

Strategies to Minimize Adverse Impacts to Wildlife from Management Activities on Power Line Rights-of-way in New Jersey (rev. July 2011)

ACTIVITY TYPE	DEFINITIONS	E&T SPECIES OR GROUPS							
		Bald Eagle*	Bog Turtle*	Indiana Bat*	Eastern Small-footed Myotis	Timber Rattlesnake/ Copperhead	Pine & Corn Snake/ Kingsnake	Wood Turtle	Eastern Box Turtle
Utility ROW Management Activities									
Wetlands & Uplands									
Integrated Vegetation Management	A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1-Sept 15; no mowing; no motorized vehicles unless on tracks in wetland areas; hand-cutting only; Do not selective foliar or radiarc herbicide; Basal treatment approved Nov. 1 - March 31; Stump treatment approved when on foot by hand outside of the April 1 to Sept. 15 dates.	Within 5 mi of hibernacula in areas <1 mi from water. Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh. Avoid herbicides May 15-Aug 15 to minimize bioaccumulation	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Avoid herbicides May 15 to Aug 15 to minimize bioaccumulation; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Avoid Apr 1-May 31 & Sept 15-Oct 31; Avoid digging or blasting Oct 1-May 31; raise blades 8" to mow between June 1 - Sept. 14; Use caution driving on roads and mowing to avoid hitting snakes; do not radiarc herbicide	Avoid working in nesting areas from June 15 - Sept 15; Adjust height of mower to 6-12 in; Use caution driving on roads and mowing to avoid hitting snakes; do not radiarc herbicide	Avoid March 1-Nov 30 when within 150 feet of stream. Avoid April 1 - Oct. 31 when greater than 150 feet from stream. No restrictions when cutting done on foot with no motorized equipment in wetlands; No radiarc application, selective foliar, or other herbicide applications using motorized equipment from March 1 - Nov. 30. Targeted basal and stump treatments approved when done on foot and no motorized equipment in wetlands.	No work from April 1 - Sept 30; Adjust height of mower to >6 inches; Do not selective foliar or radiarc herbicide April 1 - Sept. 15; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand. Avoid motorized vehicles in wetland areas from April 1 - Sept. 30; Hand cutting on foot ok.
Reclamation	Re-establishing IVM on a ROW that is not currently managed to the full extent of its easement or ownership rights and intended purpose. Conditions on a ROW in need of re-claiming include tall, dense amounts of undesirable vegetation, and electric supply lines that are inaccessible. Reclamation usually involves initial non-selective methods of mowing or hand-cutting, or broadcast application of herbicides. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1-Sept 15; no mowing; no motorized vehicles unless on tracks in wetland areas; hand-cutting only; Do not selective foliar or radiarc herbicide; Basal treatment approved Nov. 1 - March 31; Stump treatment approved when on foot by hand outside of the April 1 to Sept. 15 dates.	Within 5 mi of hibernacula in areas <1 mi from water. Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh. Avoid herbicides May 15-Aug 15 to minimize bioaccumulation	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Avoid herbicides May 15 to Aug 15 to minimize bioaccumulation; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Avoid Apr 1-May 31 & Sept 15-Oct 31; Avoid digging or blasting Oct 1-May 31; raise blades 8" to mow between June 1 - Sept. 14; Use caution driving on roads and mowing to avoid hitting snakes; do not radiarc herbicide	Avoid working in nesting areas from June 15 - Sept 15; Adjust height of mower to 6-12 in; Use caution driving on roads and mowing to avoid hitting snakes; do not radiarc herbicide	Avoid March 1-Nov 30 when within 150 feet of stream. Avoid April 1 - Oct. 31 when greater than 150 feet from stream. No restrictions when cutting done on foot with no motorized equipment in wetlands; No radiarc application, selective foliar, or other herbicide applications using motorized equipment from March 1 - Nov. 30. Targeted basal and stump treatments approved when done on foot and no motorized equipment in wetlands.	No work from April 1 - Sept 30; Adjust height of mower to >6 inches; Do not selective foliar or radiarc herbicide April 1 - Sept. 15; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand. Avoid motorized vehicles in wetland areas from April 1 - Sept. 30; Hand cutting on foot ok.
Basal Herbicide Treatment	Controlling undesirable saplings on the ROW corridor in low to med stem density areas. Material used is applied in low-volume amounts to the bottom 12-18" of bark of stem(s) of vegetation.	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1-Oct 31; approved when on foot by hand.	Avoid May 15-Aug 15 (minimize possible bioaccumulation)	Avoid May 15 to Aug 15 to minimize bioaccumulation	Use caution driving on roads to avoid hitting snakes; do not spray directly on or immediately adjacent to observed snakes	Use caution driving on roads to avoid hitting snakes; do not spray directly on or immediately adjacent to observed snakes	OK if no motorized equipment used; Avoid Mar 1-Nov 30 if motorized equipment used	Basal treatment approved Nov. 1 - March 31.
Herbicide Stump Treatment	Application of herbicides directly to cut stumps.	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1-Sept 15, apply only on foot and by hand	Avoid May 15-Aug 15 (minimize possible bioaccumulation)	Avoid May 15 to Aug 15 to minimize bioaccumulation	Use caution driving on roads to avoid hitting snakes; do not spray directly on or immediately adjacent to observed snakes	Use caution driving on roads to avoid hitting snakes; do not spray directly on or immediately adjacent to observed snakes	OK if no motorized vehicles used; Avoid Mar 1-Nov 30 if motorized vehicles used	Stump treatment approved when on foot by hand.
Radiarc Herbicide	Used only for reclamation or to create grass areas, ie. access lanes under wire zone. Equipment used for this is typically a rubber-tired tractor and a radiarc spray nozzle. Includes high volume herbicide application.	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Do not use	Avoid May 15-Aug 15 (minimize possible bioaccumulation)	Avoid May 15 to Aug 15 to minimize bioaccumulation	Do not use	Do not use	Do not use	Avoid Apr 1 - Sept 30
Selective Foliar Herbicide	Undesirable vegetation foliage treated using either a hose and nozzle from a rubber-tired spray truck or a backpack sprayer. Desirable vegetation is retained. Includes noxious weed control.	No disturbance both within 1,000 ft of nesting buffers Jan 1 Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Do not use	Avoid May 15-Aug 15 (minimize possible bioaccumulation)	Avoid May 15 to Aug 15 to minimize bioaccumulation	Use caution driving on roads to avoid hitting snakes	Use caution driving on roads to avoid hitting snakes	Avoid Mar 1-Nov 30	Avoid Apr 1 - Sept 30

Utility ROW Management Activities		Bald Eagle*	Bog Turtle*	Indiana Bat*	Eastern Small-footed Myotis	Timber Rattlesnake/ Copperhead	Pine & Corn Snake/ Kingsnake	Wood Turtle	Eastern Box Turtle
Wetlands & Uplands									
Brush Mowing	Minimally-selective means of clearing undesirable vegetation, utilizing different mowing units for different situations - remote areas, roadsides, wetlands, etc. Includes hydro-ax, ground line clearing, mowing as part of Phragmites control, and structure site maintenance.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Do not use	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Avoid Apr 1-May 31 & Sept 15-Oct 31; Avoid digging Oct 1-May 31; raise blades 8" to mow between June 1 - Sept. 14; use caution when mowing to avoid hitting snakes	Avoid working in nesting areas from June 15 - Sept 15; Adjust height of mower to 6-12 in; Use caution driving on roads and mowing to avoid hitting snakes;	Avoid March 1-Nov 30 when within 150 feet of stream. Avoid April 1 - Oct. 31 when greater than 150 feet from stream.	Avoid Apr 1 - Sept 30; Adjust mower blade height above 6 inches
Grass Mowing	Periodic cutting of grass on ROW due to regulatory or public concerns.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Do not mow	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Avoid Apr 1-May 31 & Sept 15-Oct 31; Avoid digging Oct 1-May 31; raise blades 8" to mow between June 1 - Sept. 14; use caution when mowing to avoid hitting snakes	Avoid working in nesting areas from June 15 - Sept 15; Adjust height of mower to 6-12 in; Use caution driving on roads and mowing to avoid hitting snakes;	Avoid March 1-Nov 30 when within 150 feet of stream. Avoid April 1 - Oct. 31 when greater than 150 feet from stream.	Avoid Apr 1 - Sept 30; Adjust mower blade height above 6 inches
Hand Cutting	Control of vegetation using hand-operated tools.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1 to Sept 15; no motorized vehicles unless on tracks in wetland areas	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Use caution driving on roads to avoid hitting snakes	Use caution driving on roads to avoid hitting snakes	No restrictions when cutting done on foot with no motorized equipment in wetlands	No motorized vehicles in wetland areas from April 1 - Sept. 30
Tree Pruning/ Mechanical Pruning Along ROW Edge	Minimal ROW disturbance, typically involving removing encroaching tree branches but may include tree removal as needed.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1 to Sept 15; no motorized vehicles unless on tracks in wetland areas; hand-cutting only	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Use caution driving on roads to avoid hitting snakes	Use caution driving on roads to avoid hitting snakes	OK if no motorized equipment used; Avoid Mar 1-Nov 30 if motorized equipment used	Avoid motorized vehicles in wetland areas from April 1 - Sept. 30
Danger/ Hazard Tree Removal	Tree(s) on or off ROW that could contact electric supply lines, or a structurally unsound tree that could strike electric supply lines if it fails. (ANSI A300 Part 7 2006, IVM). Tree(s) often topped and left for wildlife habitat.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1 to Sept 15; no motorized vehicles unless on tracks in wetland areas; hand-cutting only	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	Avoid maternity colonies April 15-Aug 1; Retain snags, dying trees, and trees with loose bark >22cm dbh; Trees on the edge of a ROW may provide roosts for bats. Exit surveys should be conducted for three successive evenings prior to tree removal. If bats are observed exiting tree then removal must be delayed until after August 15.	Use caution driving on roads to avoid hitting snakes	Use caution driving on roads to avoid hitting snakes	Avoid March 1 - Nov. 30 when using motorized equipment. No restrictions when cutting done on foot with no motorized equipment	No motorized vehicles in wetland areas from April 1 - Sept. 30
Patrols	Patrolling ROWs using helicopters and/or on foot to locate any areas of potential reliability issues due to vegetation or other concerns. Aerial patrols typically conducted prior to summer peak, foot patrols can be conducted any time of year.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid patrols on motorized equipment in wetlands	OK	OK	Use caution driving on roads to avoid hitting snakes	Use caution driving on roads to avoid hitting snakes	Avoid patrols on motorized equipment in wetlands	Avoid motorized vehicles in wetland areas from April 1 - Sept. 30
Soil Erosion Control	To prevent erosion from beginning and to control erosion that has started, it may be necessary to spread a grass seed mixture.	No disturbance both within 1,000 ft of nesting buffers Jan 1 - Jul 31 and within 300 ft of roost between Dec 15 and Jan 31	Avoid April 1 to Sept 15; no motorized vehicles unless on tracks in wetland areas	Within 5 mi of hibernacula in areas <1 mi from water: Retain snags, dead/dying trees, & trees with loose bark >12.7 cm dbh.	OK	Use caution driving on roads to avoid hitting snakes; no digging or blasting 10/1-5/31	Use caution driving on roads to avoid hitting snakes	Avoid Mar 1-Nov 30	Avoid Apr 1 - Sept 30

* The US Fish and Wildlife Service should also be consulted in areas where federally-listed species are present

Low Impact: vegetation within corridor is minimally affected by maintenance activity

Medium impact: some vegetation is affected, some is not affected by activity

High Impact: most of vegetation is affected by activity.

Insects = Allegheny river cruiser, Appalachian grizzled skipper, Arogos skipper, arrowhead spiketail, banner clubtail, beaverpond clubtail, bronze copper, brook snaketail, brush-tipped emerald, checkered white, cobra clubtail, coppery emerald, crimson-ringed whiteface, dotted skipper, extra-striped snaketail, forcipate emerald, frosted elfin, Georgia satyr, golden-winged skimmer, gray petaltail, green-faced clubtail, harpoon clubtail, Harris checkerspot, Hessel's hairstreak, hoary elfin, Hundsonian whiteface, Kennedy's emerald, Leonard's skipper, Maine snaketail, midland clubtail, Mitchell's satyr, New England bluet, northern metalmark, Pine Barrens bluet, rapids clubtail, robust baskettail, sable clubtail, scarlet bluet, Septima's clubtail, silver-bordered fritillary, ski-tailed emerald, spatterdock darner, subarctic darner, superb jewelwing, tiger spiketail, two-spotted skipper, Williamson's emerald, zebra clubtail

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ACTIVITY TYPE	DEFINITIONS	E&T SPECIES OR GROUPS										
		Blue-spotted & Jefferson Salamander	Longtail Salamander	Marbled Salamander	Eastern Tiger Salamander	Other Amphibians	Insects	Northern Harrier	American kestrel, Barn Owl	Other Grassland Birds	Sedge Wren	Shrub Birds
Utility ROW Management Activities												
Wetlands & Uplands												
Integrated Vegetation Management	A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	Avoid mowing Mar 1 - August 31 within 300 meters from vernal pool or red maple swamp complex; Do not selective foliar or radiarc herbicide March 1 - August 31 within 300 meters from vernal pool or red maple swamp complex; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand; Avoid motorized equipment in wetlands or within 300 meters from vernal pool or red maple swamp complex; Hand cutting on foot ok	Avoid mowing April 1 - Sept 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond; Do not selective foliar or radiarc herbicide April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond. Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand.; No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK;	Avoid mowing Sept 1 - Oct 31 within 300 meters from vernal pool; Do not selective foliar or radiarc herbicide Sept 1 - Oct 31 within 300 meters from vernal pool; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand.; No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK;	No work in ponded areas from Dec. 1 - June 15; adjust height of mower to 6-12 in; do not radiarc herbicide	No work (mowing, cutting, herbicide, motorized equipment, etc) Apr 1-Aug 31 in ponded areas and within 25 meters of a wetland, spring, or stream; Adjust height of mower to 6-12 in; do not radiarc herbicide	Avoid April 1 - Aug 31; Maintain nectar-source shrubs (<i>Clethra alnifolia</i>); Do not ground line clear; Do not use herbicides	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities; do not radiarc herbicide	Avoid Mar 15 - Sept 10; outside these dates, raise blades as high as possible when mowing; do not broadcast herbicide	Avoid Apr 15 - Oct 15; outside these dates, raise blades as high as possible when mowing; do not radiarc herbicide	Avoid Apr 1-Aug 31; outside these dates, raise blades as high as possible when mowing; Remove, stack, or chip slash; retain small trees and shrubs; Do not herbicide May 1 - Jul 15; do not radiarc herbicide
Reclamation	Re-establishing IVM on a ROW that is not currently managed to the full extent of its easement or ownership rights and intended purpose. Conditions on a ROW in need of reclaiming include tall, dense amounts of undesirable vegetation, and electric supply lines that are inaccessible. Reclamation usually involves initial non-selective methods of mowing or hand-cutting, or broadcast application of herbicides. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	Avoid mowing Mar 1 - August 31 within 300 meters from vernal pool or red maple swamp complex; Do not selective foliar or radiarc herbicide March 1 - August 31 within 300 meters from vernal pool or red maple swamp complex; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand; Avoid motorized equipment in wetlands or within 300 meters from vernal pool or red maple swamp complex; Hand cutting on foot ok	Avoid mowing April 1 - Sept 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond; Do not selective foliar or radiarc herbicide April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond. Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand.; No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK;	Avoid mowing Sept 1 - Oct 31 within 300 meters from vernal pool; Do not selective foliar or radiarc herbicide Sept 1 - Oct 31 within 300 meters from vernal pool; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand.; No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK;	No work in ponded areas from Dec. 1 - June 15; adjust height of mower to 6-12 in; do not radiarc herbicide	No work (mowing, cutting, herbicide, motorized equipment, etc) Apr 1-Aug 31 in ponded areas and within 25 meters of a wetland, spring, or stream; Adjust height of mower to 6-12 in; do not radiarc herbicide	Avoid April 1 - Aug 31; Maintain nectar-source shrubs (<i>Clethra alnifolia</i>); Do not ground line clear; Do not use herbicides	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities; do not radiarc herbicide	Avoid Mar 15 - Sept 10; outside these dates, raise blades as high as possible when mowing; do not broadcast herbicide	Avoid Apr 15 - Oct 15; outside these dates, raise blades as high as possible when mowing; do not radiarc herbicide	Avoid Apr 1-Aug 31; outside these dates, raise blades as high as possible when mowing; Remove, stack, or chip slash; retain small trees and shrubs; Do not herbicide May 1 - Jul 15; do not radiarc herbicide
Basal Herbicide Treatment	Controlling undesirable saplings on the ROW corridor in low to med stem density areas. Material used is applied in low-volume amounts to the bottom 12-18" of bark of stem(s) of vegetation.	Basal treatment approved Nov. 1 - March 31	Basal treatment approved Nov. 1 - March 31	Basal treatment approved Nov. 1 - March 31	Avoid ponded areas Dec 1-June 15	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Do not use	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	OK	OK	OK	Avoid Apr 15-Jul 15
Herbicide Stump Treatment	Application of herbicides directly to cut stumps.	Stump treatment approved when on foot by hand.	Stump treatment approved when on foot by hand.	Stump treatment approved when on foot by hand.	Avoid ponded areas Dec 1-June 15	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Do not use	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	OK	OK	OK	Avoid Apr 15-Jul 15
Radiarc Herbicide	Used only for reclamation or to create grass areas, ie. access lanes under wire zone. Equipment used for this is typically a rubber-tired tractor and a radiarc spray nozzle. Includes high volume herbicide application.	Avoid March 1 - August 31	Avoid April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid Sept 1 - Oct 31 within 300 meters from vernal pool	Do not use	Do not use	Do not use	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Do not use	Do not use	Do not use	Do not use
Selective Foliar Herbicide	Undesirable vegetation foliage treated using either a hose and nozzle from a rubber-tired spray truck or a backpack sprayer. Desirable vegetation is retained. Includes noxious weed control.	Avoid Mar 1 - August 31	Avoid April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid Sept 1 - Oct 31 within 300 meters from vernal pool	Avoid ponded areas Dec 1 - Jun 15	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Do not use	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	OK	OK	OK	Avoid Apr 15-Jul 15

Utility ROW Management Activities		Blue-spotted & Jefferson Salamander	Longtail Salamander	Marbled Salamander	Eastern Tiger Salamander	Other Amphibians	Insects	Northern Harrier	Grassland Raptors	Grassland Birds	Sedge Wren	Shrub Birds
Wetlands & Uplands												
Brush Mowing	Minimally-selective means of clearing undesirable vegetation, utilizing different mowing units for different situations - remote areas, roadsides, wetlands, etc. Includes hydro-ax, ground line clearing, mowing as part of Phragmites control, and structure site maintenance.	Avoid Mar 1- August 31 within 300 meters of vernal pool or red maple swamp complex	Avoid April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid Sept 1 - Oct 31 within 300 meters from vernal pool	Avoid ponded areas Dec 1 - Jun 15; adjust height of mower to 6-12 in	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31; Adjust height of mower to 6-12 in	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia); Do not ground line clear	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities	Avoid Mar 15 - Sept 10; outside these dates, raise blades as high as possible when mowing; do not broadcast herbicide	Avoid Apr 15 - Oct 15; outside these dates, raise blades as high as possible when mowing	Avoid Apr 1-Aug 31; outside these dates, raise blades as high as possible when mowing; Remove, stack, or chip slash; retain shrubs and small trees
Grass Mowing	Periodic cutting of grass on ROW due to regulatory or public concerns.	Avoid Mar 1- August 31 within 300 meters of vernal pool or red maple swamp complex	Avoid April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid Sept 1 - Oct 31 within 300 meters from vernal pool	Avoid ponded areas Dec 1 - Jun 15; adjust height of mower to 6-12 in	Avoid ponded areas within 25 meters of a wetland, spring, or stream; Apr 1- Aug 31; Adjust height of mower to 6-12 in	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia); Do not ground line clear;	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities	Avoid Mar 15 - Sept 10; outside these dates, raise blades as high as possible when mowing; do not broadcast herbicide	Avoid Apr 15 - Oct 15; outside these dates, raise blades as high as possible when mowing	Avoid Apr 1-Aug 31; outside these dates, raise blades as high as possible when mowing; Remove, stack, or chip slash; retain shrubs and small trees
Hand Cutting	Control of vegetation using hand-operated tools.	No motorized vehicles March 1 - August 31, else hand cutting OK	No motorized vehicles from April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond, else hand-cutting on foot OK	No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK	OK	OK	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia)	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities	OK	Avoid Apr 15 - Oct 15	Avoid Apr 1-Aug 31; Remove, stack, or chip slash; retain shrubs and small trees
Tree Pruning/ Mechanical Pruning Along ROW Edge	Minimal ROW disturbance, typically involving removing encroaching tree branches but may include tree removal as needed.	No motorized vehicles March 1 - August 31 within 300 meters of vernal pool or red maple swamp complex, else hand cutting OK	No motorized vehicles from April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond, else hand-cutting on foot OK	No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK	Hand cutting ok; if mowing, avoid ponded areas Dec 1 - Jun 15 & Adjust height of mower to 6-12 in	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia)	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities; do not radiarc herbicide	OK	Avoid Apr 15 - Oct 15	Avoid Apr 1-Aug 31; Remove, stack, or chip slash; retain shrubs and small trees
Danger/ Hazard Tree Removal	Tree(s) on or off ROW that could contact electric supply lines, or a structurally unsound tree that could strike electric supply lines if it fails. (ANSI A300 Part 7 2006, IVM). Tree(s) often topped and left for wildlife habitat.	No motorized vehicles March 1 - August 31 within 300 meters of vernal pool or red maple swamp complex, else hand cutting OK	No motorized vehicles from April 1 - Sept. 30 within 100 meters of a wetland, spring, vernal pool, stream, or pond, else hand-cutting on foot OK	No motorized vehicles within 300 meters from vernal pool from Sept 1 - Oct 31, else hand-cutting on foot OK	Hand cutting ok; if mowing, avoid ponded areas Dec 1 - Jun 15 & adjust height of mower to 6-12 in	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia)	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30; retain trees with cavities	OK	Avoid Apr 15 - Oct 15	Avoid Apr 1-Aug 31; Remove, stack, or chip slash; retain shrubs and small trees
Patrols	Patrolling ROWs using helicopters and/or on foot to locate any areas of potential reliability issues due to vegetation or other concerns. Aerial patrols typically conducted prior to summer peak, foot patrols can be conducted any time of year.	Avoid patrols on motorized equipment in wetlands or when within 300 meters from vernal pool or red maple swamp complex	Avoid patrols on motorized equipment in wetlands or when within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid patrols on motorized equipment in wetlands or when within 300 meters from vernal pool	OK	OK	OK	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	OK	OK	OK	OK
Soil Erosion Control	To prevent erosion from beginning and to control erosion that has started, it may be necessary to spread a grass seed mixture.	Avoid Mar 1- August 31 within 300 meters of vernal pool or red maple swamp complex	within 100 meters of a wetland, spring, vernal pool, stream, or pond.	Avoid Sept 1 - Oct 31 within 300 meters from vernal pool	Avoid ponded areas Dec 1 - Jun 15	Avoid ponded areas and within 25 meters of a wetland, spring, or stream Apr 1-Aug 31	Avoid April 1- Aug 31; Maintain nectar-source shrubs (Clethra alnifolia)	No disturbance within 500 feet of nest buffer between Mar 1 and July 31	Avoid Mar 15 - June 30	Avoid Mar 15 - Sept 10 where grass has already been established	Avoid Apr 15 - Oct 15	Avoid Apr 1-Aug 31; Remove, stack, or chip slash

* The US Fish and Wildlife Service should also be consulted in areas where federally-listed species are present

Low Impact: vegetation within corridor is minimally affected by maintenance activity

Medium impact: some vegetation is affected, some is not affected by activity

High Impact: most of vegetation is affected by activity.

Other amphibians = Pine Barrens Treefrog, Cope's Gray Treefrog, Eastern Mud Salamander, Northern Spring Salamander

Other grassland birds = bobolink, eastern meadowlark, grasshopper sparrow, Henslow's sparrow, horned lark, savannah sparrow, upland sandpiper, and vesper sparrow

Shrub birds = golden-winged warbler, black-billed cuckoo, brown thrasher, Canada warbler, least flycatcher, Nashville warbler, winter wren, and yellow-breasted chat

Strategies to Minimize Adverse Impacts to Wildlife from Management Activities on Power Line Rights-of-way in New Jersey (rev. July 2011)

ACTIVITY TYPE	DEFINITIONS	E&T SPECIES OR GROUPS										
		Sharp-shinned Hawk	Cooper's Hawk	Barred Owl	Long-eared Owl	Northern Goshawk/ Red-shouldered Hawk	Forest Birds	Red-headed Woodpecker	Migrant Birds	Peregrine Falcon	Osprey	Mussels
Utility ROW Management Activities												
Wetlands & Uplands												
Integrated Vegetation Management	A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory; Do not radiarc herbicide	Avoid April 1 - Aug 15; retain dead trees and trees with cavities; do not radiarc herbicide	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% canopy closure throughout buffer area. Avoid soil disturbance within buffer area. Do not use herbicides within 200 ft. riparian buffer area; if necessary, avoid Apr 1-June 30 and Aug 1-Nov 1.
Reclamation	Re-establishing IVM on a ROW that is not currently managed to the full extent of its easement or ownership rights and intended purpose. Conditions on a ROW in need of re-claiming include tall, dense amounts of undesirable vegetation, and electric supply lines that are inaccessible. Reclamation usually involves initial non-selective methods of mowing or hand-cutting, or broadcast application of herbicides. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory; Do not radiarc herbicide	Avoid April 1 - Aug 15; retain dead trees and trees with cavities; do not radiarc herbicide	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area. Do not use herbicide within 200 ft riparian buffer area
Basal Herbicide Treatment	Controlling undesirable saplings on the ROW corridor in low to med stem density areas. Material used is applied in low-volume amounts to the bottom 12-18" of bark of stem(s) of vegetation.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	OK	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	OK	Avoid May 1- Jul 15	OK	OK	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Do not use within 200 ft. riparian buffer area; if necessary, avoid Apr 1- June 30 and Aug 1-Nov 1.
Herbicide Stump Treatment	Application of herbicides directly to cut stumps.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	OK	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	OK	Avoid May 1- Jul 15	OK	OK	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Do not use within 200 ft. riparian buffer area; if necessary, avoid Apr 1- June 30 and Aug 1-Nov 1.
Radiarc Herbicide	Used only for reclamation or to create grass areas, ie. access lanes under wire zone. Equipment used for this is typically a rubber-tired tractor and a radiarc spray nozzle. Includes high volume herbicide application.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	OK	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	OK	Do not use	Do not use	Do not use	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Do not use within 200 ft. riparian buffer area; if necessary, avoid Apr 1- June 30 and Aug 1-Nov 1.
Selective Foliar Herbicide	Undesirable vegetation foliage treated using either a hose and nozzle from a rubber-tired spray truck or a backpack sprayer. Desirable vegetation is retained. Includes noxious weed control.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	OK	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	OK	Avoid May 1- Jul 15	OK	OK	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Do not use within 200 ft. riparian buffer area; if necessary, avoid Apr 1- June 30 and Aug 1-Nov 1.

Utility ROW Management Activities		Sharp-shinned Hawk	Cooper's Hawk	Barred Owl	Long-eared Owl	Northern Goshawk/ Red-shouldered Hawk	Forest Birds	Red-headed Woodpecker	Migrant Birds	Peregrine Falcon	Osprey	Mussels
Wetlands & Uplands												
Brush Mowing	Minimally-selective means of clearing undesirable vegetation, utilizing different mowing units for different situations - remote areas, roadsides, wetlands, etc. Includes hydro-ax, ground line clearing, mowing as part of Phragmites control, and structure site maintenance.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory	Avoid Apr 1 - Aug 15; retain dead trees and trees with cavities	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.
Grass Mowing	Periodic cutting of grass on ROW due to regulatory or public concerns.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory	Avoid Apr 1 - Aug 15; retain dead trees and trees with cavities	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.
Hand Cutting	Control of vegetation using hand-operated tools.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory	Avoid Apr 1 - Aug 15; retain dead trees and trees with cavities	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.
Tree Pruning/ Mechanical Pruning Along ROW Edge	Minimal ROW disturbance, typically involving removing encroaching tree branches but may include tree removal as needed.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory	Avoid Apr 1 - Aug 15; retain dead trees and trees with cavities	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.
Danger/ Hazard Tree Removal	Tree(s) on or off ROW that could contact electric supply lines, or a structurally unsound tree that could strike electric supply lines if it fails. (ANSI A300 Part 7 2006, IVM). Tree(s) often topped and left for wildlife habitat.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	Avoid Apr 15 - Aug 31; retain shrubby understory	Avoid Apr 1 - Aug 15; retain dead trees and trees with cavities	Retain shrubby understory, small trees, and shrubs; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.
Patrols	Patrolling ROWs using helicopters and/or on foot to locate any areas of potential reliability issues due to vegetation or other concerns. Aerial patrols typically conducted prior to summer peak, foot patrols can be conducted any time of year.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	OK	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	OK	OK	OK	OK	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	OK
Soil Erosion Control	To prevent erosion from beginning and to control erosion that has started, it may be necessary to spread a grass seed mixture.	No disturbance within 1,000 feet of nest buffer Apr 1 - Aug 15	No restrictions unless a nest is identified along the ROW, then no disturbance in nest buffer Mar 1 - July 31	Do not cut dead trees and trees with cavities March 1 - June 30; removal of cavity trees outside of restrictive period should be approved by DEP's DLUR; If nest cavity is identified along the ROW, no disturbance in nest buffer Mar 1 - June 30	No disturbance within 300 ft of nest SOA between Apr 1 - July 31; No disturbance within 300 ft of roost SOA between Dec 15 and Feb 28	No restrictions unless a nest is identified along the ROW, then no disturbance in breeding buffer Mar 1 - June 30.	OK	OK	OK	No disturbance within 1,000 feet of nest buffer between Mar 1 and Jul 31	No disturbance within 1,000 feet of nest buffer between April 1 and Aug 31	Maintain 200 ft forested riparian buffer on each side of stream. Retain 70% of canopy closure throughout buffer area. Avoid soil disturbance within buffer area.

* The US Fish and Wildlife Service should also be consulted in areas where federally-listed species are present

Low Impact: vegetation within corridor is minimally affected by maintenance activity

Medium impact: some vegetation is affected, some is not affected by activity

High Impact: most of vegetation is affected by activity.

Migrant birds = loggerhead shrike, gray-cheeked thrush, Kentucky warbler, and golden-winged warbler

Mussels = brook floater, creper, dwarf wedgemussel, eastern lampmussel, eastern pondmussel, green floater, tidewater mucket, triangle floater, yellow lampmussel

Forest birds = blackburnian warbler, black-throated blue warbler, black-throated green warbler, blue-headed vireo, cerulean warbler, common nighthawk, hooded warbler, Kentucky warbler, Nashville warbler, northern parula, veery, whip-poor-will, winter wren, wood thrush, worm-eating warbler

Strategies to Minimize Adverse Impacts to Wildlife from Management Activities on Power Line Rights-of-way in New Jersey (rev. July 2011)

ACTIVITY TYPE	DEFINITIONS	E&T SPECIES OR GROUPS					
Utility ROW Management Activities		Spotted Turtle	Northern Diamondback Terrapin	Saltmarsh Sharp-tailed Sparrow	Other Marsh Birds	Short-eared Owl	Great Blue Heron
Wetlands Only							
Integrated Vegetation Management	A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	Avoid mowing March 1 - Sept 30 within 100 meters from a vernal pool, wetland, stream, or pond; No motorized vehicles March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond; motorized vehicles only allowed in wetlands when on tracks; hand cutting on foot only; Avoid herbicide March 1 - Sept 30; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand; Do not selective foliar or radiarc herbicide	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; do not use herbicide near hibernacula; do not dig near hibernaculum Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15; outside these dates raise blades as high as possible when mowing; do not radiarc herbicide;	Avoid Apr 1-Aug 15; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31; do not radiarc herbicide
Reclamation	Re-establishing IVM on a ROW that is not currently managed to the full extent of its easement or ownership rights and intended purpose. Conditions on a ROW in need of re-claiming include tall, dense amounts of undesirable vegetation, and electric supply lines that are inaccessible. Reclamation usually involves initial non-selective methods of mowing or hand-cutting, or broadcast application of herbicides. (ANSI A300 Part 7, 2006, Integrated Vegetation Management)	Avoid mowing March 1 - Sept 30 within 100 meters from a vernal pool, wetland, stream, or pond; No motorized vehicles March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond; motorized vehicles only allowed in wetlands when on tracks; hand cutting on foot only; Avoid herbicide March 1 - Sept 30; Basal treatment approved Nov. 1 - March 31. Stump treatment approved when on foot by hand; Do not selective foliar or radiarc herbicide	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; do not use herbicide near hibernacula; do not dig near hibernaculum Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15; outside these dates raise blades as high as possible when mowing; do not radiarc herbicide;	Avoid Apr 1-Aug 15; do not radiarc herbicide	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31; do not radiarc herbicide
Basal Herbicide Treatment	Controlling undesirable saplings on the ROW corridor in low to med stem density areas. Material used is applied in low-volume amounts to the bottom 12-18" of bark of stem(s) of vegetation.	Basal treatment approved Nov. 1 - March 31	Do not use near hibernacula	OK	OK	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	OK
Herbicide Stump Treatment	Application of herbicides directly to cut stumps.	Stump treatment approved when on foot by hand.	Do not use near hibernacula	OK	OK	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	OK
Radiarc Herbicide	Used only for reclamation or to create grass areas, ie. access lanes under wire zone. Equipment used for this is typically a rubber-tired tractor and a radiarc spray nozzle. Includes high volume herbicide application.	Do not use	Do not use near hibernacula	Do not use	Do not use	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Do not use
Selective Foliar Herbicide	Undesirable vegetation foliage treated using either a hose and nozzle from a rubber-tired spray truck or a backpack sprayer. Desirable vegetation is retained. Includes noxious weed control.	Do not use	Do not use near hibernacula	OK	OK	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	OK

Utility ROW Management Activities		Spotted Turtle	Northern Diamondback Terrapin	Saltmarsh Sharp-tailed Sparrow	Other Marsh Birds	Short-eared Owl	Great Blue Heron
Wetlands Only							
Brush Mowing	Minimally-selective means of clearing undesirable vegetation, utilizing different mowing units for different situations - remote areas, roadsides, wetlands, etc. Includes hydro-ax, ground line clearing, mowing as part of Phragmites control, and structure site maintenance.	Avoid March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15; outside these dates raise blades as high as possible when mowing	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31
Grass Mowing	Periodic cutting of grass on ROW due to regulatory or public concerns.	Avoid March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15; outside these dates raise blades as high as possible when mowing	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31
Hand Cutting	Control of vegetation using hand-operated tools.	hand cutting on foot only	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31
Tree Pruning/ Mechanical Pruning Along ROW Edge	Minimal ROW disturbance, typically involving removing encroaching tree branches but may include tree removal as needed.	No motorized vehicles March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond; motorized vehicles only allowed in wetlands when on tracks; hand cutting on foot only	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31
Danger/ Hazard Tree Removal	Tree(s) on or off ROW that could contact electric supply lines, or a structurally unsound tree that could strike electric supply lines if it fails. (ANSI A300 Part 7 2006, IVM). Tree(s) often topped and left for wildlife habitat.	No motorized vehicles March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond; motorized vehicles only allowed in wetlands when on tracks; hand cutting on foot only	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31
Patrols	Patrolling ROWs using helicopters and/or on foot to locate any areas of potential reliability issues due to vegetation or other concerns. Aerial patrols typically conducted prior to summer peak, foot patrols can be conducted any time of year.	Avoid patrols on motorized equipment in wetlands or within 100 meters from a vernal pool, wetland, stream, or pond	Use caution driving on roads to avoid hitting turtles	OK	OK	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	OK
Soil Erosion Control	To prevent erosion from beginning and to control erosion that has started, it may be necessary to spread a grass seed mixture.	Avoid March 1 - Sept. 30 within 100 meters from a vernal pool, wetland, stream, or pond;	No work in nesting areas June 1-Oct 15; no work near hibernacula Nov 1 - Mar 15; use caution to avoid hitting turtles May 1 - June 30;	Avoid May 1-Aug 15	Avoid Apr 1-Aug 15	No disturbance within 1,000 feet of nest buffer Mar 15 - Aug 15	Avoid Mar 1-July 31

* The US Fish and Wildlife Service should also be consulted in areas where federally-listed species are present

Low Impact: vegetation within corridor is minimally affected by maintenance activity

Medium impact: some vegetation is affected, some is not affected by activity

High Impact: most of vegetation is affected by activity.

Other Marsh Birds = American bittern, black rail, least bittern, king rail, pied-billed grebe, sora, Virginia rail, black-crowned night-heron, yellow-crowned night-heron