

## EMC Critical Questions Matrix

### Theme 1: WLPZ Riparian Function

Are the FPRs and associated regulations effective in...

Critical Question	Study 1	Study 2	Study 3	Study 4
(a) maintaining and restoring canopy closure?	EMC-2015-002	EMC-2017-006	EMC-2018-006	
(b) maintaining and restoring stream water temperature?	EMC-2018-003	EMC-2018-006		
(c) retaining predominant conifers in WLPZs and large woody debris input to watercourse channels?	EMC-2015-002	EMC-2017-006	EMC-2018-006	EMC-2019-005
(d) retaining conifer and deciduous species to maintain or restore riparian shade, water temperature, and primary productivity?	EMC-2015-002	EMC-2016-003	EMC-2016-002	
(e) maintaining and restoring input of organic matter to maintain or restore primary productivity as measured by macroinvertebrate assemblages?	EMC-2016-003	EMC-2017-001	EMC-2016-002	
(f) maintaining and restoring riparian function of Class II-L watercourses in the Coast District?	EMC-2015-002	EMC-2018-006		
(g) maintaining and restoring riparian function of Class II-L watercourses in the Northern District?	EMC-2015-002			
(h) managing WLPZs to reduce or minimize potential fire behavior and rate of spread	EMC-2017-006			
(i) filtering sediment that reaches WLPZs?	EMC-2015-002	EMC-2018-003		

### Theme 2: Watercourse Channel Sediment

Are the FPRs and associated regulations effective in minimizing management-related sediment delivery from forest management activities to watercourse channels...

Critical Question	Study 1	Study 2	Study 3	Study 4	Study 5
(a) at the watershed and sub-watershed level in managed watersheds?	EMC-2016-002	EMC-2016-003	EMC-2016-002	EMC-2017-003	
(b) for individual Plans at the project level to evaluate channel response to forest management prescriptions and additional mitigation measures?	EMC-2015-002	EMC-2016-002	EMC-2016-002	EMC-2017-003	EMC-2019-005

## EMC Critical Questions Matrix

### Theme 3: Road and WLPZ Sediment

Are the FPRs and associated regulations effective in ...

Critical Question	Study 1	Study 2	Study 3
(a) reducing or minimizing management-related generation of sediment and delivery to watercourse channels?	EMC-2015-002	EMC-2014-004	EMC-2015-004
(b) reducing generation and sediment delivery to watercourse channels when timber operations implement the Road Rules 2013 measures?	EMC-2015-002	EMC-2014-004	EMC-2015-004
(c) reducing the effects of large storms on landslides as related to roads, watercourse crossings and landings?	EMC-2015-002	EMC-2014-004	EMC-2015-004
(d) maintaining or improving fish passage through watercourse crossing structures?	EMC-2016-003		

### Theme 4: Mass Wasting Sediment

Are the FPRs and associated regulations effective in minimizing sediment delivery to maintain water quality from ...

Critical Question	Study 1	Study 2	Study 3
(a) existing chronic unstable geologic features?	EMC-2016-003	EMC-2019-005	
(b) mass wasting during episodic rare events and/or large storms?	EMC-2015-002	EMC-2016-003	EMC-2019-005
(c) mass wasting from high risk geologic features?	EMC-2016-003		

### Theme 5: Fish Habitat

Are FPRs and associated regulations effective in ...

Critical Question	Study 1	Study 2	Study 3
(a) describing and mapping the distribution of foraging, rearing and spawning habitat for anadromous salmonids?			
(b) maintaining and restoring the distribution of foraging, rearing and spawning habitat for anadromous salmonids?	EMC-2016-003	EMC-2015-001	EMC-2019-005

## EMC Critical Questions Matrix

### Theme 6: Wildfire Hazard

Are the FPRs and associated regulations effective in ...

Critical Question	Study 1	Study 2	Study 3
(a) treating post-harvest slash and slash piles to modify fire behavior?			EMC-2019-002
(b) treating post-harvest slash and retaining wildlife habitat structures, including snags and large woody debris?	EMC-2017-007	EMC-2016-002	EMC-2019-002
(c) managing fuel loads, vegetation patterns and fuel breaks for fire hazard reduction?	EMC-2017-007	EMC-2017-008	EMC-2019-002

### Theme 7: Wildlife Habitat: Species and Nest Sites

Are the FPRs and associated regulations effective in protection of nest sites ...

Critical Question	Study 1	Study 2
(a) following general protection measures in 14 CCR § 919.2 [939.2, 959.2](b)?	EMC-2018-012	
(b) following species specific habitat and disturbance measures in 14 CCR § 919.3 [939.3, 959.3]?	EMC-2018-012	

Are the FPRs and associated regulations effective for the northern spotted owl in ...

Critical Question	Study 1	Study 2
(a) ensuring take avoidance following 14 CCR § 919.9 [939.9] and 14 CCR § 919.10 [939.10]?		
(b) ensuring take avoidance following 14 CCR § 919.9 [939.9](g)?		
(c) maintaining adequate amounts of suitable habitat to protect and conserve owls?		

### Theme 8: Wildlife Habitat: Seral Stages

Are the FPRs and associated regulations effective in ...

Critical Question	Study 1	Study 2
(a) retaining and recruiting late and diverse seral stage habitat components in WLPZs for wildlife?	EMC-2018-012	
(b) maintaining or increasing the amount and distribution of late succession forest stands for wildlife?	EMC-2018-012	
(c) maintaining or recruiting adequate amounts of early- and mid-seral habitats?	EMC-2018-012	

## EMC Critical Questions Matrix

### Theme 9: Wildlife Habitat: Cumulative Impacts

Are the FPRs and associated regulations effective in ...

Critical Question	Study 1	Study 2
(a) characterizing and describing terrestrial wildlife habitat and ecological processes?		
(b) avoiding significant adverse impacts to terrestrial wildlife species?	EMC-2017-002	EMC-2017-008

### Theme 10: Wildlife Habitat: Structures

Is Variable Retention silviculture effective in meeting ...

Critical Question	Study 1	Study 2
(a) ecological objectives including co-benefits?	EMC-2017-002	EMC-2018-012
(b) social objectives?		
(c) geomorphic objectives?		

Are the FPRs and associated regulations effective in retaining ...

Critical Question	Study 1	Study 2
(a) a mix of stages of snag development that maintain properly functioning levels of wildlife habitat?	EMC-2017-002	EMC-2017-007
(b) native oaks where required to maintain wildlife habitat (14 CCR § 959.15)?		

### Theme 11: Hardwood Values

Are the FPRs and associated regulations effective in retaining...

Critical Question	Study 1	Study 2
(a) diverse forests with a mixture of tree species that includes hardwoods (14 CCR § 897 (b)(1))?		
(b) native oaks where required to maintain wildlife habitat (14 CCR § 959.15)?		
(c) aspen stands (14 CCR § 913.4 [933.4, 953.4] (e))?		
(d) California black oak ( <i>Quercus kelloggii</i> ) and Oregon white oak ( <i>Quercus garryana</i> ) woodlands (14 CCR § 913.4 [933.4, 953.4] (f); § 1038 (l))?		