



E5. ALTERNATIVE ANALYSIS



MASTER MANAGEMENT PLAN UPDATE AND ASSOCIATED PARK IMPROVEMENT PROJECTS
DRAFT ENVIRONMENTAL IMPACT REPORT

E5 ALTERNATIVES ANALYSIS

E5.1 FORMULATION OF ALTERNATIVES

E5.1.1 CEQA REQUIREMENTS

Section 15126.6[a] of the State CEQA Guidelines requires that an EIR (1) describe a range of reasonable alternatives to a proposed project, or to the location of the project, that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects of the project and (2) evaluate the comparative environmental advantages and disadvantages of the alternatives. An EIR need not consider every conceivable alternative to a proposed project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision making.

The range of alternatives required to be evaluated in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The EIR need examine in detail only those alternatives that the lead agency determines could reduce a significant or potentially significant adverse effect of the proposed project and that could feasibly attain most of the basic project objectives, taking into account factors that include site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (State CEQA Guidelines Section 15126.6[f]). CEQA does not require the alternatives to be evaluated at the same level of detail as the proposed project.

An EIR must also evaluate a “no-project” alternative, which represents “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” (State CEQA Guidelines Section 15126.6[e][2]). A no-project alternative that assumes continuation of the existing Park uses and no BPMMP-related improvement is analyzed in this DEIR.

The alternatives considered for the BPMMP and the four Park Improvement projects are described in Section E2.2 Summary of Alternatives Considered. Table E5.1.1-1 summarizes these alternatives.

For the Horseshoe Lake Area Concept Plan and the Cedar Grove Area Concept Plan, only the “No project” alternative was analyzed, because these projects affect relatively small areas and partial implementation would not feasibly achieve the project’s objectives. Implementation of these projects would be expected to result in only minor impacts to the environment, because design modification and avoidance measures would be implemented, if sensitive resources are encountered during preconstruction surveys. Furthermore, while sensitive resources are

Table E5.1.1-1 Alternatives Evaluated				
Project	Alternative 1	Alternative 2	Alternative 3	No Project
BPMMP	Partial BPMMP Update 1: Development of trails and other facilities only on the north side of Big Chico Creek; south side acquisition(s) would remain unimproved; all trails on both sides of the creek would be brought up to standards presented in the Trails Manual	Partial BPMMP Update 2: Improvements in Lower and Middle Park only; Upper Park remains as is; all trails brought up to standards presented in the Trails Manual	n/a	No BPMMP Update: Continuation of existing Park uses and no BPMMP related improvements
Trails Plan	Partial Trails Plan: Proposed Trails Plan would be modified to include only trails on the north side of Big Chico Creek; south side acquisition(s) would remain unimproved	Modified Trails Plan 1: Proposed Trails Plan would be modified to include the partial or complete opening of the currently closed section of South Park Drive in Lower Park to vehicles	Modified Trails Plan 2: Proposed Trails Plan would be modified to include the closure of the remaining open section of South Park Drive in Lower Park to vehicles	No Trails Plan: Continued use of trails as is
Horseshoe Lake Area Concept Plan	n/a	n/a	n/a	No Project Alternative: No modification to current facilities and use patterns in the Horseshoe Lake Area
Cedar Grove Area Concept Plan	n/a	n/a	n/a	No Project Alternative: No modification to current facilities and use patterns in the Cedar Grove Area
Disc Golf/Trailhead Area Concept Plan	Modified Disc Golf Plan: Implementation of Disc Golf layout Alternative C as described in Appendix H of the BPMMP coupled with development of a disc golf facility at an additional site owned by the City (i.e., Comanche Creek property)	Restoration Alternative: Cessation of use of the site for disc golf, habitat restoration at the site, and allowance of other existing uses of the site, such as hiking and access to scenic viewpoints	n/a	No Project Alternative: No modification to current facilities and use patterns in Disc Golf area

known or expected to occur in the area, their precise locations are uncertain; therefore, implementation of a smaller scale alternative would not necessarily avoid significant effects on the resource. For some biological resources, such as special-status plant occurrences and raptor nests, the location of these resources may also vary over time, so project-specific, pre-construction surveys followed by avoidance measures, present a more effective mechanism for avoiding significant effects resulting from these projects than considering a downscaled alternative.

E5.1.2 RELATIONSHIP OF PROJECT OBJECTIVES TO THE ALTERNATIVES

This section outlines the project objectives of the BPMMP and the four specific Park Improvement Projects. Both the overall objective and specific objectives are provided for each project. This section also describes whether the alternatives would meet the overall and specific project objectives.

E5.1.2.1 PROJECT OBJECTIVES

BPMMP

The overall objective of the BPMMP is to provide a framework for the long term management and stewardship of Bidwell Park. The specific project objectives are to:

- ▶ Provide a set of management goals, objectives and implementing strategies and guidelines that set the framework for balancing Park use and operation with resource protection and stewardship;
- ▶ Resolve planning issues pertaining to current Park management;
- ▶ Fully incorporate recent land acquisitions into the overall Park planning framework.

Trails Plan

The overall objective of the Trails Plan for Bidwell Park is to provide guidance for future trail maintenance, improvements, construction, and closures throughout the Park. The specific objectives are to:

- ▶ Construct a limited number of new trail segments that would provide improved access, create a loop, create new connections between major trails, or provide convenient access to trailheads;
- ▶ Design alternatives to provide a safe crossing of Big Chico Creek in Upper Park and address constraints at Parking Lot U;
- ▶ Identify unofficial trails that should be targeted for closure and restoration;
- ▶ Identify key areas of concern to address during future implementation of the Trails Plan;

- ▶ Clarify circulation patterns in Lower Park;
- ▶ Provide implementation strategies for the Trail Plan; and
- ▶ Provide an overview of potential funding opportunities.

The Trails Plan is to be implemented in conjunction with the City’s Trails Manual (1999) which provides the City’s standards and guidelines for trails management.

Horseshoe Lake Area Concept Plan

The overall objective of the Horseshoe Lake Area Concept Plan is to formalize the area’s importance as the primary destination in Middle Park and as the primary access point to Upper Park. The specific objectives of the Concept Plan are to:

- ▶ Define destination points;
- ▶ Clarify and delineate access;
- ▶ Provide additional trails to enhance circulation and reduce user conflict;
- ▶ Close and rehabilitate redundant unofficial trails;
- ▶ Regulate access to the lake’s edge; and
- ▶ Provide additional parking, signage and destination points, such as overlooks and picnic areas.

The specific elements of the Horseshoe Lake Area Concept Plan that, when implemented, would help achieve these objectives can be found in Section E3.2.2. The Concept Plan would be implemented in close coordination with the Trails Plan.

Cedar Grove Area Concept Plan

The overall objectives of the Cedar Grove Area Concept Plan are rehabilitation, enhancement, and renovation of existing facilities at the Cedar Grove Picnic Area. Specific improvements would be made to parking, circulation, signage, lighting, and facilities, such as restrooms. The specific objectives of these improvements are to provide an enhanced infrastructure for the area to accommodate the existing events and functions taking place in the Cedar Grove Area, and to enhance the area by creating two distinct use areas (the group picnic/festival meadow area and the Nature Center area) which are connected by a function network of paths and access points.

The specific elements of the Cedar Grove Area Concept Plan that, when implemented, would help achieve these objectives, can be found in Section E3.2.3. Specific elements are provided for the Nature Center area and the group picnic area.

Disc Golf/Trailhead Area Concept Plan

The overall objective of the Disc Golf Course/Trailhead Area Concept Plan is to provide an opportunity for disc golf recreation in Upper Bidwell Park at a facility that has been designed to respect the sensitive resources located at the site and allows for other multiple recreation uses. Three design options for the use of the disc golf course area off SR 32 in Upper Park are under consideration.

The specific objectives are to:

- ▶ Provide options for site use, taking into consideration the extent and location of sensitive biological resources present on the site;
- ▶ Provide for multiple use of the area, including disc golf (casual and tournament use), multiuse trails, picnicking, and scenic overlooks;
- ▶ Provide two separate trailhead layouts, depending on the site use option chosen for the site.

The following three options have been developed:

Option A: an 18-hole long course and an 18-hole short course with parking lot alternative A;

Option B: an 18-hole long course and a 12-hole short course (eliminating holes 4, 8, 10, 12, and 15 from the short course proposed in Alternative A) with parking lot alternative A;

Option C: an 18-hole long course only (no additional short course) with the smaller parking lot alternative B.

The specific elements of the Disc Golf/Trailhead Area Concept Plan that, when implemented, would help achieve these objectives can be found in Section E3.2.4.

E5.2 DESCRIPTION OF ALTERNATIVES

This section analyzes the alternatives' ability to meet the project objectives. The proposed project, which consists of implementation of the goals and policies of the BPMMP and construction of the four specific Park Improvement Projects, is described in detail in Chapter E3, "Project Description." The alternatives analyzed for each project aspect are described above and a summary of alternatives considered is also provided in Section E2.2.1 "Summary of Alternatives Considered."

E5.2.1 BPMMP

E5.2.1.1 PARTIAL BPMMP UPDATE 1

General Characteristics

Under this alternative, development of trails and other facilities would only occur on the north side of Big Chico Creek. The south side acquisition(s) would remain unimproved. All existing trails on both sides of the creek that are to be retained under the trails plan would be brought up to standards presented in the Trails Manual and unofficial trails would be abandoned.

Ability to Meet Project Objectives

This alternative would meet the overall BPMMP objective to provide a set of management goals, objectives, and implementing strategies and guidelines that set the framework for balancing Park use and operation with resource protection and stewardship, although implementation of these policies would not occur on the south side of Big Chico Creek.

This alternative would not meet the objective to resolve planning issues pertaining to current Park management, as some of the issues are related to recreational uses that occur on the south side, specifically the Disc Golf/Trailhead Concept Plan Area. Furthermore, the current BPMMP does not cover all pertinent planning topics in a sufficient level of detail, so the overall objective to resolve planning issues could not be met. This alternative would also fail to fully incorporate recent land acquisitions, which are located on the south side of Big Chico Creek in Upper Park.

E5.2.1.2 PARTIAL BPMMP UPDATE 2

General Characteristics

Under this alternative, improvements associated with the BPMMP Update and three of the four specific Park Improvement Projects (Trails Plan, Horseshoe Lake Area Concept Plan, Cedar Grove Area Concept Plan) would occur in Lower and Middle Park, while Upper Park would remain in its current state and the Disc Golf/Trailhead area would not be developed. All existing trails that are to be retained under the trails plan would be brought up to standards presented in the Trails Manual and unofficial trails would be abandoned.

Ability to Meet Project Objectives

This alternative would meet the overall BPMMP objective to provide a set of management goals, objectives, and implementing strategies and guidelines that set the framework for balancing Park use and operation with resource protection and stewardship, although implementation of these policies would not occur in Upper Park.

This alternative would not meet the objective to resolve planning issues pertaining to current Park management, as some of the issues are related to recreational uses that occur in Upper Park, specifically the Disc Golf/Trailhead Concept Plan Area. Furthermore, the current BPMMP does not cover all pertinent planning topics in a sufficient level of detail, so the overall objective to resolve planning issues could not be met. This alternative would also fail to fully incorporate recent land acquisitions, which are located on the south side of Big Chico Creek in Upper Park.

E5.2.1.3 BPMMP NO-PROJECT ALTERNATIVE

The No-Project Alternative assumes that existing conditions at the project site would remain and the existing BPMMP would continue in effect. The No-Project Alternative would meet neither the overall nor the specific project objectives, because it would fail to provide a new set of management goals, objectives and implementing strategies and guidelines to meet new challenges associated with balancing Park use and operation with resource protection and stewardship, as well as and to resolving planning issues and integrating the new acquisition areas.

Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR.

E5.2.2 TRAILS PLAN

E5.2.2.1 PARTIAL TRAILS PLAN

General Characteristics

Under this alternative, the proposed Trails Plan would be modified to include only trails on the north side of Big Chico Creek and the south side acquisition(s) would remain unimproved.

Ability to Meet Project Objectives

The overall objective of the Trails Plan for Bidwell Park to provide guidance for future trail maintenance, improvements, construction, and closures throughout the Park would only be partially met by this alternative, as it would only provide guidance for the north side of Big Chico Creek in Upper Park, and the south side has unofficial trails, trails not up to Trails Manual standards, and trails that have user conflicts.

This alternative would only partially meet the specific objectives, as it would not include any improvements on the south side of Upper Park.

E5.2.2.2 MODIFIED TRAILS PLAN 1

General Characteristics

Under this alternative, the proposed Trails Plan would be modified to include the partial or complete opening of the currently closed section of South Park Drive in Lower Park from the East 7th Street entrance/exit to the Cedar Grove Entrance to vehicles.

Ability to Meet Project Objectives

This alternative would meet both the overall objective of the Trails Plan for Bidwell Park to provide guidance for future trail maintenance, improvements, construction, and closures throughout the Park, and the specific objectives because it would provide a trails plan for the entire Park.

E5.2.2.3 MODIFIED TRAILS PLAN 2

General Characteristics

Under this alternative, the proposed Trails Plan would be modified to include the closure of the remaining open section of South Park Drive in Lower Park to vehicles.

Ability to Meet Project Objectives

This alternative would meet both the overall objective of the Trails Plan for Bidwell Park to provide guidance for future trail maintenance, improvements, construction, and closures throughout the Park, and the specific objectives, because it would provide a trails plan for the entire Park.

E5.2.2.4 TRAILS PLAN NO-PROJECT ALTERNATIVE

The No-Project Alternative assumes that the Trails Plan would not be implemented and that trail use and maintenance would continue as under current conditions. The No-Project Alternative would meet neither the overall nor the specific objectives of the project.

Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR.

E5.2.3 HORSESHOE LAKE AREA CONCEPT PLAN

E5.2.3.1 HORSESHOE LAKE AREA NO-PROJECT ALTERNATIVE

The No-Project Alternative assumes that the Horseshoe Lake Area Concept Plan would not be implemented and that use and maintenance of the area would continue as under current conditions. The No-Project Alternative would meet neither the overall nor the specific objectives of the project.

Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR. No other project alternatives are evaluated for the Horseshoe Lake Area Concept Plan, because the project area is relatively small and partial implementation of the plan would not feasibly achieve the project's objectives. Implementation of the Horseshoe Lake Area Concept Plan would be expected to result in only minor impacts to the environment, because design modifications and avoidance measures would be implemented if sensitive resources are encountered during project-specific, pre-construction surveys. Furthermore, while resources are known or expected to occur in the area, the precise locations of sensitive resources are uncertain; therefore, implementation of a smaller scale alternative would not necessarily avoid significant effects on the resource. For some biological resources, such as special-status plant occurrences and raptor nests, the location of these resources may also vary over time, so project specific, pre-construction surveys followed by avoidance, is a more effective mechanism to avoiding significant effects resulting from these projects than a downscaled alternative.

E5.2.4 CEDAR GROVE AREA CONCEPT PLAN

E5.2.4.1 CEDAR GROVE AREA NO-PROJECT ALTERNATIVE

The No-Project Alternative assumes that the Cedar Grove Area Concept Plan would not be implemented and that use and maintenance of the area would continue as under current conditions. The No-Project Alternative would meet neither the overall nor the specific objectives of the project.

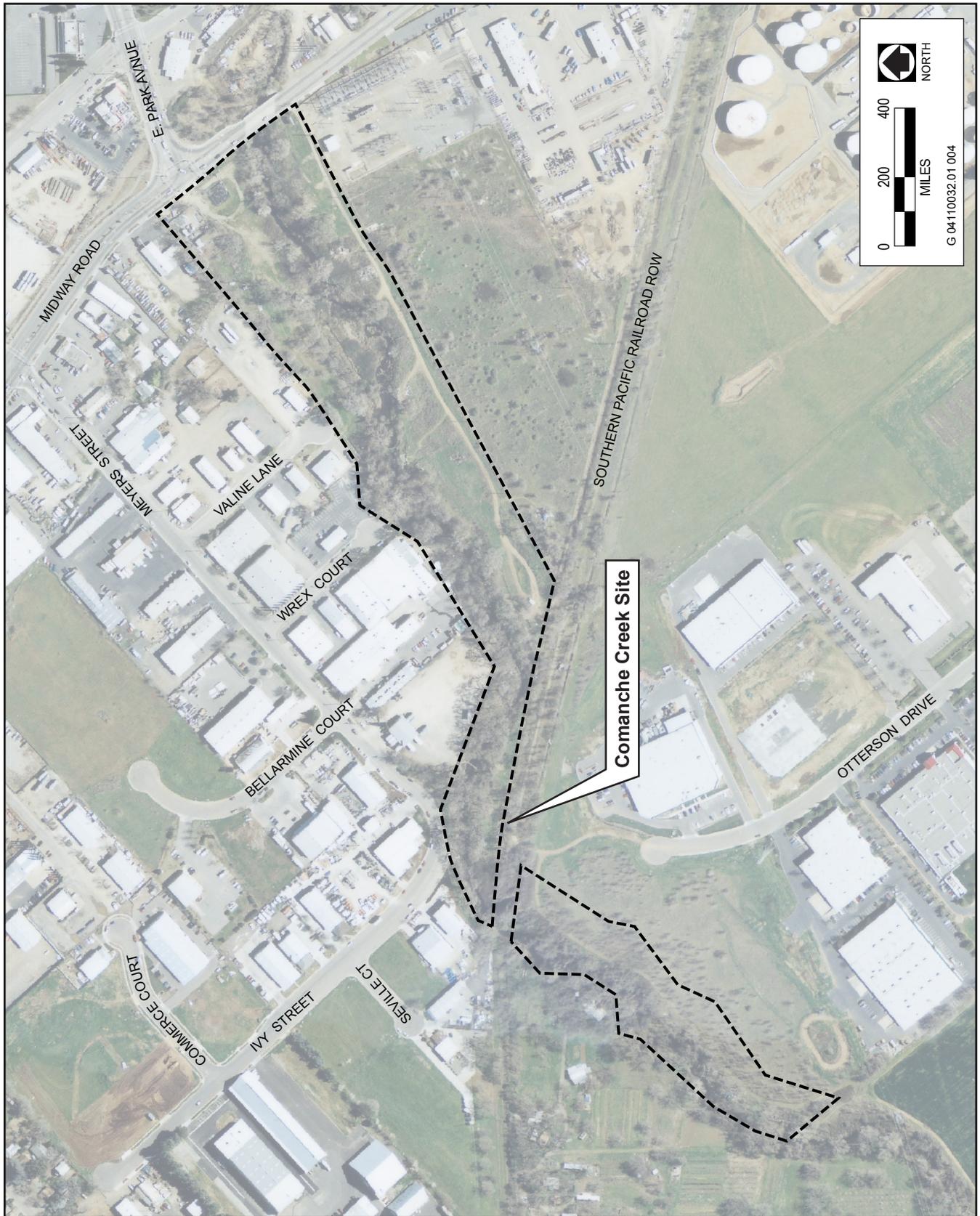
Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR. Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR. No other project alternatives are evaluated for the Cedar Grove Area Concept Plan because the project area is relatively small and partial implementation of the plan would not be feasible and would not achieve project objectives. Implementation of the Cedar Grove Area Concept Plan would be expected to result in only minor impacts to the environment, because design modifications and avoidance measures would be implemented if sensitive resources are encountered during project-specific, pre-construction surveys.

E5.2.5 DISC GOLF/TRAILHEAD AREA CONCEPT PLAN

E5.2.5.1 MODIFIED DISC GOLF PLAN

General Characteristics

This alternative includes implementation of Disc Golf layout Option C as described in Appendix H of the BPMMP, coupled with development of a disc golf facility at an additional site owned by the City (i.e., Comanche Creek property in the City of Chico, Exhibit E5.2.5.1-1). Under this alternative, a beginner's disc golf course



Comanche Creek Site

EXHIBIT E5.2.5.1-1

Draft Bidwell Park Master Management Plan
 City of Chico Planning Services Department



would be established at a location close to downtown Chico that could accommodate uses currently taking place at the short course on the Disc Golf/Trailhead site. The facility would include tees and targets as well as parking and other support facilities.

Ability to Meet Project Objectives

This alternative would meet the overall objective of the project to provide an opportunity for disc golf recreation in Upper Bidwell Park at a facility that has been designed to respect the sensitive resources located at the site and allows for other multiple recreation uses. The alternative would also meet the objective to provide for multiple use of the area, including disc golf, multiuse trails, picnicking, and scenic overlooks and would also meet the objective to provide two separate trailhead layouts, depending on the site use option chosen for the site.

E5.2.5.2 RESTORATION ALTERNATIVE

General Characteristics

This alternative includes cessation of use of the site for disc golf. It entails habitat restoration at the site, and allowance of other existing uses of the site, such as hiking and access to scenic viewpoints. Trails, scenic overlooks, parking and picnic facilities would still be developed at the site.

Ability to Meet Project Objectives

This alternative would only partially meet the overall objective of the project which is to provide an opportunity for disc golf recreation in Upper Park at a facility that has been designed to respect the sensitive resources located at the site and allows for other multiple recreation uses, as it would not provide the opportunity for disc golf.

This alternative would fail to meet the specific objectives to provide options for site use, taking into consideration the extent and location of sensitive biological resources present on the site, as it precludes disc golf. The alternative would meet the objective to provide for multiple use of the area, including multiuse trails, picnicking, and scenic overlooks; however, it would not include disc golf. It would meet the objective to provide two separate trailhead layouts, depending on the site use option chosen for the site.

E5.2.5.3 DISC GOLF/TRAILHEAD AREA NO-PROJECT ALTERNATIVE

The No-Project Alternative assumes that the Disc Golf/Trailhead Area Concept Plan would not be implemented and that use and maintenance of the area would continue as under current conditions. The No-Project Alternative would not meet the overall nor the specific objectives of the project.

Consistent with CEQA requirements, the No-Project Alternative is evaluated in this EIR.

E5.3 COMPARISON OF THE ENVIRONMENTAL EFFECTS OF THE ALTERNATIVES

This chapter compares the environmental effects of the alternatives to those resulting from implementation of the proposed project(s). Because the alternatives are in many cases modified versions of the projects themselves, the discussion focuses on those impact areas for which significant or potentially significant impacts were identified for the proposed project.

The potential environmental effects of the proposed project are described in Chapter E4, “Environmental Analysis.” Sections E4.3.1 through E4.3.13 contain a detailed analysis of potential effects of the proposed projects. A summary of impacts by project and resource is provided below in Table E5.3.1.1-1.

E5.3.1 BPMMP

E5.3.1.1 ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The policies of the BPMMP have been designed to avoid significant effects or maintain them at less than significant levels, so implementation of the BPMMP would not be expected result in significant adverse impacts on the physical environment. The alternatives analyzed in this document thus were not developed to reduce significant impacts, but to provide options for Park management.

E5.3.1.2 ENVIRONMENTAL EFFECTS OF PARTIAL IMPLEMENTATION OF THE BPMMP UPDATE 1

Similar to implementation of the BPMMP, Partial Implementation of the BPMMP Update 1 would not be expected to result in significant adverse effects on the physical environment on the north side of Upper Park, because the policies of the BPMMP have been designed to avoid significant effects or maintain them at less than significant levels. However, the absence of an adopted management framework for the south side would make it impossible to address ongoing management issues on the south side; therefore, this alternative would potentially result in a greater level of environmental impacts on the south side by allowing ongoing unofficial or informal uses to continue and by not addressing known problems such as erosion and user conflict.

E5.3.1.3 ENVIRONMENTAL EFFECTS OF PARTIAL IMPLEMENTATION OF THE BPMMP UPDATE 2

Similar to implementation of the BPMMP, Partial Implementation of the BPMMP Update 2 would not be expected to result in significant adverse effects on the physical environment on Middle and Lower Park, because the policies of the BPMMP have been designed to avoid significant effects or maintain them at less than significant levels. However, the absence of an adopted management framework for Upper Park would make it

**Table E5.3.1.1-1
Summary of Project Impacts by Project and Resource**

Resource	Project/Level of Impact				
	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/ Trailhead Area Concept Plan
Aesthetics					
AES-1a: Scenic vistas	B	--	--	--	--
AES-1b: Scenic vistas	--	B	B	B	B
AES-2: Scenic highways	NI	NI	NI	NI	NI
AES-3: Scenic easements	NI	NI	NI	NI	NI
AES-4a: Degradation of visual character	B	--	--	--	--
AES-4b: Degradation of visual character	--	LTS	LTS	LTS	LTS
AES-5: New light and glare	LTS	LTS	LTS	LTS	LTS
Air Quality					
AQ-1a: Applicable Air Quality Plans	LTS	--	--	--	--
AQ-1b: Applicable Air Quality Plans	--	LTS	LTS	LTS	LTS
AQ-2a: Violation of Standards	NI	--	--	--	--
AQ-2b: Violation of Standards	--	PS	PS	PS	PS
AQ-3a: Long term operation emissions	NI	--	--	--	--
AQ-3b: Long term operation emissions	--	LTS	LTS	LTS	LTS
AQ-4a: Cumulative AQ considerations	NI	--	--	--	--
AQ-4b: Cumulative AQ considerations	--	PS	PS	PS	PS
AQ-5a: Exposure of sensitive receptors	NI	--	--	--	--
AQ-5b: Exposure of sensitive receptors	--	LTS	LTS	LTS	LTS
AQ-6a: Objectionable odors	NI	--	--	--	--
AQ-6b: Objectionable odors	--	NI	NI	NI	NI
Biological Resources					
BIO-1a: Special-status plants	LTS	--	--	--	--
BIO-1b: Butte Co. Checkerbloom	--	--	--	--	PS
BIO-1c: Butte Co. Checkerbloom	--	PS	PS	--	--
BIO-1d: Bidwell Knotweed	--	--	--	--	PS
BIO-1e: Unknown occurrences of Special-status plants	--	PS	PS	PS	--
BIO-2a: Special-status wildlife	LTS	--	--	--	--
BIO-2b: VELB	--	PS	PS	PS	--
BIO-2c: Vernal Pool Crustaceans	--	PS	PS	--	PS
BIO-2d: Other special-status wildlife	--	LTS	LTS	LTS	LTS
BIO-2e: Northwestern pond turtle	--	PS	PS	--	--

-- = Not applicable B = Beneficial NI = No Impact LTS = Less than Significant PS = Potentially Significant

**Table E5.3.1.1-1
Summary of Project Impacts by Project and Resource**

Resource	Project/Level of Impact				
	BIO-2f: Other special-status wildlife		PS	PS	PS
BIO-2g: Special-status fish	--	LTS	--	--	--
BIO-3a: Riparian Habitats	LTS	--	--	--	--
BIO-3b: Riparian Forests	--	PS	--	PS	--
BIO-3c: Oak Woodlands	--	PS	PS	--	PS
BIO-3d: Wildflower fields	--	PS	PS	--	PS
BIO-3e: Vernal Pools	--	PS	PS	--	PS
BIO-4a: Wetlands	LTS	--	--	--	--
BIO-4b: Wetlands	--	PS	PS	--	PS
BIO-5: Wildlife Movement, Migration Corridors, and Nursery Sites	LTS	LTS	LTS	LTS	LTS
BIO-6: Fragmentation of Wildlife Habitat	LTS	LTS	LTS	LTS	LTS
BIO-7: Conflict With Local Policies and Ordinances	NI	NI	NI	NI	NI
Cultural Resources	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
CUL-1a: Change in Resource Significance	LTS	--	--	--	--
CUL-1b: Change in Resource Significance	--	PS	PS	PS	PS
CUL-2a: Disturbance of Human Remains	NI	--	--	--	--
CUL-2b: Disturbance of Human Remains	--	PS	PS	PS	PS
Geology and Soils	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
GEO-1: Seismic Hazards	LTS	LTS	LTS	LTS	LTS
GEO-2: Soil Erosion	LTS	LTS	LTS	LTS	LTS
GEO-3: Unstable Soils	LTS	LTS	LTS	LTS	LTS
GEO-4: Expansive Soils	LTS	LTS	LTS	LTS	LTS
GEO-5: Soil Limitations for Septic Systems	LTS	LTS	LTS	LTS	LTS
Hazards and Hazardous Materials	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
HAZ-1a: Use of Hazardous Materials	LTS	--	--	--	--
HAZ-1b: Use of Hazardous Materials	--	NI	NI	NI	NI

-- = Not applicable B = Beneficial NI = No Impact LTS = Less than Significant PS = Potentially Significant

**Table E5.3.1.1-1
Summary of Project Impacts by Project and Resource**

Resource	Project/Level of Impact				
HAZ-2: Potential for Release of Hazardous Materials	LTS	LTS	LTS	LTS	LTS
HAZ-3: Hazards Near a School	NI	NI	NI	NI	NI
HAZ-4: Location on a site that is included on a List of Hazardous Materials Sites	NI	NI	NI	NI	NI
HAZ-5: Airport-Related Safety	NI	NI	NI	NI	NI
HAZ-6: Interference with Emergency Response or Evacuation Plans	LTS	LTS	LTS	LTS	LTS
HAZ-7: Risks to Structures or People Involving Wildfires	LTS	LTS	LTS	LTS	LTS
HAZ-8: Conflict with Local Policies and Ordinances	NI	NI	NI	NI	NI
Hydrology and Water Quality	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
HYDRO-1a: Water Quality Degradation	LTS	--	--	--	--
HYDRO-1b: Water Quality Degradation	--	PS	PS	PS	PS
HYDRO-2: Groundwater Levels	LTS	LTS	LTS	LTS	LTS
HYDRO-3: Flood Risk	LTS	LTS	LTS	LTS	LTS
HYDRO-4: Location of structures within 100-year flood plains	LTS	LTS	LTS	LTS	LTS
HYDRO-5: Flood Risk as a Result of Dam or Levee Failure	LTS	LTS	LTS	LTS	LTS
HYDRO-6: Flood Risk as a Result of Seiche, Tsunami, or Mudflow	LTS	LTS	LTS	LTS	LTS
HYDRO-7: Conflict with Local Policies and Ordinances	NI	NI	NI	NI	NI
Land Use and Planning	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
LU-1: Inconsistency with Local Policies, Zoning Regulations, or Resource Management or Resource Conservation Plans	NI	NI	NI	NI	NI
LU-2: Physical Division of an Established Community or Changes to the Surrounding Community	NI	NI	NI	NI	NI

-- = Not applicable B = Beneficial NI = No Impact LTS = Less than Significant PS = Potentially Significant

Table E5.3.1.1-1 Summary of Project Impacts by Project and Resource					
Resource	Project/Level of Impact				
LU-3: Conflict with any Applicable Resource Management or Resource Conservation Plan	NI	NI	NI	NI	NI
LU-4: Result in Substantial Conflict with the Established Character, Aesthetics, or Functioning of the Surrounding Community	NI	NI	NI	NI	NI
LU-5: Inclusion in a Larger Project Involving a Series of Cumulative Actions	NI	NI	NI	NI	NI
LU-6: Displacement of People or Business Activity	NI	NI	NI	NI	NI
LU-7: Conversion of Agricultural Land to Nonagricultural Use or Conflicts with Existing Agricultural Operations	NI	NI	NI	NI	NI
Noise	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
NOISE-1a: Excessive Noise Levels from Project Construction	NI	--	--	--	--
NOISE-1b: Excessive Noise Levels from Project Construction	--	PS	PS	PS	PS
NOISE-2a: Excessive Noise Levels from Project Operation	NI	--	--	--	--
NOISE-2b: Excessive Noise Levels from Project Operation	--	LTS	LTS	LTS	LTS
NOISE-3a: Exposure to Vibration	NI	--	--	--	--
NOISE-3b: Exposure to Vibration	--	LTS	LTS	LTS	LTS
Public Services	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
PS-1: Fire Protection	NI	NI	NI	NI	NI
PS-2: Police Protection	NI	NI	NI	NI	NI
PS-3: Schools	NI	NI	NI	NI	NI
PS-4: Parks	NI	NI	NI	NI	NI
PS-5: Maintenance of Public Facilities	LTS	LTS	LTS	LTS	LTS
PS-6: Other Public Facilities	NI	NI	NI	NI	NI

-- = Not applicable B = Beneficial NI = No Impact LTS = Less than Significant PS = Potentially Significant

**Table E5.3.1.1-1
Summary of Project Impacts by Project and Resource**

Resource	Project/Level of Impact				
Recreation	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
REC-1: Deterioration of Existing Recreational Facilities	NI	NI	NI	NI	NI
REC-2: Construction or Expansion of Recreational Facilities with Adverse Physical Effect on the Environment	LTS	LTS	LTS	LTS	LTS
Transportation and Traffic	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
TRAFFIC-1: Increase in Traffic Levels	NI	NI	NI	NI	NI
TRAFFIC-2: Adverse Effects on Local Transit System	NI	NI	NI	NI	NI
TRAFFIC-3: Parking	NI	NI	NI	NI	NI
TRAFFIC-4a: Circulation Hazards	NI	--	--	--	--
TRAFFIC-4b: Circulation Hazards	--	--	--	--	PS
TRAFFIC-5: Inadequate Emergency Access	LTS	LTS	LTS	LTS	LTS
TRAFFIC-6: Conflict With Local Policies Supporting Alternative Transportation	NI	NI	NI	NI	NI
Utilities and Service Systems	BPMMP	Trails Plan	Horseshoe Lake Area Concept Plan	Cedar Grove Area Concept Plan	Disc Golf/Trailhead Area Concept Plan
UTIL-1: Decreased Availability of Water, Natural Gas, or Telephone Service, or Other Communication Services	B	B	B	B	B
UTIL-2: Exceedance of Wastewater Treatment Requirements or Capacity or Increase Demand for Wastewater Treatment	LTS	LTS	LTS	LTS	LTS
UTIL-3: Stormwater Drainage Facilities	LTS	LTS	LTS	LTS	LTS
UTIL-4: Increase Demand for Current Water Supplies	NI	NI	NI	NI	NI
UTIL-5: Landfill Capacity	NI	NI	NI	NI	NI
UTIL-6: Solid Waste	NI	NI	NI	NI	NI

-- = Not applicable B = Beneficial NI = No Impact LTS = Less than Significant PS = Potentially Significant

impossible to address ongoing management issues in Upper Park, where these issues are most relevant. Therefore, this alternative would potentially result in a greater level of environmental impacts in Upper Park by allowing ongoing unofficial uses to continue and by not addressing known problems such as erosion and user conflict.

E 5.3.1.4 ENVIRONMENTAL EFFECTS OF THE NO-PROJECT ALTERNATIVE

Under this alternative, current planning issues would not be resolved. Informal use of eroding trails and the Disc Golf/Trailhead Area would continue, due to the lack of an adopted management and guidance framework for these sites. User conflicts would continue and potential impacts to cultural resources resulting from site use would not be addressed. Overall, this alternative is expected to result in greater impact to the physical environment compared to the proposed project.

E5.3.1.5 COMPARISON OF THE ALTERNATIVES

All three alternatives would result in a greater level of impact to the physical environment when compared to the proposed project. The increased level of impact would result from the lack of an adopted management framework for portions of the Park that would enable the City to address ongoing management issues. Overall, the No Project Alternative has the potential to result in the greatest level of impact resulting from unabated use and unresolved planning issues, followed by Partial BPMMP 2 and BPMMP 1 (in order to decreasing level of impact).

E5.3.2 TRAILS PLAN

E5.3.2.1 ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Section E4 analyzes in detail the potentially significant environmental impacts that could result from implementation of the Trails Plan. Section E4 provides information about the nature and severity of each impact and provides mitigation measures to reduce potentially significant impacts to less than significant. In summary, impacts that could result from implementation of the Trails Plan, as proposed, include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is in non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);

- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell’s knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on Valley Elderberry Longhorn Beetle (BIO-2b);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on riparian forest (BIO-3b);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

E5.3.2.2 ENVIRONMENTAL EFFECTS OF PARTIAL IMPLEMENTATION OF PARTIAL TRAILS PLAN ALTERNATIVE

Under this alternative, the Trails Plan would only be implemented on the north side of Big Chico Creek. This alternative would still involve construction of new trails in a variety of habitats and terrain and has the potential to affect resources in a similar way as the proposed project. These impacts would occur as described in Section E4 and potentially significant impacts would be expected to be similar for all resource topics. Specific impacts that could occur under this alternative include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on Valley Elderberry Longhorn Beetle (BIO-2b);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on riparian forest (BIO-3b);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

The majority of the proposed new trails are on the north side of Big Chico Creek and, therefore, potential impacts resulting from this alternative would be expected to be of similar nature and extent as those of the proposed project.

E5.3.2.3 ENVIRONMENTAL EFFECTS OF PARTIAL IMPLEMENTATION OF MODIFIED TRAILS PLAN 1 ALTERNATIVE

Under this alternative, the proposed Trails Plan would be modified to include the partial or complete opening of the currently closed section of South Park Drive in Lower Park to vehicles. This alternative would still involve full implementation of the Trails Plan for Middle and Upper Park.

Specific impacts that could occur under this alternative include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on Valley Elderberry Longhorn Beetle (BIO-2b);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on riparian forest (BIO-3b);
- ▶ Adverse effects on oak woodland (BIO-3c);

- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

This alternative would still involve full implementation of the Trails Plan for Middle and Upper Park and therefore would involve construction of new trails in a variety of habitats and terrain and potentially significant impacts would be the similar than those of the proposed project for all resource topics.

With regards to traffic and circulation, this alternative would potentially result in additional impacts on traffic and circulation, because of potential increases in traffic levels on some streets (TRAFFIC-1) resulting from changes in circulation patterns. This could lead to an increase in conflict between different users (i.e., pedestrians and bicyclist and motorists). Motorists might use the newly opened section of South Park Drive as an alternative route creating different access and user patterns. In addition, this alternative could result in sight line issues and need for additional signage and enforcement of speed limits.

E5.3.2.4 ENVIRONMENTAL EFFECTS OF PARTIAL IMPLEMENTATION OF MODIFIED TRAILS PLAN 2 ALTERNATIVE

Under this alternative, the proposed Trails Plan would be modified to include the closure of the remaining open section of South Park Drive in Lower Park to vehicles. This alternative would still involve full implementation of the Trails Plan for Middle and Upper Park.

Specific impacts that could occur under this alternative include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on Valley Elderberry Longhorn Beetle (BIO-2b);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on riparian forest (BIO-3b);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

This alternative would still involve full implementation of the Trails Plan for Middle and Upper Park and therefore would involve construction of new trails in a variety of habitats and terrain and potentially significant impacts would be the similar for all resource topics.

With regards to traffic and circulation, this alternative would potentially result in additional impacts on traffic and circulation, because of potential increases in traffic levels on some streets (TRAFFIC-1) immediately outside the Park resulting from changes in circulation patterns. This could lead to an increase in conflict between different users (i.e. pedestrians and bicyclist and motorists) and would result in the need for additional signage and additional enforcement both within and immediately outside the Park.

E5.3.2.5 ENVIRONMENTAL EFFECTS OF THE NO-PROJECT ALTERNATIVE

Under this alternative, no Trails Plan would be implemented and trails would be managed according the current management guidelines. Under this alternative, no construction involving heavy equipment would occur, therefore impacts pertaining to air quality would not apply. Impacts to other resources might still occur as a result of trail maintenance and use and as a result bringing existing trails up to the standards in the Trails Manual. The following impacts would, therefore, still be applicable.

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on wildflower fields (BIO-3d);

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b).

When compared with the proposed project, this alternative would result in a reduction of the number of impacts, because no construction involving heavy equipment would occur. Potential impacts on biological resources and cultural resources might occur as a result of ongoing use, informal trails, and minor construction associated with the upgrade of trail to the standards outlined in the Trails Manual. In addition, impacts to sensitive resources could be greater over time, as this alternative does not involve the same degree of active resource management as the proposed project. No new impacts to traffic safety would occur, as this alternative does not include changes in current circulation pattern.

E5.3.2.6 COMPARISON OF THE ALTERNATIVES

Impacts resulting from implementation of the Partial Trail Plan Alternative are similar to those resulting from the proposed project because the majority of the proposed new trails are on the north side. Because of changes in circulation patterns, impacts on traffic and circulation resulting from implementation of the Modified Trails Plan 1 and Modified Trails Plan 2 are potentially greater than the proposed project, as new traffic circulation hazards might arise as a result of changes in circulation patterns. Impacts resulting from implementation of the No Project Alternative are less than under the proposed project due to the lack of construction related impacts. However, impacts resulting on other resources are similar or could potentially be greater over time, because the Trails Plan No Project Alternative involves less active resource management and avoidance.

E5.3.3 HORSESHOE LAKE AREA CONCEPT PLAN

E5.3.3.1 ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Environmental effects that could result from implementation of the Horseshoe Lake Area Concept Plan are discussed in detail in Section E4. In summary, potentially significant effects resulting from implementation of the Horseshoe Lake Area Concept Plan include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell's knotweed (BIO-1d);

- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on Valley Elderberry Longhorn Beetle (BIO-2b);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

E5.3.3.2 ENVIRONMENTAL EFFECTS OF THE NO-PROJECT ALTERNATIVE

Under this alternative, no changes to the Horseshoe Lake Area would occur, and therefore, no impacts associated with construction would occur.

However, under this alternative, a certain degree of use of informal trails and off-road parking would occur, resulting in ongoing resource damage, such as erosion on Monkey Face and potential damage to special-status plant species, wildflower fields, and cultural resources. Therefore, the following impacts still would apply.

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);

- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of Bidwell’s knotweed (BIO-1d);
- ▶ Adverse effects of Park Improvement Projects on unknown occurrences of other special-status plant species (BIO-1e);
- ▶ Adverse effects on wildflower fields (BIO-3d);

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b).

E5.3.3.3 COMPARISON OF THE ALTERNATIVES

Impacts resulting from implementation of the No Project Alternative are less than under the proposed project, because of the lack of construction-related impacts. However, impacts on other resources are similar or could potentially be greater, because the Horseshoe Lake Area Concept Plan involves less active resource management and avoidance, and the No Project Alternatives does not resolve ongoing issues, such as multiple trails and unregulated parking.

E5.3.4 CEDAR GROVE AREA CONCEPT PLAN

E5.3.4.1 ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Environmental effects that could result from implementation of the Cedar Grove Area Concept Plan are discussed in detail in Section E4. In summary, potentially significant effects resulting from implementation of the Cedar Grove Area Concept Plan include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse on unknown occurrences of special-status plant species (BIO-1e);
- ▶ Adverse effects of Park Improvement Projects on nesting raptors (BIO-2e);
- ▶ Adverse effects of Park Improvement Projects on riparian forest (BIO-3b);

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b).

E5.3.4.2 ENVIRONMENTAL EFFECTS OF THE NO-PROJECT ALTERNATIVE

Under this alternative, no changes to the Cedar Grove Area would be made, and therefore, no impacts associated with construction would occur. Environmental effects would be limited to those resulting from ongoing use of the area and no significant ongoing impacts are known at the Cedar Grove area. Overall, there would be less environmental effects with implementation of this alternative.

E5.3.4.3 COMPARISON OF THE ALTERNATIVES

Impacts resulting from implementation of the No Project Alternative are less than under the proposed project due to the lack of construction related impacts.

E5.3.5 DISC GOLF/TRAILHEAD AREA CONCEPT PLAN

E5.3.5.1 ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Environmental effects that could result from implementation of the Disc Golf/Trailhead Area Concept Plan are discussed in detail in Section E4. In summary, potentially significant effects resulting from implementation of the Disc Golf/Trailhead Area Concept Plan include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);

- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects on Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on nesting raptors (BIO-2e);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b).

Noise

- ▶ Excessive noise levels from project construction (NOISE-1b).

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b).

E5.3.5.2 ENVIRONMENTAL EFFECTS OF THE MODIFIED DISC GOLF PLAN ALTERNATIVE

Under this alternative, Option C (long course only) of the proposed Disc Golf/Trailhead Area Concept Plan would be implemented, and an additional disc golf facility equivalent to the short course would be built on an alternative site owned by the City (i.e., the Comanche Creek property, Exhibit E5.2.5.1-1). Because this alternative would

still involve construction activities at the Disc Golf/Trailhead Area site, impacts related to construction such as air quality impacts would still apply, though the overall construction period may be shorter and the area of construction at the Disc Golf/Trailhead area would be smaller. Construction-related impacts would also apply to the alternative site. Due to its location in the City, there could be additional potential impacts related to land use or zoning inconsistencies or to biological resource that may be different from those found at the Disc Golf/Trailhead area site. Known potential environmental effects that could result from implementation of the modified Disc Golf Plan include the following:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c) (Disc Golf/Trailhead area only);
- ▶ Adverse effects on Bidwell's knotweed (BIO-1d) (Disc Golf/Trailhead area only);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c) (Disc Golf/Trailhead area only);
- ▶ Adverse effects on unknown occurrences of special-status plant species (BIO-1e) (Comanche Creek site only);
- ▶ Adverse effects on VELB (BIO-2c) (Comanche Creek site only);
- ▶ Adverse effects on nesting raptors (BIO-2e) (both sites);
- ▶ Adverse effects on Riparian Forest (BIO-3b);
- ▶ Adverse effects on oak woodland (BIO-3c) (Comanche Creek site only);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b) (both sites).

Cultural Resources

- ▶ Change in resource significance (CUL-1b) (both sites);
- ▶ Disturbance of human remains (CUL-2b) (both sites).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b) (both sites);

Noise

- ▶ Excessive noise levels from project construction (NOISE-1b) (both sites);

Traffic

- ▶ Increase in circulation hazards (TRAFFIC-4b) (both sites).

Additional potential but yet unknown environmental impacts that could result from implementation of the Modified Disc Golf Plan with respect to the Comanche Creek site include the following:

Biological Resources

- ▶ Adverse effects on Giant Garter Snake; (new biological resources impact not associated with the currently proposed Park Improvement Projects);

Hydrology and Water Quality

- ▶ Location of structures within 100-year flood plains (HYDRO-4). This alternative might resolve in the placement of structures within the floodplain of Comanche Creek.

Land Use and Planning

- ▶ Inconsistency with local policies and zoning regulations (LU-1). The Comanche Creek parcel is currently zoned for Light Manufacturing and rezoning of the site would be required in order to use it for recreational purposes. The City also has specific policies regarding developing in a creekside greenway.

Traffic

- ▶ Increase in traffic levels (TRAFFIC-1). Access to this site is constrained and it is a key traffic LOS intersection (Midway and East Park Avenue). There is also no provision of parking.

Overall, this alternative may result in a greater number of impacts to the environment, mainly due to construction at an additional site which may have additional resource constraints and zoning restrictions.

E5.3.5.3 ENVIRONMENTAL EFFECTS OF THE RESTORATION ALTERNATIVE

Under this alternative, the use of the site for disc golf would be eliminated and areas that have been degraded by the unmitigated use of the site would be restored. Because restoration would likely not involve the use of heavy construction equipment, impacts associated with construction would not apply to the same extent. However,

because some facilities like the parking lot and trailhead would still be constructed, they are included here as potential impacts. Impacts to other sensitive resources would likely occur at a lesser degree than under the proposed project, but could not be eliminated, because removal of the current disc golf structures and restoration activities would occur on or immediately adjacent to the sensitive resources present on the site. The following impacts would still apply due to restoration efforts or from anticipated use of the site as a multi-use trailhead:

Air Quality

- ▶ Violation of air quality standard or substantial contribution to an existing or projected air quality violation (short term construction emissions only) (AQ-2) (reduced);
- ▶ Cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard (AQ-4) (reduced).

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects on Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b).

Noise

- ▶ Excessive noise levels from project construction (NOISE-1b) (reduced).

In addition, there would be the following beneficial effect on biological resources at the site:

- ▶ Beneficial effects on sensitive natural communities and habitat for common and special-status plant and wildlife species due to restoration of degraded habitat

Overall, the environmental impact of this alternative on sensitive resources would be less than under the proposed project, because it would involve active restoration of the site. While all of the potential impacts to biological resources, cultural resources and hydrology would still apply due to the fact that some facilities would be placed at the site, the overall impact would be expected to be less severe, due to the limited footprint of the site. Adverse effects on air quality and noise associated with construction would be reduced due to the downscaled degree of construction. This alternative would eliminate a current use of the site and would therefore reduce the footprint of facilities of the site. It would likely result in a reduction of the overall number of visitors to the site, due to the elimination of an activity that is currently very popular. Use of the site for picnics, scenic viewing and hiking would result in less intensive use of the site than the proposed project. In addition, many of the impacts associated with construction of the project (such as air quality and noise impacts) would be less severe, due to the overall reduced footprint of proposed facilities. There would be no increase in traffic hazards when compared with current conditions. However, as noted previously above, this alternative would not fulfill some of the project's objectives.

E5.3.5.4 ENVIRONMENTAL EFFECTS OF THE NO-PROJECT ALTERNATIVE

Under this alternative, no modification to current facilities and use patterns in the Disc Golf Area would occur. While impacts related to construction activities would be eliminated, impacts to other resources would continue to result from ongoing use of the site for disc golf, trails, and other activities. The following impacts would occur:

Biological Resources

- ▶ Adverse effects on Butte County checkerbloom (BIO-1c);
- ▶ Adverse effects on Bidwell's knotweed (BIO-1d);
- ▶ Adverse effects on vernal pool crustacean habitat (BIO-2c);
- ▶ Adverse effects on oak woodland (BIO-3c);
- ▶ Adverse effects on wildflower fields (BIO-3d);
- ▶ Adverse effects on vernal pools (BIO-3e);
- ▶ Adverse effects on jurisdictional wetlands (BIO-4b).

Cultural Resources

- ▶ Change in resource significance (CUL-1b);
- ▶ Disturbance of human remains (CUL-2b).

Hydrology and Water Quality

- ▶ Potential for water quality degradation (HYDRO-1b);

Overall, the impact on the resources listed above would be expected to be greater than under the proposed project, because current use patterns of the site have not been designed to avoid impacts to sensitive resources.

E5.3.5.5 COMPARISON OF THE ALTERNATIVES

Impacts resulting from implementation of the Modified Disc Golf Alternative would result in a greater number of overall impacts to the environment, because it would involve construction at a new unaltered site, in addition to construction at the already utilized Disc Golf/Trailhead site. However, this alternative would reduce the level of impact to sensitive resources at the Disc Golf/Trailhead area and therefore in Bidwell Park, because it would remove the site of the short course from use for disc golf and allow the recovery of resources over time for this portion of the site. Implementation of the Restoration Alternative would result in less impacts than the proposed project, because it would not involve the use of heavy construction equipments and would also not involve the placement of disc golf infrastructure. In addition, restoration of the site would result in beneficial impacts to the sensitive biological resources at the site as it would restore and enhance sensitive natural communities such as wildflower field and oak woodland and thus in turn would provide additional habitat for common and special-status plant and wildlife species. Implementation of the No Project Alternative would result in greater impacts than the proposed project, because the current use pattern of the site is extensive and has not been designed to avoid sensitive resources present on the site.

E5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require identification of an environmentally superior alternative. If the No-Project Alternative is environmentally superior, CEQA requires selection of the “environmentally superior alternative other than the no-project alternative” from among the project and the alternatives evaluated (CEQA Guidelines Section 15126.6[e][2]).

The following represent the environmentally superior alternative for purposes of CEQA Guidelines Section 15126.6(e)(2):

BPMMP: Proposed Project

Horseshoe Lake Area Concept Plan: Proposed Project

Cedar Grove Area Concept Plan: Proposed Project

Trails Plan: Proposed Project

Disc Golf/Trailhead Area Concept Plan: Restoration Alternative.