

The table also includes the state-listed threatened, endangered, or special concern bird species identified by the CTDEP NDDB as occurring in the Project area, as well as bird species observed during the field surveys performed along the ROWs (refer to Section 5 for a discussion of the species observed during the 2008 and 2011 field surveys of two segments of the ROWs). In addition, Table 4-1 identifies which of the eight habitats found along the ROWs each bird species is likely to use, and whether the species would typically use such habitat for nesting (N), foraging (F), or cover, resting, or roosting (C).

Based on the review of the available literature and the results of the field surveys, of the 170 bird species identified in as breeding in Connecticut, 146 species were determined as potentially occurring in the vicinity of the proposed Project. Of these 146 species, 61 species were observed during meander surveys performed on May 27 and 29, 2008, and June 3 and 5, 2008. Only three bird species (none of them whip-poor-wills) were heard or observed during the surveys performed on June 15, 16 and 20, 2011.

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Bitterns, Herons									
Double-crested Cormorant	<i>Phalacrocorax auritus</i>			N,C		F,C	F,C		
Least Bittern (T)	<i>Ixobrychus exilis</i>				F,C	N,F,C	F		
Great Blue Heron*	<i>Ardea herodias</i>			N,C	F,C	F,C	F		F
Green Heron*	<i>Butorides virescens</i>			N,C	N,C	F,C	F		
Swans, Geese, Ducks									
Mute Swan	<i>Cygnus olor</i>				N,C	N,F,C	F,C		
Canada Goose	<i>Branta canadensis</i>				N,F,C	N,F,C	F,C	F,C	N,F
Wood Duck	<i>Aix sponsa</i>		N,F	N,F,C	F,C	F,C	F,C		
American Black Duck	<i>Anas rubripes</i>	N	N	N,C	N,F,C	N,F,C	F,C		
Mallard	<i>Anas platyrhynchos</i>	N	N	N,C	N,F,C	N,F,C	F,C		N,F
Gadwall	<i>Anas strepera</i>				N,C	N,F,C	F,C		F
Hooded Merganser	<i>Lophodytes cucullatus</i>			N	F,C	F,C	F,C		
American Vultures									
Turkey Vulture*	<i>Cathartes aura</i>		N,F,C					F	F

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Eagles, Hawks									
Osprey	<i>Pandion haliaetus</i>				F,C	N,F,C	F		
Sharp-shinned Hawk (E)	<i>Accipiter striatus</i>	F	N,F,C	F,C	F	F			F
Cooper's Hawk	<i>Accipiter cooperii</i>	F	N,F,C	F,C	F	F			F
Northern Goshawk	<i>Accipiter gentilis</i>	F	N,F,C	F,C	F	F			
Red-shouldered Hawk	<i>Buteo lineatus</i>		N	N,F,C			F	F	
Broad-winged Hawk (SC)	<i>Buteo platypterus</i>	F	N,F,C						F
Red-tailed Hawk*	<i>Buteo jamaicensis</i>	F	N,F,C					F	F
Falcons									
American Kestrel (T)*	<i>Falco sparverius</i>	F,C	N,C	N,C	F	F			N,F
Pheasants, Grouse, Turkeys, and Quail									
Ring-necked Pheasant	<i>Phasianus colchicus</i>	N,F,C		F,C	F,C				N,F,C
Ruffed Grouse	<i>Bonasa umbellus</i>	F	N,F,C		F,C				
Wild Turkey*	<i>Meleagris gallopavo</i>	F,C	N,F,C		F,C				N,F,C
Northern Bobwhite	<i>Colinus virginianus</i>	N,F,C			F,C				N,F,C
Rails, Gallinules									
Virginia Rail	<i>Rallus Limicola</i>				F,C	N,F,C	F		
Sora	<i>Porzana carolina</i>					N,F,C	F		
Common Moorhen (E)	<i>Gallinula chloropus</i>				N,F,C	N,F,C	F		
Plovers									
Kildeer*	<i>Charadrius vociferous</i>	F						N,F,C	F,C
Sandpipers, Snipes, Woodcocks									
Spotted Sandpiper	<i>Actitis macularia</i>	N					F		
American Woodcock*	<i>Scolopax minor</i>	N,F,C	N,C	N,C	F,C				F,C
Pigeons, Doves									
Rock Dove (Pigeon)	<i>Columba livia</i>							N,F,C	F,C
Mourning Dove*	<i>Zenaida macroura</i>	F,C	N,F,C					F,C	F,C

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Cuckoos									
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	N,F,C	N,F,C	F,C	F,C				
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	N,F,C	N,F,C	F,C	F,C				
Owls									
Eastern Screech-Owl	<i>Otus asio</i>	F	N,F,C	F,C				N,F,C	F
Barn Owl (E)	<i>Tyto alba</i>	F,C				F		N,F,C	F
Great Horned Owl	<i>Bubo virginianus</i>	F	N,F,C	F,C		F		F,C	F
Barred Owl***	<i>Strix varia</i>	F	N,F,C	N,F,C		F			F
Nighthawks, Nightjars									
Whip-poor-will (SC)	<i>Caprimulgus vociferous</i>	N,F,C	N,F,C						F,C
Chimney Swift*	<i>Chaetura pelagica</i>	F				F	F	N,F,C	F
Hummingbirds									
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	N,F,C	N,F,C	F,C	F,C	F,C		F,C	
Kingfishers									
Belted Kingfisher	<i>Ceryle alcyon</i>					C	N,F,C		
Woodpeckers									
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	F,C	N,F,C	N,F,C				F	
Downy Woodpecker*	<i>Picoides pubescens</i>	F,C	N,F,C	N,F,C				F	
Hairy Woodpecker	<i>Picoides villosus</i>	F,C	N,F,C	N,F,C				F	
Northern Flicker*	<i>Colaptes auratus</i>	F,C	N,F,C	N,F,C				F	F
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	F,C	N,F,C	N,F,C					
Pileated Woodpecker	<i>Dryocopus pileatus</i>		N,F,C	N,F,C					
Tyrant Flycatchers									
Eastern Wood-Pewee*	<i>Contopus virens</i>	F,C	N,F,C	F,C					
Acadian Flycatcher	<i>Empidonax virescens</i>	F,C	N,F,C	N,F,C	F,C	F,C	F		
Alder Flycatcher (SC)	<i>Empidonax alnorum</i>	N,F,C	F,C	F,C	N,F,C				
Willow Flycatcher*	<i>Empidonax traillii</i>				N,F,C	F,C	F		
Least Flycatcher	<i>Empidonax minimus</i>	F,C	N,F,C	N,F,C					N,F,C
Eastern Phoebe*	<i>Sayornis phoebe</i>	N,F,C	N,F,C	N,F,C	F,C	F,C	F	N,F,C	F

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Eastern Kingbird*	<i>Tyrannus tyrannus</i>	F,C	N,F,C	N,F,C	F,C	F,C	F	F	F
Great Crested Flycatcher*	<i>Myiarchus crinitus</i>	F,C	N,F,C	N,F,C	F,C	F,C	F	N,F,C	F
Larks									
Horned Lark (T)	<i>Eremophila alpestris</i>	N,F,C						N,F,C	N,F,C
Swallows									
Purple Martin (T)	<i>Progne subis</i>						F		N,F,C
Tree Swallow*	<i>Tachycineta bicolor</i>	F,C	N,F,C	N,F,C	F,C	F,C	F	N,F,C	N,F,C
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>					F,C	N,F		F
Bank Swallow*	<i>Riparia riparia</i>				F,C	F,C	N,F		F
Cliff Swallow	<i>Hirundo pyrrhonota</i>				F,C	F,C	N,F		F
Barn Swallow*	<i>Hirundo rustica</i>	F,C			F,C	F,C	F	N,F,C	F
Jays, Crows									
Blue Jay*/***	<i>Cyanocitta cristata</i>	F,C	N,F,C	N,F,C				N,F,C	F,C
American Crow*	<i>Corvus brachyrhynchos</i>	F,C	N,F,C	F,C	F,C	F,C	F	N,F,C	F,C
Common Raven**	<i>Corvus corax</i>	F,C	N,F,C	N,F,C	F,C				F,C
Chickadees, Titmice									
Black-capped Chickadee*	<i>Parus atricapillus</i>	F,C	N,F,C	N,F,C				N,F,C	F,C
Tufted Titmouse*	<i>Parus bicolor</i>	F,C	N,F,C	N,F,C				F,C	F,C
Nuthatches									
Red-breasted Nuthatch	<i>Sitta canadensis</i>		N,F,C	N,F,C				N,F,C	
White-breasted Nuthatch	<i>Sitta carolinensis</i>		N,F,C	N,F,C				F,C	
Creepers									
Brown Creeper	<i>Certhia americana</i>		N,F,C	N,F,C					
Wrens									
Carolina Wren*	<i>Thryothorus ludovicianus</i>	N,F,C	N,F,C	N,F,C				N,F,C	N,F,C
House Wren*	<i>Troglodytes aedon</i>	N,F,C	N,F,C					N,F,C	N,F,C

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Marsh Wren	<i>Cistothorus palustris</i>				F	N,F,C			
Winter Wren	<i>Troglodytes troglodytes</i>	F,C	F,C	N,F,C	F,C				
Kinglets, Gnatcatchers, Thrushes									
Golden-crowned Kinglet	<i>Regulus satrapa</i>	F, C	N,F,C	N,F,C	F,C				
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>	F,C	N,F,C	N,F,C				F,C	
Eastern Bluebird*	<i>Sialia sialis</i>	N,F,C	N,C	C				N,F,C	N,FC
Veery*	<i>Catharus fuscescens</i>		N,F,C	N,F,C	N,F,C				
Hermit Thrush	<i>Catharus guttatus</i>		N,F,C	F,C					
Wood Thrush*	<i>Hylocichla mustelina</i>		N,F,C	N,F,C	F,C				
American Robin*/****	<i>Turdus migratorius</i>	N,F,C	N,F,C	F,C	F,C			N,F,C	N,F,C
Mockingbirds, Thrashers									
Gray Catbird*	<i>Dumetella carolinensis</i>	N,F,C	N,F,C	N,F,C	N,F,C	F,C		N,F,C	N,F,C
Northern Mockingbird*	<i>Mimus polyglottos</i>	N,F,C	F,C	F,C				N,F,C	N,F,C
Brown Thrasher* (SC)	<i>Toxostoma rufum</i>	N,F,C	F,C	F,C				N,F,C	F
Waxwings									
Cedar Waxwing*	<i>Bombycilla cedrorum</i>	N,F,C	F,C					F,C	N,F,C
Starlings									
European Starling*	<i>Stumus vulgaris</i>	N,F,C				F,C		N,F,C	N,F,C
Vireos									
White-eyed Vireo	<i>Vireo griseus</i>	N,F,C	F,C	F,C					
Blue-headed (Solitary) Vireo	<i>Vireo solitarius</i>	F,C	N,F,C	F,C					
Yellow-throated Vireo*	<i>Vireo flavifrons</i>	F,C	N,F,C	F,C					
Warbling Vireo*	<i>Vireo gilvus</i>	F,C	N,F,C	N,F,C	F,C				F
Red-eyed Vireo*	<i>Vireo olivaceus</i>	F,C	N,F,C	N,F,C				N,F,C	
Wood-Warblers									
Blue-winged Warbler*	<i>Vermivora pinus</i>	N,F,C	N,F,C	N,F,C	N,F,C	N,F,C			F
Golden-winged Warbler (E)	<i>Vermivora chrysoptera</i>	N,F,C							F

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Blue-winged Warbler and Golden-winged Warbler Hybrid	<i>Vermivora pinus</i> X <i>Vermivora chrysoptera</i>	N,F,C	N,F,C	F,C	F,C				
Nashville Warbler	<i>Vermivora ruficapilla</i>	N,F,C	F,C	F,C	F,C	F,C			
Yellow Warbler*	<i>Dendroica petechia</i>	N,F,C	N,F,C	N,F,C	N,F,C	F,C		N,F,C	F
Northern Parula (SC)	<i>Parula americana</i>	F,C	N,F,C	N,F,C	N,F,C	F,C			
Magnolia Warbler	<i>Dendroica magnolia</i>	F,C	N,F,C	N,F,C	F,C				
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	N,F,C	N,F,C	F,C	F,C				F
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	F,C	N,F,C	F,C	F,C			F,C	
Yellow-rumped Warbler	<i>Dendroica coronata</i>	F,C	N,F,C	F,C	F,C				F
Black-throated Green Warbler	<i>Dendroica virens</i>		N,F,C	F,C					
Blackburnian Warbler	<i>Dendroica fusca</i>		N,F,C	F,C					F
Pine Warbler*	<i>Dendroica pinus</i>	F,C	N,F,C	F,C					F
Prairie Warbler*	<i>Dendroica discolor</i>	N,F,C	F,C	F,C					N,F,C
Cerulean Warbler	<i>Dendroica cerulea</i>		N,F,C	N,F,C	F,C				
Black-and-white warbler*	<i>Mniotilta varia</i>		N,F,C	F,C					
American Redstart*	<i>Setophaga ruticilla</i>	N,F,C	N,F,C	N,F,C				F,C	F
Worm-eating Warbler	<i>Helmitheros vermivorus</i>		N,F,C	F,C					
Ovenbird*	<i>Seiurus aurocapillus</i>		N,F,C	F,C					
Northern Waterthrush	<i>Seiurus noveboracensis</i>			N,F,C	F,C		F		
Louisiana Waterthrush	<i>Seiurus motacilla</i>			N,F,C	F,C		F		
Kentucky Warbler	<i>Oporornis formosus</i>			N,F,C	N,F,C				
Common Yellowthroat*	<i>Geothlypis trichas</i>	N,F,C	N,F,C	N,F,C	N,F,C				F
Hooded Warbler	<i>Wilsonia citrina</i>		N,F,C	N,F,C	F,C				
Canada Warbler	<i>Wilsonia canadensis</i>		F,C	N,F,C	F,C				
Yellow-breasted Chat (E)	<i>Icteria virens</i>	N,F,C	F,C	F,C	N,F,C				

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Tanagers									
Scarlet Tanager*	<i>Piranga olivacea</i>	F	N,F,C	F,C					F
Cardinals, Grosbeaks, and Buntings									
Northern Cardinal*	<i>Cardinalis cardinalis</i>	N,F,C	N,F,C	F,C				N,F,C	F
Rose-breasted Grosbeak*	<i>Pheucticus ludovicianus</i>	F	N,F,C	F,C					F
Indigo Bunting*	<i>Passerina cyanea</i>	N,F,C	F,C						F
Eastern (Rufous-sided) Towhee*	<i>Pipilo erythrophthalmus</i>	F,C	N,F,C	F,C					F
Chipping Sparrow*	<i>Spizella passerina</i>	N,F,C	F,C					N,F,C	F
Field Sparrow*	<i>Spizella pusilla</i>	N,F,C							N,F,C
Vesper Sparrow (E)	<i>Poocetes gramineus</i>	N,F,C	F,C						N,F,C
Savannah Sparrow (SC)	<i>Passerculus sandwichensis</i>	N,F,C							N,F,C
Grasshopper Sparrow (E)	<i>Ammodramus savannarum</i>	N,F,C							N,F,C
Song Sparrow*	<i>Melospiza melodia</i>	N,F,C	N,F,C	N,F,C				N,F,C	F,C
Swamp Sparrow*	<i>Melospiza Georgiana</i>	F		N,F,C	N,F,C	N,F,C			
White-throated Sparrow	<i>Zonotrichia albicollis</i>	F,C	F,C	N,F,C	F,C			F,C	F,C
Dark-eyed Junco	<i>Junco hyemalis</i>	F,C	N,F,C					F,C	F,C
Blackbirds, Orioles									
Bobolink (SC)	<i>Dolichonyx oryzivorus</i>								N,F,C
Red-winged Blackbird*	<i>Agelaius phoeniceus</i>			F,C	F,C	N,F,C		N,F,C	F,C
Eastern Meadowlark* (SC)	<i>Sturnella magna</i>								N,F,C
Common Grackle*	<i>Quiscalus quiscula</i>	F		N,F,C	F,C	F,C	F	N,F,C	F,C
Brown-headed Cowbird*	<i>Molothrus ater</i>	F,C	N,F,C	N,F,C				N,F,C	F,C
Orchard Oriole	<i>Icterus spurius</i>	F	N,F,C					N,F,C	F
Baltimore Oriole*	<i>Icterus galbula</i>	FF	N,F,C					N,F,C	F

**Table 4-1
Breeding Birds Observed or Potentially Occurring in the Project Area, by Habitat Type**

COMMON NAME (1,3)	SCIENTIFIC NAME	HABITAT TYPE (2)							
		OFS	UF	PFO	PSS	PEM	POW	CI/HY	AG
Finches									
Purple Finch	<i>Carpodacus purpureus</i>	F,C	N,F,C	F,C				F	F
House Finch	<i>Carpodacus mexicanus</i>	F,C	F,C					N,F,C	F
Pine Siskin	<i>Carduelis pinus</i>		N,F,C					N,F,C	F,C
American Goldfinch*	<i>Carduells tristis</i>	N,F,C						N,F,C	N,F,C
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	F,C	N,F,C	F,C				F,C	F,C
House Sparrow	<i>Passer domesticus</i>	F,C						N,F,C	N,F,C

1. State of Connecticut listings: **E** = Endangered; **T** = Threatened; **SC** = Special Concern. Note that only the species identified in **BOLD** are reported by CTDEP NDDB to occur in the Project area. Other state-listed species were identified as potentially occurring in the general Project vicinity, based on *Atlas* data only.
2. OFS = Old Field/Shrub/Sapling Thickets
UF = Mixed Deciduous Forest
PFO = Forested Wetland
PSS = Shrub Swamp
PEM = Emergent Marsh
POW = Open Water
CI/HY = Urban Areas
AG = Agricultural Land
3. For each species listed, habitat types marked with an "N" indicate that species may use that habitat type for nesting, an "F" indicates that the species may forage in that habitat, and a "C" indicates that the species may use as cover, rest, or roost in that habitat. Blank boxes indicate the species is not typically found in that habitat type, except as occasional transients.

(*) indicates confirmation of species during field surveys of Mansfield and Putnam ROW segments conducted on 27 and 29 May, 2008, and 3 and 5 June, 2008.

(**) indicates species is not listed as nesting in Project vicinity but observations during 2011 vernal pool surveys warrant inclusion as a potential breeder.

(***) indicates confirmation of species during field surveys of Putnam ROW segment conducted on June 15, 16 and 20, 2011.