Trail Change-in-Use Proposal Evaluation

Park (Including classification):	Folsom Lake SRA	**Evaluation Team Members**	Jim Micheaels, Sr Park & Rec Specialist (Trails Coord.)
Park Sub-classification			Greg Wells, Park & Rec Spec. (Trails specialist)
Trail Name:	Pioneer Express Segments 12, 13, 14, 28 and Lake Overlook Connector-1.		Cara Allen, Environmental Scientist
Location in Unit:	Lake Natoma		Mike Green, State Park Ranger
Current Use Designation(s):	Equestrian, pedestrian		Steve Hilton, State Archaeologist
Proposed Use Type Change:	add bikes		
Use Change Initiated By:	FATRAC, Mtn Bike Focus Group		**Initial Field Evaluation 10/19/15, Final 3/23/22**
Evaluation Date:	May 21, 2015		

This worksheet is designed to help park managers make an objective, defensible, and consistent determination regarding a proposed change-in-use (CIU) for a trail in the state park system. The first section is designed to make an initial determination regarding the compatibility of the proposed CIU with the park's classification and management. Refer to the rules and regulations for the park's classification as well as approved planning documents when making this preliminary decision. If the CIU is found to be incompatible, note the rule, regulation, or planning document under which the determination to deny was made.

Preliminary Considerations

		Yes	No	NA	Comments
0.1	Is the proposed CIU compatible with the park unit classification or sub-classification per the CA Public Resources Code and/or Code of Regulations?	X			
0.2	Is the proposed CIU on a trail that passes through more than one unit or sub-unit?		X		This trail segment passes through the American River Bluffs National Natural Landmark
0.3	Is there an approved general plan?	X			
0.4	Is there an approved road and trail management plan?		X		The FLSRA Road and Trail Management Plan is currently in process.
0.5	Is there an approved area management plan?		X		
0.6	If there is an approved and relevant planning document, is the proposed CIU consistent with planning recommendations?	X			
0.7	Has a previous CIU request been made and evaluated for this trail?		X		
0.8	Is the proposed CIU located on a non-system (volunteer trail)? *This form can only be used to consider a CIU for system roads and trails.*		X		
0.9	Is the proposed CIU on a facility designated as a trail or road? *This form cannot be used to consider a CIU for non-designated facilities such as a beach or desert wash.*	X			
0.10	Based on the preliminary considerations, should the CIU be further evaluated? *If yes, continue to the next page. If no, please explain.*	X			

If found to be compatible, the following pages aid park managers in considering the broader impacts of the proposed CIU, including necessary management or design options. Clearly identify the primary concerns and considerations for each item that significantly contributes to approval or denial of the CIU proposal.

Summary of Findings and Considerations

Complete this section last

Transfer the results from the following pages to this summary page.
If using the electronic version, the results will transfer automatically.

		Yes	No	NA	Comments
Part 2	Will the CIU be compatible with existing visitor uses, facilities, and services?	X			
Part 3	Will implementation of the CIU enhance circulation?		X		The paved trail does provide a connection to Hazel for mtn bikes.
Part 4	Would implementation of the CIU with management and design options (as recommended) maintain trail safety?		X		There isn't adequate room on the public land to make the re-routes needed to lessen grades to make a multi-use trail sustainable and to maintain trail safety. The steep cross slopes exacerbate the situation.
Part 5	Will the trail be sustainable following implementation of the CIU with management and design options (as recommended)?	X			However, there are concerns about the sustainability of the seasonal creek/drainage section of trail.
Part 6	Would implementation of the CIU with management and design options (as recommended) create significant negative impacts to the natural or cultural resources?		X		There are however concerns with the amount of impact the trail and proposed causeway would have on the seasonal drainage.
Part 7	Will implementation of the CIU with management and design options create a significant on-going maintenance or operational workload?	X			There is uncertainty regarding the amount of work required to maintain the proposed causeway in the bottom of the drainage in this section of trail.

Recommendation Based on Evaluation Considerations

Substantiate in Comment Box

Recommend that the park's general plan or road and trail management plan be developed or amended to evaluate the CIU	X			This CIU evaluation will be part of the FLSRA RTMP that is currently being prepared.
Recommend that the CIU be approved		X		
Recommend that the CIU be approved with design options such a major or minor re-route or minor re-construction.		X		Topography and land ownership do not permit the extent of design options/physical modifications needed to make trail sustainable and to maintain trail safety. The proposed CIU would provide very limited additional access or connectivity for bikes.
Recommend that the CIU be approved with management options such as alternating days of use, one way travel, and/or seasonal closures		X		
Recommend that the CIU be put on hold		X		

Final Comments/Determinations

This is a short segment of the Pioneer Express Trail that climbs steeply from the paved trail just east of Hazel Avenue up to the Nimbus Overlook. From there the trail drops steeply down into a drainage and runs east along the bottom of this steep-sided drainage before connecting back to the paved bike path. The CIU for this section of the Pioneer Express Trail is being considered along with CIUs for other connected trails along the north/west side of Lake Natoma, including other portions of the Pioneer Express, Middle Ridge Trail, Shady Trail, and Snowberry Trail.

There are problems with the existing trail alignment including the 500-foot section of the trail that runs along the bottom of a seasonal drainage, two very steep switchbacks as the trail climbs out of the drainage towards the Overlook and a section with steep grades from the Overlook down towards Hazel Ave. The topography and land ownership do not permit the full extent of re-routes needed for full trail sustainability and trail safety. The steep side slopes of the drainage do not permit re-routing the existing trail out of the drainage. This is a relatively short section of trail, approximately 1/2 mile. The number of physical modifications required to implement the CIU are substantial for the trail access and connectivity benefits that the CIU might provide. These modifications include two minor trail re-alignments, reconstruction of most of this section of trail, including a 500-foot section of causeway/drain lens. Even with these modifications, it is uncertain if sustainability and trail safety would be maintained.

Other CIUs in the Mississippi Bar area, including the Shady and Snowberry Trail CIUs are recommended for approval and provide bikes access across the Mississippi Bar area and single-track connectivity and experience in the area. Approving this CIU provides little additional benefit to cyclists. The American River Bike Path provides access and connectivity for bikes from Hazel Avenue to the Nimbus Dam. Not approving the CIU preserves a non-bike trail experience which helps contribute to diverse trail opportunities within FLSRA.

Given that this is a short section of trail and provides limited connectivity, that there are other connection options, that the CIU requires extensive modifications and that even with the modifications the sustainability and trail safety are uncertain, **the recommendation is <u>not</u> to approve this CIU.**

The District should consider whether the section of this trail along the creek/drainage should be eliminated and restored or alternately if this trail should be considered for allowing pedestrian use only given the alignment challenges.

Multiple CIU requests may require development or amendment of a unit wide road and trail transportation management plan.
Qualified staff, including a DPR-trained Trail Coordinator will complete this survey and checklist to:
(1) Determine the sustainability, safety, and feasibility of a proposed CIU for a single trail.
(2) Determine the appropriateness of the CIU in relation to cumulative impacts to the existing uses (users, routing, hiking opportunities, etc)
(3) Validate the existing conditions described on the attached trail log. The trail log should address typical log elements and positive and negative attributes related to the evaluation criteria.

Trail Change-in-Use Proposal Evaluation

Evaluation Considerations		Yes	No	NA	Comments
Part 1 Existing Conditions					*Describe positive and negative impacts of the proposed CUI and any other details related to proposal evaluation.*
1.1	Is the trail a controlled access road?		X		
1.2	ADA Accessible Route of Travel		X		
1.3	Connection to a trail head or other accessible facility?	X			This section of trail connects to the Lake (Nimbus) Overlook, a parking area and trailhead.
1.4	What is the trail's current classification?	I			*Enter the trail class (I, II, III, or IV)*
	Trail or road surface type:	*Check All Applicable*			**Comments**
1.5	Asphalt				
1.6	Concrete				
1.7	Gravel				
1.8	Native Material	X			
	Trail and road facility use type				
1.9	Public	X			
1.10	Administration				
1.11	Fire Break				
1.12	Motorized Recreation				
1.13	Non-Motorized Recreation				
1.14	Road used as trail route				
	Current trail uses allowed	**Yes**	**No**	**NA**	
1.15	Pedestrian	X			
1.16	Mountain Bike		X		
1.17	Equestrian	X			
1.18	Other - specify in comment box				

Trail Change-in-Use Proposal Evaluation

Evaluation Considerations		Yes	No	NA	Comments
Part 2 Compatibility with Existing Visitor Uses, Facilities, and Services					
Existing Conditions					
2.1	Is the trail high-use or in a high use area?	X			
2.2	Is there evidence of unauthorized use?	X			Some evidence of unauthorized use, but this is not a determining factor in this CIU decision.
2.3	Does the proposed use currently exist in the park?	X			
2.4	Are there other routes in the unit or on nearby public land that adequately accommodate the type of use proposed?		X		There are other trails within the park unit that allow mountain bike use, but there is no single track trail along the North/West side of Lake Natoma that provides connectivity for bikes.
2.5	Is there documented survey or statistical information that identifies a need/desire for the CIU?	X			In the 2014 FLSRA Trail User Survey, there were many comments requesting more multi-use trails. At FLSRA/FPSHP, the trail mileage by use type is: 5.5 mi of pedestrian only; 11 mi. of ped./bike; 46 mi. of ped./equestrian; 38 mi. of unpaved multi-use and 19 mi. of paved multi-use.
2.6	Would the CIU create conflicts with existing facilities connected or adjacent to the trail (trail heads, stables, campgrounds etc)?		X		This segment of trail is not immediately adjacent to the Shadow Glen Stables.
2.7	Would significant user conflict be anticipated with implementation of the CIU?		X		The trail segment does not apear to be heavily used by bikes, and it isn't anticipated that this would be heavily used if the CIU were approved.
Part 2	**Based on above considerations, will the CIU be compatible with existing visitor uses and services?**	X			
#3 Effects to Circulation Patterns					
	Does the CIU:				
3.1	Provide a loop, semi-loop, or other connection for the CIU user group?	X			Implementing a CIU on this section of trail would provide limited connection to other trails for bikes. The paved bike path also provides connection from Nimbus Dam to Hazel Avenue.
3.2	Legalize or legitimize unauthorized trail use currently occuring in the unit?	X			There is some evidence of unauthorized use, but not heavy use.
3.3	Provide a connection to adjacent land agency that allows similar use?		X		

Trail Change-in-Use Proposal Evaluation

Evaluation Considerations		Yes	No	NA	Comments
3.4	Improve circulation or relieve congestion on other high-use trails?		X		A CIU for this trail segment and others being evaluated on the north side of Lake Natoma may slightly relieve congestion in other areas, but would primarily allow legal access for bikes on these trails at Lake Natoma.
3.5	Create the potential need for use changes on adjacent or connecting trails or facilities?	X			The CIU evaluation for this segment of the Pioneer Express is being evaluated along with CIU surveys for other connected trail segments including: Shady Trl and Middle Ridge Trl. However, because the paved bike path provides connection to Hazel Avenue, these other CIU evaluations are not dependent on this CIU.
3.6	Require a seasonal closure to mitigate resource impacts?	X			Maybe, portions of this trail are aligned immediately adjacent to a creek/drainage.
3.7	If yes, will seasonal closures disrupt circulation patterns?			X	
Part 3	**Based on above criteria, will implementation of the CIU enhance circulation for the new use type?**		**X**		
#4 Effects to Trail Safety					
Existing Conditions					
4.0	Are there documented safety concerns resulting from interactions between different user groups?		X		
4.1	With standard cyclical trail brushing (as determined by vegetation type), is there adequate-sight distance to address safety concerns resulting from the CIU?	X			
4.2	With standard cyclical slough and berm removal, is there adequate tread width for safe passage of trail users with the CIU?		X		Portions of this trail section would require reconstruction in order to provide adequate tread width for safe passage.
4.3	With equestrian users is there adequate space for non-equestrian users to retreat to the downhill side of trail for safe passage?		X		In some locations there is not adequate space to retreat downhill for safe passage.
4.4	If tread widths are narrow, are the fill slopes gentle, firm, and stable for users to retreat to the downhill side of trail for safe passage?		X		Portions of trail are on steep side slopes making downhill retreat difficult.
4.5	Does the trail have sinuosity that slows trail users?		X		
4.6	Would the CIU increase the need for enforcement of park rules and regulations?		X		

Trail Change-in-Use Proposal Evaluation

Evaluation Considerations		Yes	No	NA	Comments
Design Options to Improve Safety					
	Check those design options that could be implemented to improve trail safety with the CIU				
4.7	Increase sinuosity through re-routing or re-construction		X		In locations where there are potential problems with speed, the terrain will not permit increasing sinousity.
4.8	Increase sight distances through re-routing or removal of visual obstructions		X		
4.9	Widening of the trail tread to provide adequate passing space	X			Reconstruction of the trail could be done to increase tread width, but substantial work would be required.
4.10	Install speed control devices such as pinch points or tread texturing	X			Tread texturing is possible in some locations to control speeds.
Management Options to Improve Safety					
	Check those management options that could be implemented to improve trail safety with the CIU				
4.11	Alternating days of use		X		
4.12	One-way directional usage		X		
4.13	Installation of new signage	X			
4.14	Other (Describe)				
Part 4	**Based on the above considerations, would implementation of the CIU with management and design options (as recommended) maintain trail safety?**		**X**		Design options and physical modifications of the trail will help with trail safety, but the terrain and land ownership do not permit the full extent of modifications to maintain trail safety.
#5 Effects on Trail Sustainability					
Existing Conditions					
5.1	Is the trail draining to natural topographic drainage features, such as creeks and swales or natural sheet flow, and not being captured and concentrated to the man-made drainage structures?		X		A good portion of this trail section from the Lake Overlook Connector to the Lake Overlook is in the bottom of a drainage and the trail tread appears to have captured the stream flow (when it flows).
5.2	Is the trail tread firm and stable?	X			
5.3	Are there abrupt changes in trail running grade?	X			
5.4	Is the fill slope stable?		X		Along the section of trail from the Overlook to Hazel Ave there are three sections of retaining walls (which need to be replaced) which are supporting unstable fill slopes on steep cross slopes.
5.5	Is the back slope/cut bank stable?	X			
5.6	Does the trail tread remain firm and stable in wet conditions?		X		There may be problems with the tread in the creek area during wet periods. Need to assess during rain event.

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Evaluation Considerations		Yes	No	NA	Comments
	Supporting data from trail log				
5.7	Number of water breaks (water bars, dips, etc.) required for proper drainage	9			1 dip, 8 waterbreaks documented in condition assessment.
5.8	Linear footage of berms	none			0 ft of berms documented in condition assessment.
5.9	Linear footage of ditches	none			No ditches identified in condition assessment, documented as points (ditch outs?) not linear features.
5.10	Linear footage rills and ruts	611			611 ft of rills and gullies documented in condition assessment.
5.11	Linear footage log entrenched trail	738			738 ft of entrenched trail documented in condition assessment.
	Describe the locations of soil types and matrixes encountered on trail				
5.12	Rocky				
5.13	Rocky/Partial Soil Profile	X			
5.14	Full Soil Profile				
5.15	Partial Soil Profile/Sandy				
5.16	Sandy				
5.17	Based on these considerations is the trail currently sustainable?		X		
5.18	Will the trail be sustainable following implementation of the CIU without management or design options (as recommended)?		X		
Design Options to Improve Sustainability					
	If not sustainable, can any of the following measures be implemented to make the trail sustainable for the CIU?				
5.20	Armoring of wet drainage crosings to reduce erosion and impacts to waterways?		X		
5.21	Additional drainage structures (e.g. grade reversals, water bars, rolling grade dips, etc.) to manage increased mechanical wear?		X		
5.22	Additional bridges and puncheons/boardwalks to facilitate dry crossings necessary to reduce erosion and impacts to waterways?		X		
5.23	Reconstruction or replacement of bridges and puncheons to comply with equestrian constuction standards?		X		
5.24	Fill slope or cut bank retaining walls?	X			Replacement of at least three retaining walls is needed.
5.25	Additional or upgraded turnpikes or causeways?	X			An approximately 500 ft section of causeway or drainage lens is needed in the portion of the trail along the bottom of the drainage.
	Minor reconstruction of trail tread would:				
5.26	Correct lack of outslope	X			Reconstruction of 2 switchbacks needed to remove berms, stabilize grade changes and correct rutting.
5.27	Stabilize abrupt grade changes	X			

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Evaluation Considerations		Yes	No	NA	Comments
5.28	Stabilize cut bank		X		
5.29	Stabilize fill slope	X			
5.30	Correct rilling and rutting	X			
5.31	Provide for firm and stable surfaces	X			Construction of cuaseway in drainage bottom will help provide firm stable tread surface in creek area.
	Minor realignment/re-route of trail within the immediate proximity of the existing trail would:				
5.32	Stabilize cut bank		X		
5.33	Stabilize fill slope		X		
5.34	Eliminate abrupt grade changes	X			Reroute from Overlook down to switchbacks will help lessen abrupt grade change and help correct unsustainable grades.
5.35	Correct unsustainable grades	X			
5.36	Correct lack of sinuosity		X		
5.37	Should a major reroute be considered to establish sustainability?		X		Proposed re-routes are relatively minor within the immediate proximity of the existing trail. There isn't adequate land ownership to construct a major re-route to fully address the problems in this trail section.
Management Options to Improve Sustainability					
	If not sustainable, can any of the following measures be implemented to make the trail sustainable for the CIU?				
5.38	Can wet weather closures establish or maintain sustainability?	X			Wet weather closures ay help with sustainability in the creek area in particular. Such closures would likely be implemented park wide and could be considered in the RTMP.
5.39	Can other mangement options be implemented to improve trail sustainability? If so, please describe.		X		
Part 5	**Based on the above considerations, will the trail be sustainable following implementation of the CIU with management and design options (as recommended)?**	**X**			Maybe. If all of the physical modifications of the trail implemented all of the trail may be sustainable except for the creek section of trail. It is uncertain if the proposed causeway in this area could be maintained to be sustainable.

Trail Change-in-Use Proposal Evaluation

Evaluation Considerations		Yes	No	NA	Comments
#6 Effects or Impacts to the Natural or Cultural Resources					
	Would the CIU and/or needed modifications significantly impact:				
6.1	Erosion of existing trail tread and sedimentation of adjacent streams?	X			In order to implement the CIU, a causeway would be needed for approximately 500 ft of trail that is aligned along the bottom of the drainage. The trail has captured the run-off and the terrain does not permit re-routing the trail out of the drainage bottom.
6.2	Significant geologic features?		X		
6.3	Sensitive wildlife habitat?		X		
6.4	Sensitive plant habitat?		X		
6.5	A wetland, riparian or stream zone?		X		See answer to 6.5 above.
6.6	A sensitive cultural feature?				
6.7	A sensitive palaeontological feature?				
6.8	Is the trail a historic feature?				
6.9	Would required trail modifications trigger outside agency permits?	X			
Part 6	**Based on the above considerations, would implementation of the CIU with management and design options (as recommended) create significant negative impacts to the natural or cultural resources?**		**X**		But there are substantial concerns with the impact of trail and proposed modifications on the function of the seasonal drainage.
#7 Effects or Impacts to Maintenance and Operations					
	Would the CIU and/or needed modifications:				
7.1	Change the classification of the trail?		X		
7.2	Require additional maintenance?	X			The proposed causeway in the drainage may require additional maintenance following storm events.
7.3	Require additional management practices to maintain user compliance?	X			Additional staff time would be required for trail maintenance, patrol and trail user education regarding trail safety and etiquette.
7.4	Require additional staff time to address compliance requirements of the management or design options?	X			The proposed causeway would require at least a CDFW streambed alteration permit and may require mitigation which may involve additional staff time.
7.5	Could the proposed modifications be completed by non-department work forces?	X			Some of the modifications could be completed by non-department work forces, but the more involved modifications, such as reroutes and major reconstruction are best completed by Department staff.

Evaluation Considerations		Yes	No	NA	Comments
7.6	Could the proposed modifications be maintained by non-department work forces with minimal cost to the State?		X		Modifications may be difficult to maintain due steep cross slopes and portion of trail in drainage. Some trail maintenance work could be completed by non-department work forces, other maintenance work is best suited to Department staff. Using non-department work forces still requires coordination and oversight of Department staff.
7.7	Can necessary management strategies be enforced?		X		If required, a wet weather closure of the creek section could be difficult to enforce.
7.8	If not, is there a volunteer group or partner agency that can assist with enforcement?		X		There is a volunteer mounted patrol and the Sector is finalizing an agreement with a bike patrol organization. Both of these groups could help patrol the trail, reporting problems and education, but volunteers do not get involved in enforcement.
Part 7	**Based on the above considerations, will implementation of the CIU with management and design options (as recommended) create a significant on-going maintenance or operational workload?**	**X**			Maybe, much depends on the frequency and volume of flows in the seasonal drainage and the impact the flows would have on the proposed causeway/drain lens.