

Exhibit D

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wetland scrub, freshwater marshes and roads and highways. However, this land disturbance represents a small portion of the available land in the surrounding area and would, therefore, be a SMALL impact.

4.1.2.4 Makeup and Potable Water Systems

As described in [Sections 3.3](#) and [3.4](#), reclaimed water from the Miami-Dade Water and Sewer Department (MDWASD) and/or radial collector wells-supplied water would be used as cooling water makeup for Units 6 & 7. Potential impacts of construction activities for these cooling water systems are described below.

As described in [Section 2.2](#), the reclaimed water pipeline corridor would require approximately 9 miles of pipelines between the Turkey Point plant property and the MDWASD South District Wastewater Treatment Plant to the north ([Figure 2.2-5](#)). For about 6.5 miles of their length, the pipelines would be collocated with the existing Clear Sky-to-Davis transmission line right-of-way and adjacent road and canal rights-of-way. For the remaining approximately 2.5 miles, the pipelines would then diverge from the existing right-of-way. The current land use of the 1886 acres within this corridor, some smaller portion of which could be impacted with the construction of the pipelines and right-of-way. Major land use impacts within this area are shown in [Table 2.2-6](#). Construction activities for the pipelines could result in vegetation loss and habitat disruption. As described in [Section 4.3](#), the pipelines would be trenched beneath/along an existing access road on the west side of the corridor and, upon completion, the disturbed portions of the corridor would be graded to the contours of the surrounding landscape and revegetated or returned to previous land uses. Clearing of new corridors and/or expansion of existing corridors would include use of environmental best management practices to minimize impacts to sensitive habitats. Most of the reclaimed water pipelines would follow existing rights-of-way.

Construction of the radial collector wells would not cause new surface land disturbance to any previously undeveloped property. Also, as described in [Subsection 4.1.1.1.2](#), Miami-Dade County has approved the rezoning of the land for development.

Accordingly, land use impacts from construction of the makeup water systems in the six-mile vicinity would be SMALL and would not require mitigation.

As described in [Section 2.2](#), the radial collector wells would include horizontal laterals extending underground from a collection caisson to a depth of approximately 25 to 40 feet below the bottom of Biscayne Bay. Because construction of the radial collector wells would involve surface land disturbance only on the Turkey Point plant property and no surface land disturbance in offsite areas, there would be no new construction impacts associated with the radial collector wells to offsite land use.

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4.2.1.1.7 Constructing Reclaimed Water Pipelines on Turkey Point Plant Property

Surface Water

The reclaimed water pipelines would enter the Turkey Point plant property north of the location of the FPL reclaimed water treatment facility. Following treatment, the reclaimed water would be pumped via pipelines to the makeup water reservoir on the Units 6 & 7 plant area. The pipelines would cross areas previously disturbed and segments of the existing industrial wastewater facility, as described in [Section 2.2](#).

Installation of the reclaimed water pipelines across segments of the industrial wastewater facility would be accomplished via bridging to minimize potential impacts.

Surface disturbance that could affect hydrologic alteration would be short-term and would result in an impact to a limited area. The construction areas would be contoured to facilitate drainage and the area seeded with native species. During construction, water resulting from dewatering and surface water runoff would be released to the industrial wastewater facility. Potential impacts to surface water from hydrologic alteration for constructing the onsite portion of the reclaimed water pipelines would also be of short duration.

The potential impact from hydrologic alteration of surface water as a result of construction of the reclaimed water pipelines would be SMALL and would not warrant additional mitigation.

Groundwater

Installing the onsite portion of the reclaimed water pipelines could alter the flow of groundwater in the proximity of the excavation activity. Once construction activities come to an end, the groundwater hydrologic flow would return to preconstruction conditions. Impacts during construction would be short-term and limited to the area of construction activity. Therefore, impacts would be SMALL and would not warrant additional mitigation.

4.2.1.1.8 Constructing Radial Collector Wells

Surface Water

Radial collector wells would be installed adjacent to Biscayne Bay to provide cooling water for Units 6 & 7 (see [Figure 3.1-3](#)). The well caissons would be located on the Turkey Point peninsula, east of the existing units. Each radial collector well would consist of a central reinforced concrete caisson extending below the ground level with laterals projecting from the caisson. The well laterals would be advanced horizontally a distance of up to 900 feet and installed to a depth of approximately 25 to 40 feet below the bottom of Biscayne Bay. Groundwater recharge from Biscayne Bay would flow into the horizontal well laterals and flow by head force to the collection caisson located onshore where the water would be pumped via pipelines to Units 6 & 7.

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4.3.1 TERRESTRIAL ECOSYSTEMS

The terrestrial resources of the Units 6 & 7 plant area, the Turkey Point plant property in general, and the southeastern region of Florida, are described in [Subsection 2.4.1](#). This information provides a baseline from which to gauge potential impacts of construction activities. Potential impacts to plant property areas are discussed in [Subsection 4.3.1.1](#) and potential offsite impacts are discussed in [Subsections 4.3.1.2](#) (reclaimed water pipelines) and [4.3.1.3](#) (transmission corridors, borrow site, and access roads/potable water pipelines).

4.3.1.1 Potential Impacts to the Units 6 & 7 Plant Area and Other Plant Property Areas

Construction of Units 6 & 7 and associated onsite facilities ([Figure 4.3-1](#)) would result in approximately 600 acres being disturbed (and would represent the maximum possible area of soil exposed at one time) during the construction phase. A variety of wetland land cover types, as summarized in [Table 4.3-1](#), would be disturbed by construction activities. Construction of the heavy haul road would result in land disturbance, but would mostly occur on previously disturbed land on the Turkey Point property and, therefore, would not impact terrestrial habitats. Clearing methods, disposal of construction wastes, and methods of limiting erosion, runoff, and siltation are addressed in [Section 4.1](#).

As described in [Subsection 2.4.1](#), the approximately 218-acre Units 6 & 7 plant area consists primarily of hypersaline mudflats and other wetland types ([Figure 2.4-2](#)). The area has been impacted by unit operations for three decades. Although the Units 6 & 7 plant area has not been developed directly, it has been impacted by the construction of berms/spoil deposit areas and the adjacent and remnant canals associated with the industrial wastewater facility.

An approximate 52-acre laydown area would be established west of the Units 6 & 7 plant area. This area consists of streams and waterways/canals, reservoirs larger than 500 acres (note: this description applies to the part of the industrial wastewater facility that is within the laydown area), dwarf mangroves, fill area and roads and highways ([Table 4.3-1](#)). An approximate 3-acre transmission laydown area would be established and consist of ditches, dwarf mangroves and electric power facilities ([Table 4.3-1](#)).

An approximate 44-acre FPL reclaimed water treatment facility would be built on a parcel of land between SW 344th Street/Palm Drive and the test canals (immediately north of the industrial wastewater facility). This facility would be built on sawgrass marsh with scattered dwarf mangroves, Australian pine, streams and waterways/canals, and exotic wetland hardwoods ([Table 4.3-1](#)). Delivery pipelines would extend east and south from this facility through a land cover type consisting of roads/highways ([Table 4.3-1](#)), to the makeup water reservoir. The facility is immediately north of land considered crocodile critical habitat.

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acres (note: this description applies to the part of the industrial wastewater facility that is within the laydown area), dwarf mangroves, fill area and roads and highways (Table 4.3-1). An approximate 3-acre transmission laydown area would be established and consist of ditches, dwarf mangroves and electric power facilities (Table 4.3-1). After construction activities are completed, this land could be regraded.

A nuclear administration building, training building, and parking areas would be built on two adjacent parcels of land north of the Units 6 & 7 plant area. These areas total approximately 32 acres, consisting of a variety of land cover types including mangrove swamps, fill areas, and roads/highways (Table 4.3-1).

The FPL reclaimed water treatment facility would be built on a parcel by the test canals in an area historically dredged for test cooling evaluations (immediately north of the industrial wastewater facility). This facility would be built on sawgrass, dwarf mangroves, Australian pine, streams and waterways/canals, and exotic wetland hardwoods-Australian pine, roads and highways (Table 4.3-1). Pipelines would extend east and south from this facility through a land cover type consisting of roads/highways (Table 4.3-1) to the makeup water reservoir. The facility would be immediately north of land considered crocodile critical habitat. Any required mitigation for wetland loss would likely include wetland enhancement, restoration, and/or purchase of Everglades Mitigation Bank credits (see description in Subsection 4.3.1.1.4).

There would be approximately 10.8 total miles of roadway improvements and new road construction to create better access to the Turkey Point plant property for construction workers and trucks delivering fill and other material. The majority of these improvements would occur along existing paved and non-paved roads and transmission corridors, thus reducing potential impacts to the environment. Land uses/covers associated with these roadway corridors include a variety of land cover types, with the majority consisting of wetlands, farms, roads, and disturbed areas (Table 2.2-7). The new construction would occur between the existing road on the northern end of the cooling canals and SW 359th Street and would require the construction of a bridge to cross the L31E canal.

Construction/expansion of the roadways would follow the design standards of FDEP and the Miami-Dade County Public Works Department. Activities to reduce impacts to water and wetlands would include use of silt fences and floating turbidity curtains. Culverts would be installed and placed to maintain hydrologic flows through the area, based on hydrologic studies. Unavoidable wetland impacts resulting from roadway improvements would be mitigated in consultation with FDEP and USACE.

Potable water pipelines approximately 9 miles long would bring potable water from MDWASD to the Units 6 & 7 plant area. The pipelines would generally follow existing roadways/corridors. Much of the pipelines would be installed by trenching adjacent to or within the corridors

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4.3.2.1.4 Habitat Disturbance

Construction of Units 6 & 7 would result in the unavoidable destruction of wetlands and man-made canals, most of it hypersaline mudflats, as described in [Subsection 2.4.2.1.1](#) and shown in [Figure 2.4-2](#). Specific impacted habits (land cover types) are shown in [Table 4.3-1](#). The area contains marginal habitat which has been impacted by unit operations for at least 30 years. The aquatic species in the impacted wetlands are widely distributed across similar habitats in south Florida. No rare or specially protected species exist there.

An approximately 52-acre laydown area west of the Units 6 & 7 plant area has streams and waterways/canals, reservoirs larger than 500 acres (note: this description applies to the part of the industrial wastewater facility that is within the laydown area), dwarf mangroves, fill area and roads and highways ([Table 4.3-1](#)). An approximate 3-acre transmission laydown area would be established and consist of ditches, dwarf mangroves and electric power facilities ([Table 4.3-1](#)).

An approximately 44-acre FPL reclaimed water treatment facility would be built immediately north of the industrial wastewater facility on sawgrass marsh with scattered dwarf mangroves, Australian pine, streams and waterways/canals, and exotic wetland hardwoods-Australian pine ([Table 4.3-1](#)). Reclaimed water pipelines would extend east and south from this facility through land use of roads/highways to the makeup water reservoir ([Table 4.3-1](#)). The open water and dwarf mangrove habitats do not support any specially protected species. Only ubiquitous, hardy aquatic species are expected to occur there.

Other aquatic habitats in the plant area and on the Turkey Point plant property may be temporarily impacted, but would not be destroyed. Specific areas are described in the following sections: Equipment Barge Unloading Area ([Subsection 4.3.2.2.1](#)), Drilling Deep Injection Wells ([Subsection 4.3.2.2.2](#)), and Staging Areas ([Subsection 4.3.2.2.3](#)).

Potential impacts to offsite aquatic resources are described in [Subsection 4.3.2.3](#). Offsite construction that may impact aquatic resources includes installation of pipelines for delivery of reclaimed water ([Subsection 4.3.2.3.1](#)) installation of radial collector wells ([Subsection 4.3.2.3.2](#)), development of transmission corridors and construction of transmission lines ([Subsection 4.3.2.3.3](#)), improvement of roadways ([Subsection 4.3.2.3.4](#)), and collection and transport of borrow material to fill the plant area ([Subsection 4.3.2.3.5](#)).

4.3.2.2 Potential Impacts to the Units 6 & 7 Plant Area and Other Onsite Aquatic Resources

When a wetland or other surface water body is impacted by construction activities and aquatic organisms are present, impacts to these organisms are expected. If the water body has an outlet, and the disturbance is gradual rather than abrupt, some animals may relocate. However, construction impacts to small wetlands or other surface waters result in loss of the fishes and

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Table 4.3-1 (Sheet 1 of 2)
Turkey Point Property Disturbed Area FLUCCS Summary

Disturbed Area	Level 3	FLUCCS Land Use Category	Acres	% of Total
Turkey Point Units 6 & 7 Plant Area	510	Streams And Waterways/Canals	0.30	0.14
	511	Ditches	8.38	3.8
	612-A	Mangrove Heads	12.14	5.56
	650	Non-Vegetated Wetlands	182.05	83.41
	743	Spoils Areas	6.35	2.91
	743-WET	Wetland Spoils Areas	9.05	4.15
	Totals		218.27	100.00
FPL-Owned Fill Source	241	Tree Nurseries	243.78	81.70
	422	Brazilian Pepper	0.25	0.08
	511	Ditches	5.19	1.74
	619	Exotic Wetland Hardwoods	3.02	1.01
	619/631	Exotic Wetland Hardwoods/Wetland Scrub	30.71	10.29
	631	Wetland Scrub	4.42	1.48
	641	Freshwater Marshes	8.76	2.94
	814	Roads and Highways	2.25	0.75
Totals		298.39	100.00	
Western Laydown Areas	510	Streams And Waterways/Canals	3.31	6.39
	531	Reservoirs Larger Than 500 Acres (202 Hectares)	11.99	23.10
	612-B	Dwarf Mangroves	16.87	32.52
	744	Fill Areas <Highways-Railways>	19.55	37.68
	814	Roads And Highways	0.16	0.31
	Totals		51.88	100.00
Training Parking	612	Mangrove Swamps	5.61	61.50
	612-618	Mangrove Swamps/Exotic Wetland Hardwoods/Willow and Elderberry	1.85	20.33
	744	Fill Areas <Highways-Railways>	1.64	173.97
	831	Electric Power Facilities	0.02	0.19
	Totals		9.12	100.00
Nuclear Administration Building	612	Mangrove Swamps	18.68	82.21
	744	Fill Areas <Highways-Railways>	3.39	14.91
	814	Roads And Highways	0.66	2.89
	Totals		22.73	100.00
Radial Collector Wells Delivery Pipelines	510	Streams And Waterways/Canals	0.15	1.14
	612	Mangrove Swamps	3.98	29.83
	744	Fill Areas <Highways-Railways>	9.21	69.02
	Totals		13.34	100.00

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Table 4.3-1 (Sheet 2 of 2)
Turkey Point Property Disturbed Area FLUCCS Summary

Disturbed Area	Level 3	FLUCCS Land Use Category	Acres	% of Total
Heavy Haul Road	510	Streams And Waterways/Canals	0.15	2.99
	650	Non-Vegetated	0.00	0.01
	740	Disturbed Land	0.19	3.64
	744	Fill Areas <Highways-Railways>	0.03	0.59
	814	Roads And Highways	1.05	20.26
	831	Electric Power Facilities	3.75	72.51
	Totals			5.17
Transmission Laydown Area	511	Ditches	0.02	0.62
	612-B	Dwarf Mangroves	0.31	10.76
	831	Electric Power Facilities	2.55	88.61
	Totals			2.88
Equipment Barge Unloading Area	510	Streams And Waterways/Canals	0.02	2.55
	831	Electric Power Facilities	0.73	97.45
	Totals			0.75
Spoils Area A	510	Streams And Waterways/Canals	1.06	1.36
	744	Fill Areas <Highways-Railways>	76.35	98.64
	Totals			77.41
Spoils Area B	510	Streams And Waterways/Canals	0.00	0.03
	542	Embayments Not Opening Directly Into The Gulf Of Mexico Or The Atlantic Ocean	0.00	0.02
	740	Disturbed Land	10.27	57.40
	744	Fill Areas <Highways-Railways>	4.19	23.42
	814	Roads And Highways	3.42	19.13
	Totals			17.89
Spoils Area C	510	Streams And Waterways/Canals	4.39	3.78
	744	Fill Areas <Highways-Railways>	111.64	96.22
	Totals			116.02
Radial Collector Well Area	744	Fill Areas <Highways-Railways>	3.28	100.00
Radial Collector Well Laydown Area	744	Fill Areas <Highways-Railways>	2.72	100.00
FPL Reclaimed Water Treatment Facility	437	Australian Pine	7.79	17.74
	510	Streams And Waterways/Canals	3.07	6.99
	511	Ditches	0.30	0.68
	612-B	Dwarf Mangroves	19.80	45.09
	619	Exotic Wetland Hardwoods	0.61	1.39
	619-AP	Exotic Wetland Hardwoods-Australian Pine	0.16	0.36
	6411	Sawgrass Marshes	11.93	27.17
	814	Roads and Highways	0.26	0.59
Totals			43.91	100.00

Note: The treated reclaimed water supply pipeline is now fully within the heavy haul road disturbed area and is not separately considered.

Due to rounding, table values may not exactly sum to the total acres and percentages.

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Figure 4.3-1 Turkey Point Disturbed Area

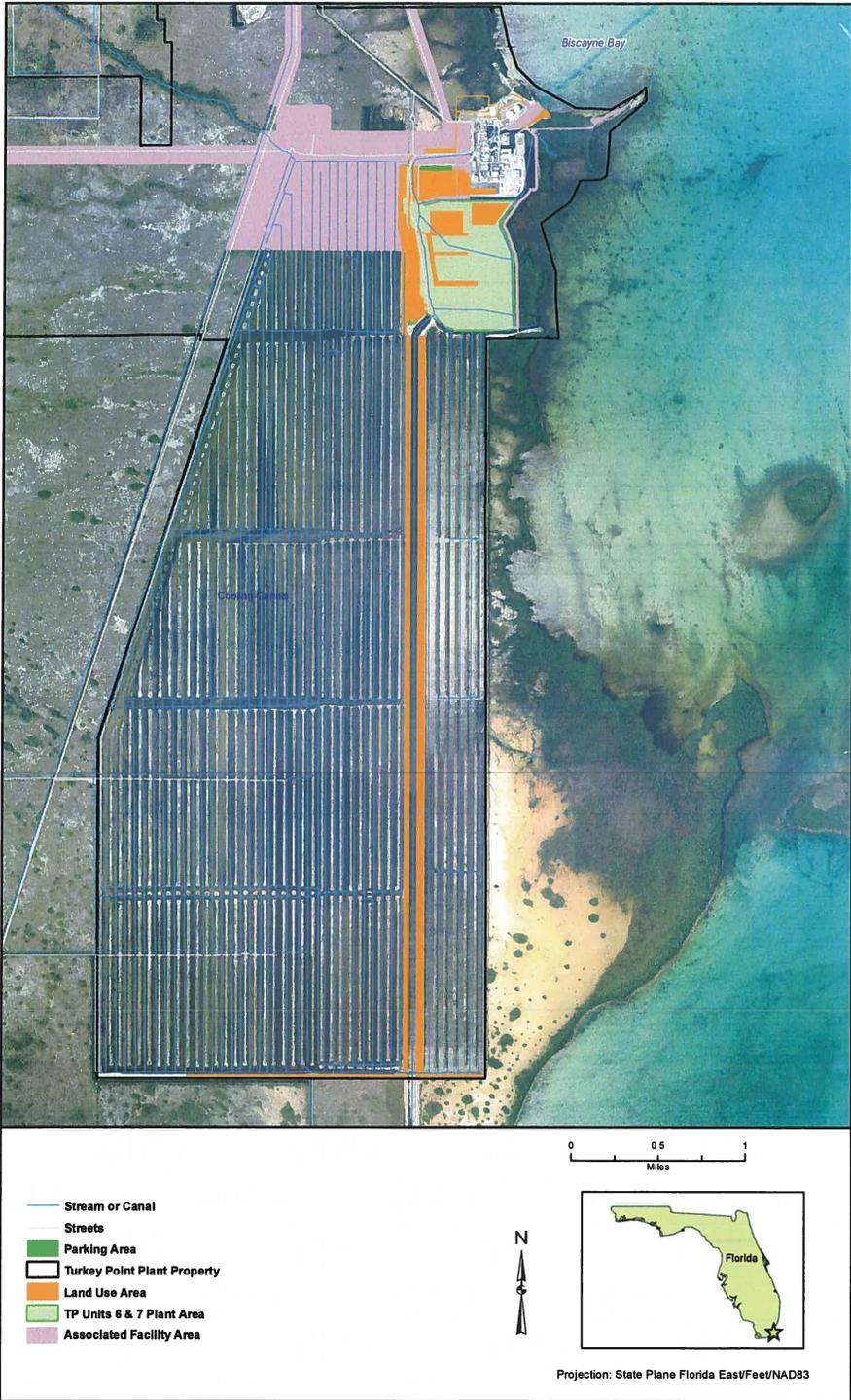


Exhibit E

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**Table 5.1-1 (Sheet 1 of 2)
Permanent Disturbed Acreage**

Disturbed Area	Acreage
Turkey Point Property	
Unit 6 & 7 plant area	218
Western laydown areas	52
Training parking	9
Nuclear Administration parking	23
Heavy haul road	5
Access road upgrades	Note (1)
Transmission infrastructure improvements	Note (1)
Transmission laydown areas	3
Sanitary waste pipeline	Note (1)
Equipment barge unloading area	0.75
"A", "B", "C" spoils area	211
Radial collector wells and associated facilities	3
Radial collector well laydown area	3
FPL reclaimed water treatment facility	44
FPL reclaimed water supply pipeline	Note (1)
Radial collector well water supply pipelines	13
Vicinity	
FPL-owned offsite fill source	300
<u>Road Improvements</u> ^(Note 2)	
SW 117th Ave. North	9
SW 117th Ave. South	8
SW 137th Ave.	7
SW 328th St.	24
SW 344th St.	2
SW 359th Ave. East	47
SW 359th Ave. West	31
Region	
Reclaimed water pipeline corridor	Note (3)
Potable water pipeline corridor	Note (4)
<u>Transmission</u>	
East Preferred Corridor (1635 acres total)	
Clear Sky to Davis	Note (5)
Davis to Miami	Note (5)
West Preferred Corridor (3356 acres total)	
Clear Sky to Levee – 1st leg	Note (5)
Clear Sky to Levee – 2nd leg	Note (5)
Clear Sky to Levee – 3rd leg	Note (5)
Levee to Pennsuco	Note (5)
West Secondary Corridor	
Clear Sky to Levee – 1st leg	Note (5)
Clear Sky to Levee – 2nd leg	Note (5)
Clear Sky to Levee – 3rd leg	Note (5)
Levee to Pennsuco	Note (5)

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Table 5.1-1 (Sheet 2 of 2)
Permanent Disturbed Acreage

Disturbed Area	Acreage
West Corridor Transmission Access Road 1	11
West Corridor Transmission Access Road 2	365
Levee substation	2
Pennsuco substation	2
Davis substation	1
Turkey Point substation	1

- (1) Previously disturbed area.
- (2) Road improvements may be removed after Units 6 & 7 are in operation.
- (3) Acreage will be restored to pre-existing conditions.
- (4) Acreage will be below grade.
- (5) Actual disturbed acreage will be based on required right-of-way.