

Table 6-2. Aquatic Avoidance and Minimization Measures [Modified January 30, 2018]

ID	Avoidance and Minimization Measure	Covered Activity Application	Measure Covered by NPDES Requirements? *
1	Minimize the potential impacts on covered species most likely to be affected by changes in hydrology and water quality.	All	No
2	Reduce stream pollution by removing pollutants from surface runoff before the polluted surface runoff reaches local streams.	All	Yes
3.1	Maintain the current hydrograph.	All	Yes
3.2	To the extent possible, restore the hydrograph to more closely resemble predevelopment conditions.	All	No
5	Invasive plant species removed during maintenance will be handled and disposed of in such a manner as to prevent further spread of the invasive species.	All	No
7	Personnel shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels.	All	Yes
8	Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).	All	Yes
11	Vehicles shall be washed only at approved facilities. No washing of vehicles shall occur at job sites.	All	Yes
14	If high levels of groundwater in a work area are encountered, the water is pumped out of the work site. If necessary to protect water quality, the water shall be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a creek.	All	Yes
34	Use the minimum amount of impermeable surface (building footprint, paved driveway, etc.) as practicable.	All	Yes
35	Use pervious materials, such as gravel or turf pavers, in place of asphalt or concrete to the extent practicable.	All	Yes
36	Use flow control structures such as swales, retention/detention areas, and/or cisterns to maintain the existing (pre-project) peak runoff.	All	Yes
37	Direct downspouts to swales or gardens instead of storm drain inlets.	All	Yes
39	Minimize alterations to existing contours and slopes, including grading the minimum area necessary.	All	Yes
40	Maintain native shrubs, trees and groundcover whenever possible and revegetate disturbed areas with local native or non-invasive plants.	All	Yes
41	Combine flow-control with flood control and/or treatment facilities in the form of detention/retention basins, ponds, and/or constructed wetlands.	All	Yes
42	Use flow control structures, permeable pavement, cisterns, and other runoff management methods to ensure no change in post-construction peak runoff volume from pre-project conditions for all covered activities with more than 5,000 square feet of impervious surface.	All	Yes
51	All projects will be conducted in conformance with applicable County and/or city drainage policies.	All	Yes

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53	When possible, maintain a vegetated buffer strip between staging/excavation areas and receiving waters.	All	No
61	Minimize ground disturbance to the smallest area feasible.	All	Yes
62	Use existing roads for access and disturbed area for staging as site constraints allow. Off-road travel will avoid sensitive communities such as wetlands and known occurrences of covered plants.	All	No
63	Prepare and implement sediment erosion control plans.	All	Yes
64	No winter grading unless approved by the local jurisdiction and specific erosion control measures are incorporated.	All	Yes
65	Control exposed soil by stabilizing slopes (e.g., with erosion control blankets) and protecting channels (e.g., using silt fences or straw wattles).	All	Yes
66	Control sediment runoff using sandbag barriers or straw wattles.	All	Yes
67	No stockpiling or placement of erodible materials in waterways or along areas of natural stormwater flow where materials could be washed into waterways.	All	Yes
68	Stabilize stockpiled soil with geotextile or plastic covers. Materials that may entrap reptiles and amphibians, such as mono-filament erosion control materials, shall be avoided.	All	Yes
69	Maintain construction activities within a defined project area to reduce the amount of disturbed area.	All	Yes
70	Only clear/prepare land which will be actively under construction in the near term.	All	No
71	Preserve existing vegetation to the extent possible.	All	Yes
72	Equipment storage, fueling and staging areas will be sited on disturbed areas or non-sensitive habitat outside of a stream channel.	All	Yes
73	When possible, avoid wet season construction.	All	No
74	Stabilize site ingress/egress locations.	All	Yes
75	Dispose of all construction waste in designated areas and prevent stormwater from flowing onto or off of these areas.	All	Yes
76	Prevent spills and clean up spilled materials.	All	Yes
77	Sweep nearby streets at least once a day.	All	Yes
83	Sediments will be stored and transported in a manner that minimizes water quality impacts. If soil is stockpiled, no runoff will be allowed to flow back to the channel.	All	Yes
84.1	Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into wetlands, ponds, streams, or riparian vegetation. Erosion control measures will be placed between the outer edge of the buffer and the project site.	All	Yes
84.2	Fiber rolls used for erosion control will be certified as free of noxious weed seed.	All	No
84.3	Filter fences and mesh will be of material that will not entrap reptiles and amphibians.	All	No

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86	Topsoil removed during soil excavation will be preserved and used as topsoil during revegetation when it is necessary to conserve the natural seed bank and aid in revegetation of the site.	All	No
88	To the extent feasible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.	All	No
89	The potential for traffic impacts on terrestrial animal species will be minimized by adopting traffic speed limits.	All	No
90	All trash will be removed from the site daily to avoid attracting potential predators to the site. Personnel will clean the work site before leaving each day by removing all litter and construction-related materials.	All	No
93	When accessing upland areas adjacent to riparian areas or streams, access routes on slopes of greater than 20% should generally be avoided. Subsequent to access, any sloped area should be examined for evidence of instability and either revegetated or filled as necessary to prevent future landslide or erosion.	All	No
94	Personnel shall use existing access ramps and roads if available. If temporary access points are necessary, they shall be constructed in a manner that minimizes impacts to streams.	All	Yes
95	<p>To minimize entrapment of animals on job sites, the project biologist will survey the work area at the close daily activities to identify and remediate any potential areas or conditions that might trap animals. Examples of such include pits, trenches or pipes that animals can fall into or perforated pipes or netting that can cause entanglement.</p> <p>The biologist shall consider the animals expected to enter the site during the calendar period work will be occurring, and shall use his or her best judgment to remove entrapment conditions, allow for escape (such as a ramp not exceeding a 30-degree slope leading out of a trench) or develop a site-specific protocol (such as daily post-dawn surveys) to eliminate or minimize entrapment.</p> <p>If no project biologist is required on-site the job foreman or property owner will designate an individual to carry out these activities. Only individuals that hold permits or that have been approved by the Habitat Agency as a qualified biologist may handle listed species.</p>	All	No
97	Erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales, silt fences, etc.) are in place downstream of project site.	All	Yes
99	Conduct street cleaning on a regular basis.	All	Yes
100	Potential contaminating materials must be stored in covered storage areas or secondary containment that is impervious to leaks and spills	All	Yes
101	Runoff pathways shall be free of trash containers or trash storage areas. Trash storage areas shall be screened or walled	All	Yes

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103	Unless otherwise indicated in an Executive Directive issued by the Habitat Agency, for example a directive to address plant pathogens, (103.1) all disturbed soils will be revegetated with native plants, grasses, seed mixtures, or sterile nonnative species suitable for the altered soil conditions upon completion of construction. (103.2) Local watershed native plants will be used if available. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. (103.3) All disturbed areas that have been compacted shall be de-compacted prior to planting or seeding. (103.4) Cut-and-fill slopes will be planted with local native or non-invasive plants suitable for the altered soil conditions.	All	No
104	Measures will be utilized on site to prevent erosion along streams (e.g., from road cuts or other grading), including in streams that cross or are adjacent to the project proponent’s property. Erosion control measures will utilize natural methods such as erosion control mats or fabric, contour wattling, brush mattresses, or brush layers. For more approaches and detail, please see the <i>Bank Protection/ Erosion Repair Design Guide</i> in the Santa Clara Valley Water Resources Protection Collaborative’s <i>User Manual: Guidelines & Standards for Land Use Near Streams</i> (Santa Clara Valley Water Resources Protection Collaborative 2006).	All	Yes
112	Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.	All	Yes
114	Erosion control methods shall be used as appropriate during all phases of routine maintenance projects to control sediment and minimize water quality impacts.	All	Yes
105	Vegetation and debris must be managed in and near culverts and under and near bridges to ensure that entryways remain open and visible to wildlife and that passage through the culvert or bridge remains clear.	Culverts and Bridges	No
52	Adhere to the siting criteria described for the borrow site covered activity (see Chapter 2 for details).	Dams (seismic retrofit)	No
4	Reduce the potential for scour at stormwater outlets to streams by controlling the rate of flow into the streams.	In-stream (in water)	No
6	Activities in the active (i.e., flowing) channel will be avoided whenever possible. If activities must be conducted in the active channel, applicable avoidance and minimization measures identified in this table will be enforced.	In-stream (in water)	No

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10	<p>(10.1) If ground disturbing activities are planned for a stream channel that is known or suspected to contain elevated levels of mercury, the following steps shall be taken.</p> <p>(10.2) 1. Avoid disturbing soils in streams known or suspected to contain high levels of mercury.</p> <p>(10.3) 2. Soils that are likely to be disturbed or excavated shall be tested for mercury. Soils shall be remediated if:</p> <p>(10.4) a. disturbed or excavated soils exposed to flood flows below the 2.33-year channel flow level exceed 1 ppm Hg, or</p> <p>(10.5) b. disturbed or excavated soils above the 2.33-year flow level exceed 20 ppm Hg.</p> <p>(10.5) 3. The channel must be dewatered prior to commencement of the activity.</p> <p>(10.6) 4. Personnel shall implement measures to ensure that hazardous materials are properly handled and disposed of.</p> <p>(10.7) 5. If tested soils indicate an elevated level of mercury, the frequency of wetting and drying sediments during project activities will be minimized.</p>	In-stream (in water)	No
12	Unless allowed by other regulatory permits, no equipment servicing shall be done in the stream channel or immediate flood plain.	In-stream (in water)	No
13	Personnel shall use the appropriate equipment for the job that minimizes disturbance to the channel bed and banks. Appropriately-tired vehicles, either tracked or wheeled, shall be used depending on the situation	In-stream (in water)	No

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15	<p>If native fish or non-covered, native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, a native fish and aquatic vertebrate relocation plan shall be implemented when ecologically appropriate as determined by a qualified biologist to ensure that significant numbers of native fish and aquatic vertebrates are not stranded.</p> <p>Prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates shall be captured in the work area and transferred to another reach as determined by a qualified biologist. Timing of work in streams that supports a significant number of amphibians will be delayed until metamorphosis occurs to minimize impacts to the resource. Capture and relocation of aquatic native vertebrates is not required at individual project sites when site conditions preclude reasonably effective operation of capture gear and equipment, or when the safety of biologist conducting the capture may be compromised.</p> <p>Listed species not covered by the Habitat Plan will not be relocated without the appropriate permits and authorizations from the correct agencies.</p> <p>Relocation of native fish or aquatic vertebrates may not always be ecologically appropriate. Prior to capturing native fish and/or vertebrates, the qualified biologist will use a number of factors, including site conditions, system carrying capacity for potential relocated fish, and flow regimes (e.g., if flows are managed) to determine whether a relocation effort is ecologically appropriate. If so, the following factors will be considered when selecting release site(s):</p> <ol style="list-style-type: none"> 1. similar water temperature as capture location; 2. ample habitat availability prior to release of captured individuals; 3. presence of other same species so that relocation of new individuals will not upset the existing prey/predation function; 4. carrying capacity of the relocation location; 5. potential for relocated individual to transport disease; and 6. low likelihood of fish reentering work site or becoming impinged on exclusion net or screen; 7. Presence of aquatic predators <p>Proposals to translocate any covered species will be reviewed and approved by the Wildlife Agencies.</p>	In-stream (in water)	No
17	<p>When work in a flowing stream is unavoidable, the work area will be isolated from the stream. This may be achieved by diverting entire streamflow around the work area by a pipe or open channel. Cofferdams shall be installed both upstream and downstream not more than 100 feet from the extent of the work areas. Cofferdam construction shall be adequate to prevent seepage into or from the work area. Where feasible, water diversion techniques shall allow stream flows to gravity flow around or through the work site. If gravity flow is not feasible, stream flows may be pumped around the work site using pumps and screened intake hoses. If a pump is used, it shall be operated at the rate of flow that passed through the site; pumping rates shall not be dewater nor impound water on the upstream side of the coffer dam. Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows). The work area will remain isolated from flowing water until any necessary erosion protection is in place. All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices, etc.).</p>	In-stream (in water)	No

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18	If a bypass will be of open channel design the berm confining the channel may be constructed of material from the channel.	In-stream (in water)	No
20	Diversions shall maintain ambient flows below the diversion, and waters discharged below the project site shall not be diminished or degraded by the diversion. All materials placed in the channel to dewater the channel shall be removed when the work is completed. Dirt, dust, or other potential discharge material in the work area will be contained and prevented from entering the flowing channel. Normal flows shall be restored to the affected stream as soon as is feasible and safe after completion of work at that location.	In-stream (in water)	No
21	To the extent that stream bed design changes are not part of the project, the stream bed, including the low-flow channel, will be returned to as close to pre-project condition as possible unless the pre-existing condition was detrimental to channel condition as determined by a qualified biologist or hydrologist.	In-stream (in water)	No
22	, Unless there is an extenuating circumstance as agreed to by the Habitat Agency or Wildlife Agencies, all temporary diversion structures and the supportive material shall be removed no more than 48 hours after work is completed.	In-stream (in water)	No
23	Temporary fills, such as for access ramps, diversion structures, or cofferdams, shall be completely removed upon finishing the work.	In-stream (in water)	No
24	To prevent increases in temperature and decreases in dissolved oxygen (DO), if bypass pipes are used, they shall be properly sized (i.e., larger diameter pipes to better pass the flows). Use of bypass pipes may be avoided by creating a low-flow channel or using other methods to isolate the work area.	In-stream (in water)	No
25	Diversions shall maintain fish passage when the project meets the following conditions: 1) the length of the area dewatered exceeds 500 feet, and/or 2) the length of time the stream is dewatered exceeds two weeks in length. Conditions for fish passage shall be met as long as the diversion 1) maintains contiguous flows through a low flow channel in the channel bed or an artificial open channel, 2) presents no vertical drops exceeding six (6) inches and follows the natural grade of the site, 3) is conducted such that water at the downstream end does not scour the channel bed or banks; and 4) maintains water depths in the bypass channel that exceed average depths in the 150 feet of stream upstream of the beginning of the bypass channel. A qualified biologist may make adjustments on a site-specific basis if determined to be beneficial to the fish. An artificial channel used for fish passage shall be made of impervious material to prevent loss of flows and lined with cobble/gravel. A closed conduit pipe shall not be used for fish passage. The inlets of diversions shall be checked daily to prevent accumulation of debris. If block nets are being used to keep leaf litter/debris out of the diversion, they should be checked at least twice per day.	In-stream (in water)	No
26	Any sediment removed from a project site shall be stored and transported in a manner that minimizes water quality impacts.	In-stream (in water)	No
27	Unless otherwise indicated in an Executive Directive issued by the Habitat Agency, sediment from the San Francisco Bay Watershed, including that for reuse, will not be removed to areas any farther south than Metcalf Road in south San Jose.	In-stream (in water)	No
30	Vegetation control and removal in channels, on stream banks, and along levees and maintenance roads shall be limited to removal necessary for facility inspection purposes, or to meet regulatory requirements or guidelines.	In-stream (in water)	No

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31	(31.1) When conducting vegetation management, retain as much understory brush and as many trees as feasible, emphasizing shade-producing and bank-stabilizing vegetation. Carry out the activity in such a manner as to minimize impacts to the natural community present and encourage regrowth of the community structure appropriate to the site. (31.2) If riparian vegetation is to be removed with chainsaws, consider using saws currently available that operate with vegetable-based bar oil.	In-stream (in water)	No
32	In-channel vegetation removal may result in increased local erosion due to increased flow velocity. To minimize the effect, the top of the bank shall be protected by leaving vegetation in place to the maximum extent possible.	In-stream (in water)	No
33	Regional Board objectives for temperature change in receiving waters (measured 100 feet downstream of discharge point) shall not be exceeded. Receiving water and discharge water may be monitored for temperature changes after a comparison of ambient temperature to pipeline water temperature suggests the potential for change.	In-stream (in water)	No
43	Site characteristics will be evaluated in advance of project design to determine if non-traditional designs, such as bioengineered bank treatments that incorporate live vegetation, can be successfully utilized while meeting the requirements of the project.	In-stream (in water)	No
44	Maintenance of natural stream characteristics consistent with the stream section, such as riffle-pool sequences, riparian canopy, sinuosity, floodplain, and a natural channel bed, will be incorporated into the project design.	In-stream (in water)	No
45	Stream crossings shall incorporate a free-span bridge unless infeasible due to engineering or cost constraints or unsuitable based on minimal size of stream (swale without bed and banks or a very small channel). If a bridge design cannot free-span a stream, bridge piers and footings will be designed to have minimum impact on the stream. A hydraulics analysis must be prepared and reviewed by the jurisdictional partner, including SCVWD as appropriate, demonstrating that piers or footings will not cause significant scour or channel erosion. Whenever possible, the span of bridges will also allow for upland habitat beneath the bridge to provide undercrossing areas for wildlife species that will not enter the creek. Native plantings, natural debris, or scattered rocks will be installed under bridges to provide wildlife cover and encourage the use of crossings.	In-stream (in water)	No
47	If a culvert is used, up- and downstream ends of the culvert must be appropriately designed so that the stream cannot flow beneath the culvert or create a plunge pool at the downstream end. Preference will be given to designs that allow a natural bottom (arch culvert) and/or which do not alter natural grade.	In-stream (in water)	No
49	The project or activity must be designed to avoid the removal of native riparian vegetation, where feasible. If the removal native of riparian vegetation is necessary, the amount shall be minimized to the amount necessary to accomplish the required activity and comply with public health and safety directives. Impacts to non-native vegetation that is determined to be providing unique habitat value (such as shading, foraging habitat, or nesting area) shall be avoided and minimized in the same manner as native vegetation.	In-stream (in water)	No
54	Deep pools within stream reaches shall be maintained as refuge for fish and wildlife to the maximum extent practicable by constructing temporary fencing and/or barriers so as to avoid pool destruction and prevent access from the project site.	In-stream (in water)	No

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56	Increased water velocity at bank protection sites may increase erosion downstream. Therefore, bank stabilization site design shall consider hydraulic effects immediately upstream and downstream of the work area. Bank stabilization projects will be designed and implemented to provide similar roughness and characteristics that may affect flows as the surrounding areas just upstream and downstream of the project site.	In-stream (in water)	No
78	In-stream projects occurring while the stream is flowing must use appropriate measures to protect water quality, native fish and covered wildlife species at the project site and downstream of the project site.	In-stream (in water)	No
80	All personnel working within or adjacent to the stream setback (i.e., those people operating ground-disturbing equipment) will be trained by a qualified biologist in these avoidance and minimization measures and the permit obligations of project proponents working under this Plan.	In-stream (in water)	No
87	Vehicles operated within and adjacent to streams will be checked and maintained daily to prevent leaks of fluids and lubricants.	In-stream (in water)	No
91	To prevent the spread of exotic species and reduce the loss of native species, aquatic species will be netted at the drain outlet when draining reservoirs or ponds to surface waters. Captured native fish, native amphibians, and western pond turtles will be relocated if ecologically appropriate. Exotic species will be dispatched.	In-stream (in water)	No
92	To minimize the spread of pathogens all staff working in aquatic systems (i.e., streams, ponds, and wetlands)—including site monitors, construction crews, and surveyors—will adhere to the most current guidance for equipment decontamination provided by the Wildlife Agencies at the time of activity implementation. Guidance may require that all materials that come in contact with water or potentially contaminated sediments, including boot and tire treads, be cleaned of all organic matter and scrubbed with an appropriate cleansing solution, and that disposable gloves be worn and changed between handling equipment or animals. Care should be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.	In-stream (in water)	No
98	When needed, utilize in-stream grade control structures to control channel scour, sediment routing, and headwall cutting.	In-stream (in water)	No
102	Immediately after project completion and before close of seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets	In-stream (in water)	Yes
106	Prior to undertaking stream maintenance activities, reach conditions will be assessed to identify tasks that are necessary to maintain or enhance the channel for the purposes for which it was designed and/or intended (e.g., habitat values; flood control, groundwater recharge). Only in-stream work that is necessary to maintain the channel will be conducted and potentially conflicting uses will be balanced to the greatest extent practicable.	In-stream (in water)	No

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107	On streams managed for flood control purposes, when stream reaches require extensive vegetation thinning or removal (e.g., when the channel has been fully occluded by willows or other vegetation), removal will be phased so that some riparian land cover remains and provides some habitat value. In addition, vegetation removal will be targeted and focused on removing the least amount of riparian vegetation as possible while still meeting the desired flood control needs. For example, vegetation removal should be focused on shrubby undergrowth at the toe-of-slope that is most likely to increase roughness and create a flooding hazard. Vegetation on the upper banks, particularly mature tree canopy, should be maintained to the extent possible to provide habitat for birds and small mammals and shading for the active channel.	In-stream (in water) and Riparian	No
108	When reaches require sediment removal, approaches will be considered that may reduce the impacts of the activity. Examples of potential approaches include phasing of removal activities or only removing sediment along one half of the channel bed, allowing the other half to remain relatively undisturbed.	In-stream (in water)	No
109	In streams not managed for flood control purposes, woody material (including live leaning trees, dead trees, tree trunks, large limbs, and stumps) will be retained unless it is threatening a structure, or is causing excessive bank failure and increasing sediment loading to the stream.	In-stream (in water)	No
110	If debris blockages threaten bank stability and may increase sedimentation of downstream reaches, debris will be removed. When clearing natural debris blockages (e.g., branches, fallen trees, soil from landslides) from the channel, only remove the minimum amount of debris necessary to maintain flow conveyance (i.e., prevent significant backwatering or pooling). Non-natural debris (e.g., trash, shopping carts, etc.) will be fully removed from the channel.	In-stream (in water)	No
111	Bank repairs will use only compacted soil if site conditions allow and the repair is not likely to fail again. If compacted soil is not sufficient to stabilize the slope, bioengineering techniques must be used. No hardscape (e.g., concrete or any sort of bare riprap) or rock gabions may be utilized in streams not managed for flood control except in cases where infrastructure or human safety is threatened (e.g., undercutting of existing roads). Rock riprap may only be used to stabilize channels experiencing extreme erosion, and boulders must be backfilled with soil and planted with willows or other native riparian species suitable for planting in such a manner.	In-stream (in water)	No
50	If levee reconstruction requires the removal of vegetation that provides habitat value to the adjacent stream (e.g., shading, bank stabilization, food sources, etc.), then the project will include replacement of the vegetation/habitat that was removed during reconstruction unless it is determined to be inappropriate to do so by the relevant resource agencies (e.g., CDFG and USFWS).	Levees	No
29	Existing native vegetation shall be retained by removing only as much vegetation as necessary to accommodate the trail clearing width. Maintenance roads should be used to avoid effects on riparian corridors.	Trails	No
48	Trails will be sited and designed with the smallest footprint necessary to cross through the in-stream area. Trails will be aligned perpendicular to the channel and be designed to avoid any potential for future erosion. New trails that follow stream courses will be sited outside the riparian corridor.	Trails	No

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57	When parallel to a stream or riparian zone and not located on top of a levee, new trails shall be located behind the top of bank or at the outside edge of the riparian zone except where topographic, resource management, or other constraints or management objectives make this not feasible or undesirable.	Trails	No
58	Existing access routes and levee roads shall be used if available to minimize impacts of new construction in special status species habitats and riparian zones.	Trails	No
59	Trails in areas of moderate or difficult terrain and adjacent to a riparian zone shall be composed of natural materials or shall be designed (e.g., a bridge or boardwalk) to minimize disturbance and need for drainage structures, and to protect water quality.	Trails	No
60	Trail crossings of freshwater stream zones and drainages shall be designed to minimize disturbance, through the use of bridges or culverts, whichever is least environmentally damaging. Structures over water courses shall be carefully placed to minimize disturbance. Erosion control measures shall be taken to prevent erosion at the outfalls of drainage structures.	Trails	Yes

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