

Attachment Veg-5

Veg-5: Provide local extent of priority habitat adjacent to the Project Siting Area to provide spatial context to the impacts of priority habitats within the Project Siting Area.

In order to address the question regarding the local extent of Priority Habitat types adjacent to the Project Siting Area a summary of habitat types within one mile of the Solar Array Siting Area has been provided (Figure to Attachment Veg-5). Field surveys were not conducted within one mile of the Solar Array Siting Area so desktop data from the National Land Cover Dataset was used instead. Field verification of habitat types was conducted inside the Solar Array Siting Area so more detailed habitat mapping has been completed and previously provided. Because of that, field verification and similarities between habitat types and land use inside and outside of the Solar Array Siting Area, some assumptions were made regarding habitat types outside of the Solar Array Siting Area regarding habitat classification. Land cover types in the NLCD was cross-walked into the Washington Department of Fish and Wildlife habitat classifications in the 2009 Wind Power Guidelines (Table 1). The main implication of that is that the areas shown as Herbaceous on Attachment Veg-5 have been recategorized as Croplands, Pasture, Urban and Mixed Environs because they are likely heavily grazed rangelands similar to what has been observed in the Solar Array Siting Area.

Table 1. Habitat Type Crosswalk

Project Habitat Type	Johnson and O'Neil (2001) Habitat Type	WDFW (2008) Priority Habitat	WDFW (2009) Wind Power Guidelines Habitat Type	WDFW (2009) Wind Power Guidelines Classification
Shrub/Scrub	Shrub-steppe	Shrub-steppe	Shrub-steppe	Class II
Hay/pasture	Agriculture, Pastures and Mixed Environs	Not a Priority Habitat	Croplands, Pasture, Urban and Mixed Environs	Class IV
Cultivated crops				
Herbaceous				
Barren land				
Developed	Urban and Mixed Environs		Urban and Mixed Environs	
Open Water			Open Water	

Utilizing those cross-walked habitat classifications habitats inside and outside of the Solar Array Siting Area can then be compared and the context requested in the Data Request is available. Table 2 summarizes the acres of each habitat type inside and outside of the Solar Array Siting Area. In general, the land use across the region is consistent and includes primarily cropland and grazed rangeland, with some interspersed areas of shrub-steppe. The proportion of the Solar Array Siting Area that includes shrub-steppe is 23 percent, while the proportion of the one-mile buffer around the Solar Array Siting Area is 15 percent. So, there is less shrub-steppe habitat, proportionally outside of the Solar Array Siting Area, within one mile.

Table 2. Percentage of Habitat Types Inside and Outside of Solar Array Siting Area

WDFW Habitat Category	Acres Within One Mile of Solar Array Siting Area	Percentage of Area Within One Mile of Solar Array Siting Area	Acres In Solar Array Siting Area	Percentage of Solar Array Siting Area	Total Acres in Solar Array Siting Area and One-mile Buffer
Shrub-steppe	2,260.60	15%	2,552.00	23%	4,812.60
Croplands, Pastures, and Mixed Environs	12,533.29	83%	8,572.00	77%	21,105.29
Urban and Mixed Environs	310.16	2%	54.00	0%	364.16
Open Water	6.87	0%	0.00	0%	6.87
Wetlands	3.33	0%	0.00	0%	3.33
Total	15,114.25	100%	11,178.00	100%	26,292.25

Table 3 provides a summary of the permanent, altered, and temporary impacts to habitat types compared to the amount of habitat available in the Solar Array Siting Area and in the Solar Array Siting Area and the one-mile buffer, to provide the region context. Shrub-steppe is the only Priority Habitat type in the region. The Project will result in permanent impacts to 1.3 percent of the shrub-steppe in the Solar Array Siting Area and one-mile buffer (region), 30.4 percent of shrub-steppe in the region will be altered (behind the fence of a solar array), and 1.5 percent will be temporarily impacted and restored post-construction.

Table 3. Acres By Impact Type and Percentage of Habitat Type Impacted in Solar Array Siting Area and One-Mile Buffer

WDFW Habitat Category	Total Acres in Solar Array Siting Area and One-mile Buffer (acres)	Permanent Impacts (acres)	Percentage of Solar Array Siting Area and One-mile Buffer from Permanent Impacts	Altered Impacts (acres)	Percentage of Solar Array Siting Area and One-mile Buffer from Altered Impacts	Temporary Impacts (acres)	Percentage of Solar Array Siting Area and One-mile Buffer from Temporary Impacts
Shrub-steppe	4,812.60	60.82	1.3%	1,463.05	30.4%	71.13	1.5%
Croplands, Pastures, and Mixed Environs	21,105.29	116.36	0.6%	3,122.61	14.8%	257.43	1.2%
Urban and Mixed Environs	364.16	2.82	0.8%	--	--	0.36	0.1%
Open Water	6.87	--	--	--	--	--	--
Wetlands	3.33	--	--	--	--	--	--
Total	26,292.25	177.54		4,585.66		331.39	