

Draft Management Prescriptions for the Tuolumne Wild and Scenic River

Management zoning is the method used by the National Park Service to identify and describe the desired resource conditions and visitor experiences to be achieved and maintained in the different areas of a park.

The Tuolumne River Plan uses this process to address resource protection, development of lands and facilities, and other management practices needed to ensure that the entire spectrum of the river's outstandingly remarkable values are protected and enhanced.

The following management prescriptions are currently under consideration for possible application within the Tuolumne River corridor.

-  **Wilderness:** Areas in this zone are managed to protect wilderness values, including natural ecosystem function and opportunities for primitive, unconfined recreation. All congressionally designated wilderness must be in this zone, and areas adjacent to designated wilderness may also be included if they are under consideration for wilderness-like management as part of an alternative zoning plan.
-  **High-country riparian and meadow:** Areas in this zone are managed to preserve the ecological integrity of riparian and meadow areas outside designated wilderness to the maximum extent possible. Management of resources and visitor use may be intensive if necessary to restore and protect the structural integrity of the ecosystem.
-  **High-country experience:** Areas in this zone are managed to allow visitors of varying ages and abilities to appreciate and learn about undisturbed natural areas and cultural resources, and to enjoy dispersed, resource-based day-use recreation against a backdrop of the rugged High Sierra.
-  **High-country base camp:** Areas in this zone are managed to provide basic accommodations and services, providing opportunities for visitors to spend a few hours, stay overnight, or stage an excursion into the wilderness supported by road access, abundant informational and interpretive programs, campgrounds, and modest levels of food service and lodging. Administrative needs are met by management facilities, employee housing, access roads, and utility infrastructure. This prescription is generally reserved for relatively resilient landscapes.
-  **Tuolumne Heritage:** Areas in this zone are managed to protect the cultural landscape character of places where historic sites or structures are prominent and can serve as a platform for visitors to

Zoning is generally a two-step process:

(1) Identify a combination of resource conditions and associated visitor experiences that complement one another (known as *management prescriptions*), and

(2) apply those prescriptions to geographical locations on the map.

These color-coded zones express the goals for how various areas should be managed. Different ideas about which resource conditions and visitor experiences should be emphasized in particular areas are explored through zoning alternatives.

(See 2008 Tuolumne Planning Workbook for more on the draft range of alternatives.)

explore how the layering of human experiences over time in the Tuolumne River corridor has contributed in significant ways to the American experience. The preservation or enhancement of the integrity of archeological resources, American Indian traditional cultural properties and places, and historic sites and structures is a critical component of this prescription.

Each prescription, presented in detail in the following table, provides specific guidance regarding desired conditions for natural resources, cultural resources, and opportunities for visitor experiences. They are called *prescriptions*, rather than *descriptions*, because they express the targets for future conditions to be achieved and maintained, which could be quite different from the conditions that currently exist.

The management prescriptions focus on results, rather than actions. They stop short of directing specific management activities or facilities. However, they include general direction about the types of management or facilities that would be appropriate to carry out the prescription (e.g., trails vs. paved roads). This general direction about types of management or facilities can be equated to a management toolbox, from which managers can choose one or more tools to manage resources and/or visitor use. If a manager selects and implements one tool and it proves to be ineffective in achieving the desired resource conditions or visitor experiences, another tool can be selected and tried until the desired conditions are achieved and maintained over time. The tools listed in the management prescriptions table are intended to be exemplary but not all-inclusive of the tools managers might appropriately use to achieve the desired conditions.

The following table is divided into two parts: The conditions that would be desired under each prescription, and the management toolbox for achieving those conditions.

Draft Management Prescriptions, Tuolumne Wild and Scenic River

	Wilderness	High-Country Riparian and Meadow	High-Country Experience	High-Country Base Camp	Tuolumne Heritage
Desired Resource Conditions and Associated Visitor Experiences					
Desired Natural Resource Conditions					
Hydrologic Processes and Features	<ul style="list-style-type: none"> ▪ Natural hydrologic processes are intact. ▪ The river is free of unnatural impoundments. ▪ Water quality is excellent. 	Same as wilderness	<ul style="list-style-type: none"> ▪ Natural hydrologic processes are largely intact, with some localized management activity to mitigate the impacts of visitor use. ▪ The river is free of unnatural impoundments. ▪ Water quality is excellent. 	<ul style="list-style-type: none"> ▪ Natural hydrologic processes are largely intact, with some localized management activity to mitigate the impacts of visitor use. Some hydrologic features may be locally affected by disruptions to natural processes; however, features contributing to the outstandingly remarkable values of the river are strictly protected. Also, no disruption to natural hydrologic processes that would diminish natural system functioning in adjacent areas is allowed. ▪ Existing unnatural water diversions may remain. ▪ Water quality is excellent. 	Same as high-country base camp
Ecological Processes and Features	<ul style="list-style-type: none"> ▪ Natural ecological processes, such as flooding and fire, sustain the inherent integrity of biological and physical resources. ▪ Ecological communities are intact, with a natural distribution, population number and composition, and interaction of native species. 	Same as wilderness	<ul style="list-style-type: none"> ▪ Natural systems are sustained by natural ecological processes supplemented by management activity to mitigate the impacts of visitor use. ▪ Ecological communities are largely intact. Human activity may have minor impacts so long as they do not disrupt ecological processes. Habitats sustain a natural distribution, population number and composition, and interaction of native species in the context of the ecosystem as a whole. 	<ul style="list-style-type: none"> ▪ Natural ecological processes, such as fire, may be controlled to protect human life and property where such processes pose an unacceptable risk. ▪ Ecological communities are as intact as possible with active management. Concentrated human activity and infrastructure may have localized effects, but not to the extent that would diminish native biodiversity or the overall health of ecological communities in or adjacent to the river corridor. 	Same as high-country base camp, plus <ul style="list-style-type: none"> ▪ Ecological communities may be managed to preserve distinct or iconic features of the cultural landscape and historic vistas.

	Wilderness	High-Country Riparian and Meadow	High-Country Experience	High-Country Base Camp	Tuolumne Heritage
Geologic Features	<ul style="list-style-type: none"> Geologic features and processes are intact. 	Same as wilderness	<ul style="list-style-type: none"> Distinct or iconic geologic features are intact. Soil manipulation may take place to achieve or enhance another resource or visitor experience goal. 	Same as high-country experience	Same as high-country experience
Air Quality	<ul style="list-style-type: none"> In-park sources of air pollutants are not detectable, with the exception of smoke associated with the natural role of fire in the ecosystem. 	Same as wilderness	<ul style="list-style-type: none"> Air quality is well above existing standards for in-park pollutants, except when associated with the natural role of fire in the ecosystem. 	<ul style="list-style-type: none"> In-park sources of air pollutants are limited to localized emissions from vehicles, campfires, and occasional generator use, as well as smoke associated with the natural role of fire in the ecosystem. 	Same as high-country base camp
Soundscapes and Lightscapes	<ul style="list-style-type: none"> Natural soundscapes and lightscapes are as intact as possible. 	Same as wilderness	<ul style="list-style-type: none"> Natural soundscapes and lightscapes are largely intact; however, localized, intermittent occurrences of unnatural sound or light may be associated with visitor and administrative activities. 	<ul style="list-style-type: none"> The sounds and sights of automobile traffic, concentrations of people, and overnight facilities are discernible against the backdrop of natural soundscapes and lightscapes. 	Same as high-country base camp
Desired Cultural Resource Conditions					
Archeological resources, American Indian traditional cultural properties, and historic structures, buildings, and landscapes	<ul style="list-style-type: none"> Archeological resources, American Indian traditional cultural properties, and historic structures, buildings, and landscapes retain their current levels of integrity to the maximum extent possible while protecting wilderness values. 	<ul style="list-style-type: none"> Archeological resources, American Indian traditional cultural properties, and historic structures, buildings, and landscapes retain their current levels of integrity to the maximum extent possible while protecting natural ecosystem processes. 	<ul style="list-style-type: none"> Archeological resources, American Indian traditional cultural properties, and historic resources retain their current levels of integrity to the maximum extent possible while protecting natural ecosystem processes. Elements contributing to historic districts may be restored to enhance visitor understanding and enjoyment. Surface archeological resources may be considered for onsite interpretation. 	<ul style="list-style-type: none"> Archeological resources, American Indian traditional cultural properties, and historic resources retain their current levels of integrity to the maximum extent possible while achieving visitor experience goals. Historic buildings may be rehabilitated for modern use in accordance with the secretary of the interior's guidelines. 	<ul style="list-style-type: none"> Archeological resources and American Indian traditional cultural properties retain their current levels of integrity. Historic buildings may retain their current levels of integrity or be restored to an earlier condition. Historic sites and structures that are not contributing elements to the historic landscape may be considered for removal to enhance restoration and interpretation of the historic landscape. Sites or structures may be rehabilitated for modern uses compatible with the historic landscape character Archeological resources may be interpreted.

	Wilderness	High-Country Riparian and Meadow	High-Country Experience	High-Country Base Camp	Tuolumne Heritage
American Indian traditional cultural practices	<ul style="list-style-type: none"> American Indian traditional cultural practices are perpetuated and enhanced, integrating American Indian management strategies to the extent possible while protecting wilderness qualities. 	<ul style="list-style-type: none"> American Indian traditional cultural practices are perpetuated and enhanced, integrating American Indian management strategies, to the extent possible while protecting natural ecosystem processes. Habitats that sustain traditionally used plants are protected and restored. Visitors are invited to learn about American Indian traditional cultural practices in designated areas in ways that do not interfere with traditional activities. 	<ul style="list-style-type: none"> American Indian traditional cultural practices are perpetuated and enhanced, integrating American Indian management strategies, to the extent possible while protecting natural ecosystem processes and achieving visitor experience goals. Visitors are invited to learn about American Indian traditional cultural practices in designated areas in ways that do not interfere with traditional activities. 	Same as high-country experience	Same as high-country experience
Desired Visitor Experiences					
Experience and Setting	<ul style="list-style-type: none"> Visitors enjoy abundant opportunities for primitive, unconfined recreation, characterized by personal freedom and self-reliance, in an environment that appears pristine to all the senses. 	<ul style="list-style-type: none"> Visitors enjoy day-use opportunities to experience and learn about the natural environment in a setting that is highly protective of ecological processes and features while being easily accessible to people of varying ages and abilities. 	<ul style="list-style-type: none"> Visitors enjoy day-use opportunities to experience and learn about the High Sierra and the outstandingly remarkable values of the Tuolumne River corridor in a natural setting that is easily accessible for people of varying ages and abilities. 	<ul style="list-style-type: none"> Visitors enjoy opportunities for day and overnight use in a setting characterized by natural scenery and rustic-style facilities. A variety of recreational, creative, and educational activities are easily accessible to visitors of varying ages and abilities. 	<ul style="list-style-type: none"> Visitors enjoy outstanding opportunities to experience and learn about the cultural heritage values of the High Sierra in easily accessible settings that evoke images, understandings, and other perceptions of the past. Families and groups can share in the same experiences in the same settings that have been available for generations. Opportunities may include overnight as well as day use, depending on the historic use of the landscape.

	Wilderness	High-Country Riparian and Meadow	High-Country Experience	High-Country Base Camp	Tuolumne Heritage
Interaction with Others	<ul style="list-style-type: none"> People generally travel alone, in solitude, or in small groups. Encounters are generally infrequent, but become more likely as one approaches roads and frontcountry areas 	<ul style="list-style-type: none"> Encounters with others are likely in areas where use is confined to designated walkways and overlooks. 	<ul style="list-style-type: none"> Although opportunities for the kind of solitude found in wilderness are not expected, there are ample opportunities for a sense of escaping civilization and finding serenity in nature. 	<ul style="list-style-type: none"> Visitors enjoy opportunities to share their Tuolumne experiences as part of the high-country base camp community. 	<ul style="list-style-type: none"> Visitors enjoy social opportunities to share their Tuolumne experiences as part of the cultural traditions of the area.
Level of Self-Discovery or Interpretive Programs	<ul style="list-style-type: none"> Enjoyment of natural and cultural resources is generally through self-discovery, with no interpretive signing and only occasional guided hikes. Interactions with park staff are infrequent. 	<ul style="list-style-type: none"> Enjoyment of natural and cultural resources may be through self-discovery or may be augmented by guided interpretive walks and/or a moderate amount of on-site interpretation. Use is highly structured to protect ecological values in areas where visitor activities could potentially affect meadow or riparian communities. Interactions with park staff are frequent. 	<ul style="list-style-type: none"> Enjoyment of natural and cultural resources may be through self-discovery or may be augmented by guided interpretive walks and/or a moderate amount of on-site interpretation. Interactions with park staff are occasional, primarily along trails and in locations of concentrated use. 	<ul style="list-style-type: none"> Enjoyment of natural and cultural resources through self-discovery is augmented by a full range of interpretive programs Interactions with park staff are frequent. 	Same as high-country base camp
Recreational Activities	<ul style="list-style-type: none"> Recreational activities typically include backpacking, private and commercial stock packing, dispersed primitive camping, day hiking, nature study, rock climbing and mountaineering, fishing, swimming, and wading. Winter activities typically include cross-country skiing, snowshoeing, winter camping, and mountaineering. 	<ul style="list-style-type: none"> Recreational activities typically include walking, hiking, nature study, fishing, swimming, and wading. 	<ul style="list-style-type: none"> Recreational activities typically include day hiking and walking, horseback riding, nature study, rock climbing, fishing, swimming, and wading. 	<ul style="list-style-type: none"> Recreational activities typically include motor and bicycle touring, staging for backpacking and stock-packing trips into the wilderness, picnicking or camping in designated areas with amenities, day hiking or walking, nature study, rock climbing, fishing, swimming, and wading. 	<ul style="list-style-type: none"> Recreational activities depend upon the historic landscape (for example, whether or not it is roadless) and may include backpacking, day hiking or walking, horseback riding, nature study, rock climbing, fishing, swimming, wading, motor touring, and camping in designated areas with amenities.

	Wilderness	High-Country Riparian and Meadow	High-Country Experience	High-Country Base Camp	Tuolumne Heritage
Management Toolbox					
Appropriate Types and Levels of Management					
General Resource Management	<ul style="list-style-type: none"> Inventory, documentation, and monitoring of cultural and natural resources to ensure timely management response to prevent resource degradation 	Same as wilderness	Same as wilderness	Same as wilderness	Same as wilderness
Management of Natural Resources	<ul style="list-style-type: none"> Restoration of fire regimes to the extent necessary to restore and prevent degradation of wilderness character Minimum tool analysis to determine appropriate measures for ecosystem restoration Scientific activities to improve wilderness stewardship, better understand the role of wilderness in the larger social and ecological landscape, and develop benchmark or reference understanding about ecological systems and their components 	<ul style="list-style-type: none"> Ecological restoration activities to restore biological and physical components of natural systems that have been impacted by human disturbance (such as the introduction of invasive species, soil compaction, and changes to hydrologic patterns) Scientific activities to develop the knowledge and tools needed to sustain river and park values 	<ul style="list-style-type: none"> Ecological restoration activities to restore biological and physical components of natural systems that have been impacted by human disturbance (such as the introduction of invasive species, soil compaction, and changes to hydrologic patterns) Scientific activities to develop the knowledge and tools needed to sustain river and park values Localized management to maintain features or processes that cannot be sustained naturally because of an ongoing disruption associated with the desired visitor experience 	<ul style="list-style-type: none"> Control of ecological processes, such as fire, to protect human life and property Relatively intensive manipulation to restore and maintain features or processes that cannot be sustained naturally because of an ongoing disruption associated with concentrated human activity or infrastructure Scientific activities to develop the knowledge and tools needed to sustain river and park values 	<ul style="list-style-type: none"> Control of ecological processes, such as fire, to protect human life and property Management of ecological communities to preserve contributing features of the cultural landscape Relatively intensive manipulation to restore and maintain features or processes that cannot be sustained naturally because of an ongoing disruption associated with concentrated human activity or infrastructure Scientific activities to develop the knowledge and tools needed to sustain river and park values
Management of Cultural Resources All treatment of archeological sites, traditional cultural properties, and historic resources must be in accordance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties" and the accompanying guidelines, and they must be in consultation with associated American Indian tribes and other appropriate groups.	<ul style="list-style-type: none"> Preservation of resources unless removal is necessary to restore and/or protect wilderness values. If protection of wilderness values leads to the deterioration or loss of resources: appropriate treatment measures, such as data recovery in accordance with the secretary of the interior's guidelines Provision of access to areas for American Indian traditional ceremonial practices in consultation with culturally associated tribes 	Same as wilderness	Similar to wilderness, with the addition of <ul style="list-style-type: none"> Consideration of on-site interpretation of historic or archeological resources or American Indian traditional cultural practices 	<ul style="list-style-type: none"> Preservation and, where appropriate, interpretation of resources unless removal is necessary to achieve a visitor experience goal If a desired visitor experience leads to the deterioration or loss of resources: appropriate treatment measures, such as data recovery in accordance with the secretary of the interior's guidelines Rehabilitation of historic structures or sites for adaptive use Scenic vista management 	<ul style="list-style-type: none"> Preservation, restoration, and rehabilitation of the cultural landscape, including historic districts, structures, and sites Removal of noncontributing elements from the historic landscape if recommended through the planning process Scenic vista management Preservation and interpretation, where appropriate, of archeological resources Provision of access to areas for American Indian traditional ceremonial

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	<ul style="list-style-type: none"> Consideration of sites with unique features or artifacts, or representative and intact deposits, for scientific study 			<ul style="list-style-type: none"> Provision of access to areas for American Indian traditional ceremonial practices in consultation with culturally associated tribes Consideration of sites with unique features or artifacts, or representative and intact deposits, for scientific study 	<p>practices in consultation with culturally associated tribes</p> <ul style="list-style-type: none"> Consideration of sites with unique features or artifacts, or representative and intact deposits, for scientific study
Management of Visitor Activities	<ul style="list-style-type: none"> Educating visitors about appropriate use behaviors (e.g., Leave No Trace Ethics) Rerouting trails and eliminating social trails Visitor use dispersal measures (e.g., dispersed camping) Group size limits Temporary area or site closures Permit or reservation system to restrict overnight access Sanctions used to address noncompliant behaviors (e.g., citation issued for not having a wilderness permit) 	<ul style="list-style-type: none"> Educating visitors about appropriate use behaviors (e.g., Leave No Trace Ethics) Rerouting trails and eliminating social trails Use of direct communication to inform visitors of appropriate use behaviors (e.g., signs posting use regulations) Temporary area or site closures Sanctions used to address noncompliant behaviors (e.g., citation issued for a disallowed activity in a protected sensitive area) 	<ul style="list-style-type: none"> Educating visitors about appropriate use behaviors (e.g., Leave No Trace Ethics) Use of direct communication to inform visitors of appropriate use behaviors (e.g., signs posting use regulations) Temporary area or site closures Sanctions used to address noncompliant behaviors (e.g., citation issued for fishing without a license) 	<ul style="list-style-type: none"> Educating visitors about appropriate use behaviors (e.g., Leave No Trace Ethics) Use of direct communication to inform visitors of appropriate use behaviors (e.g., signs posting use regulations) Temporary area or site closures Sanctions used to address noncompliant behaviors (e.g., citation issued for traffic violation) Reservation system for overnight accommodations 	Same as high-country base camp
Appropriate Types and Levels of Access and Facilities					
Access	<ul style="list-style-type: none"> Backpacking and stock packing in summer Cross-country skiing and snowshoeing in winter 	<ul style="list-style-type: none"> Day hiking, walking 	<ul style="list-style-type: none"> Walking, hiking, horseback riding, stock packing 	<ul style="list-style-type: none"> Vehicle access Walking Bicycling 	<ul style="list-style-type: none"> Walking Possible vehicle access, depending on the historic landscape
Facilities All new facilities outside designated wilderness would incorporate universal design concepts, including accessibility for people with disabilities, energy efficiency, and sustainability.	<p>Minimal facilities necessary to protect river values and resources, preserve wilderness character, and provide for basic visitor safety, e.g.,</p> <ul style="list-style-type: none"> Unpaved trails Bridges Directional signs at trail junctions 	<p>Minimal facilities necessary to support protection and visitor enjoyment of natural resources, e.g.,</p> <ul style="list-style-type: none"> Well-marked unpaved trails, with designated trailheads and directional and informational signs, connecting areas of interest Bridges Interpretive wayside exhibits Temporary fencing to protect rehabilitated sites 	<p>Minimal facilities necessary to support protection and visitor enjoyment of natural and cultural resources, e.g.,</p> <ul style="list-style-type: none"> Well-marked unpaved trails, with designated trailheads and directional and informational signs, connecting areas of interest Bridges Minimal unpaved service roads for administrative use Interpretive wayside exhibits 	<p>Moderate amount of facilities necessary to meet the visitor experience goals and to support area administration while protecting natural and cultural resources, e.g.,</p> <ul style="list-style-type: none"> Paved roads with turnouts and parking areas Bus stops Bike paths Vehicle and foot bridges Paved and unpaved trails, with designated trailheads 	<p>Historic buildings and structures, e.g.,</p> <ul style="list-style-type: none"> Campground Lodging and food service Fuel station Retail Post office Administrative offices Maintenance facilities Employee Housing Stable <p>Minimal new compatible</p>

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		<ul style="list-style-type: none"> Utility corridors 	<ul style="list-style-type: none"> Waterless toilet, if needed to protect water quality Fencing Utility corridors 	<ul style="list-style-type: none"> and informational signs, connecting areas of interest Visitor orientation and interpretive facilities Ample signing Fencing Picnic areas and campgrounds Lodging and food service Fuel station Stable Retail Post office <p>Utilities:</p> <ul style="list-style-type: none"> Electric power Domestic water and sewer Trash removal Communications systems <p>Administrative facilities:</p> <ul style="list-style-type: none"> Offices Maintenance facilities Employee housing Stable 	<p>facilities necessary to support visitor enjoyment of the historic landscape. Such facilities must</p> <ul style="list-style-type: none"> Be the minimum requirement Be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the historic district and its environment Be compatible with the historic character-defining spatial organization and land patterns of the historic district Avoid adverse effects on historic properties unless unavoidable to address health and safety concerns. <p>Utilities:</p> <ul style="list-style-type: none"> Electric power Domestic water and sewer Trash removal Communications systems
	<p>The following facilities would be <i>in appropriate</i>:</p> <ul style="list-style-type: none"> Roads or paved trails Support facilities such as ranger stations, utilities, campgrounds, overnight facilities Interpretive signs or exhibits 	<p>The following facilities would be <i>in appropriate</i>:</p> <ul style="list-style-type: none"> Roads or paved trails Support facilities such as ranger stations Overnight lodging, camping, or food service Administrative facilities 	<p>The following facilities would be <i>in appropriate</i>:</p> <ul style="list-style-type: none"> Roads, other than unpaved service roads Paved trails Overnight lodging, camping, or food service Interpretive structures Administrative facilities 	<p>The following facilities would be <i>in appropriate</i>:</p> <ul style="list-style-type: none"> Level of development that would change the overall natural character of the area 	<p>The following facilities would be <i>in appropriate</i>:</p> <ul style="list-style-type: none"> New structures that would not be compatible with the historic landscape character