drip-line of elderberry shrubs.

3) Harming or handling of any wildlife is not permitted. If there is an issue, permittee is to contact DPR Ranger staff immediately.

4) If any cultural resource is found, do not remove it. Immediately contact DPR Ranger staff.

Water Usage

1) Dust suppression equipment (e.g. water truck, water trailer) may be required as determined by DPR staff prior to the event.

2) Water use for course preparation may be limited due to water conservation goals, as determined by DPR staff.

3) Straw bale usage will require proof of weed-free certification before deploying in the field and will require prompt removal after event completion.

Hazardous Materials

1) All fuel storage containers over five gallons in size are required to have secondary spill containment (e.g. spill berm, portable tray, fuel containment pads or equivalent) which will help to reduce the chances of hazardous materials from contaminating the park's natural resources.

2) Permittee must have the ability to respond to a hazardous materials spill with an appropriate spill kit (e.g. absorbent pads, disposable bags, personal protective equipment). All spill materials are to be removed from the park and disposed of properly by the Permittee.

3) The portable toilets and restroom facilities used during the event must be placed on a level surface and anchored in a way which will prevent accidental tipping and spilling.

For questions or concerns prior to the event:	For questions or concerns during the event:
Steve Gorman, Special Event Coordinator: (916) 985-5642 McKenzie Boring, Environmental Scientist: (916) 985-1098 Taylor Espenshade, Environmental Scientist: (916) 542-5883	Prairie City SVRA Ranger Station: (916) 985-7378 McKenzie Boring, Environmental Scientist: (916) 542-5150 Taylor Espenshade, Environmental Scientist: (916) 542-5883

11 APPENDIX 3: EXAMPLE MAINTENANCE CHECKLISTS

Prairie City SVRA Sediment Basin Maintenance Checklist

Date:

Fill out the table below.

Basin Name	Loads of Dirt Excavated (tally)	Plants removed (yes or no)	Comments

Prairie City SVRA Culvert Maintenance Checklist

Date:

Fill out the table below including if culverts were cleaned by hand or using heavy equipment. Take photos before and after the work and send to resources or save in a folder on the W drive.

Culvert ID	Prescription from Monitoring	Maintenance Completed	Comments

Prairie City SVRA Road and Trail Maintenance Checklist

Trail Name _____Trail No._____Segment No. _____

Trail Difficulty easiest more difficult most difficult Max Trail Slope _% Ave Trail Slope _%

Activity: maintenance reconditioning new construction Side Slope:_____%
Drainage: Outslope Rolling Dip Confined Flat Other_____
Equipment: Hand Trail Tractor Mini-excavator Other_____ **Soil Type: clayey loamy sandy Rock Fragments (%): <15 15-50 >50**

Soil Depth: shallow deep Vegetation Type: _____ Photo Numbers: _____

Operator _____Assistant(s) _____Date _____ Last Maintenance (mo/yr)
_____Maintenance Type : Hand
Mechanical Notes:_____

Guideline	Yes	No	N/A
1. This checklist was reviewed before starting maintenance or construction on this trail			
2. Prior to mobilization the completed OHV Trail Condition Evaluation Forms were reviewed and trail segments, sections, or features needing maintenance or reconditioning were confirmed.			
3. Equipment was operated by certified operators, or under direct supervision of certified operator			
4. If new, this trail was constructed to Guidelines			
5. OHV rolling dips were constructed/maintained by compacting moist soil in lifts no greater than 4 inches loose thickness			
6. Prior to mobilization, need for maintenance with mechanical equipment was validated			
7. The blade was lifted and the equipment walked across sections of trail that needed no maintenance			
8. Soil collected in rolling dip outlets was recycled into rolling dip structures or back onto the trail tread			

9. Berms were worked back into the trail tread, not bladed off the trail as sidecast			
10. Rills and gullies in treads were repaired with soil reclaimed from rolling dip outlets or from outside berms, not by blading the trail tread			
11. Soil sloughed from cutbanks or sideslopes above the trail was bladed only as needed to maintain a safe trail; cutbanks were not bladed into or undercut			
12. Whoops and stutter (braking) bumps were repaired by ripping, blading, and compacting trail treads when soil was moist (except for non-cohesive soils)			
13. The amount of soil moved was the smallest amount needed to meet the maintenance objective			
14. Where soil was too dry for compaction, maintenance was deferred or done by hand			

If "no" is checked, enter a footnote number and write a brief explanation under comments. Comments: _____

_____

_____