

Comparison of field set up and measurements under the proposed Stillwater protocol, Crawford 2011a and Crawford 2011b, and O’Neal 2014.

Category	Measurement	Stillwater 2016	Crawford 2011 a, b	O’Neal 2014
Riparian Vegetation, sample reach	# bankfull measurements	3	3	5
	# of transects	5	11	21
	Distance between transects	4x bankfull	2x bankfull	1 bankfull width category apart
	Sample reach length	16x bankfull	20x bankfull	20 bankfull width categories
	Reach maximum length	400 meters	500 meters	600 meters
	Reach minimum length	120 meters	150 meters	120 meters
	Canopy % cover	Total	Big tree/little tree	Big tree/little tree
	Understory % cover	woody/herbaceous	woody/herbaceous	woody/herbaceous
	Groundcover % cover	woody/herbaceous	woody/herbaceous	woody/herbaceous (reed canary grass)
	Bare ground	Yes, mineral only	Yes, including duff	Yes, including duff
	Herbaceous weeds	% cover	Not measured	Not measured
	Woody weeds	% cover	Not measured	Not measured
Canopy Cover	4 measurements from channel center	4 measurements from channel center, plus river left and right banks	4 measurements from channel center, plus river left and right banks	
Riparian Planting	Transect set up	same	same	N/A
	% cover woody	same	same	N/A
	% cover herbaceous	same	same	N/A
	% cover herbaceous weeds	same	same	N/A
	% cover woody weeds	same	same	N/A
	% bare ground	Yes, mineral only	Yes, including duff	N/A
Exclosure Fencing	Fencing intact	same	same	same
	Livestock evidence present?	same	same	same
	Notes	same	same	same

Crawford, B. A. 2011a. Protocol for monitoring effectiveness of riparian planting projects, MC-3. Washington Salmon Recovery Funding Board.

Crawford, B. A. 2011b. Protocol for monitoring effectiveness of riparian livestock exclusion projects, MC-4. Washington Salmon Recovery Funding Board.

O’Neal, J., and R. Scranton. 2014. BPA - MBACI protocol for monitoring the effectiveness of livestock fencing projects. Bonneville Power Administration, Portland, Oregon.

Stillwater Sciences. 2016. OWEB CREP effectiveness monitoring field methods and analyses. Prepared by Stillwater Sciences, Portland, Oregon for the Oregon Watershed Enhancement Board, Salem, Oregon.