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June 20, 2007

BY ELECTRONIC FILING

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: *Broadwater Energy LLC*, Docket Nos. CP06-54-000;
Broadwater Pipeline, LLC, Docket Nos. CP06-55-000 & CP06-56-000

Dear Ms. Bose:

Pursuant to information requests from the New York State Department of State, a cooperating agency in the above-captioned proceedings with responsibility for decisions regarding the project under the federally-approved coastal management program for the State of New York, enclosed for filing is the response of Broadwater Energy LLC and Broadwater Pipeline LLC to such requests. Such filings are being made for the consolidated record maintained by the FERC for these proceedings.

Sincerely yours,

/s/ Brett A. Snyder

Brett A. Snyder

Enclosures

Additional Alternatives Analysis

1.0 Background

The New York State Department of State (NYSDOS), a cooperating agency in the FERC proceedings for the Broadwater LNG Project ("Project"), has further engaged the applicant, Broadwater Energy LLC and Broadwater Pipeline LLC (jointly "Broadwater"), on the topic of alternatives to the Project. For the most part the alternatives discussed were addressed in varying ways in extant documents for the Project. This engagement has included information requests from NYSDOS to Broadwater. As with other Broadwater responses to Environmental Information Requests from the FERC and other cooperating agencies, general information provided to the NYSDOS by Broadwater in response to these NYSDOS information requests is submitted to the FERC for inclusion in the FERC record/consolidated record for the Project and associated proceedings.

2.0 Purpose and Need

For context, it is important to restate the purposes of and need for the Project.[1] The Project will provide a source of reliable, long-term, and competitively priced natural gas to this Region to meet growing market demand. To fulfill this purpose and need, a viable LNG import terminal concept and site must meet, at a minimum, the following specific criteria:

- Be technically and economically feasible, practicable, and implementable;
- Maximize the buffer between the Project and populated areas;
- Have significant environmental benefits over other alternatives;
- Be able to provide reliable natural gas deliveries to the Region via pipeline connections;
- Provide deepwater berthing to accommodate up to 250,000 m^3capacity LNG carriers, with a maximum draft requirement of 49 feet (15 m);
- Provide for storage and vaporization facilities for at least 1.0 bcfd of natural gas for an in-service date of 2010;
- Comprise a site that allows the terminal to maintain sufficient control and proprietary rights of operation;
- Comprise a site situated close to an existing pipeline system serving the Region with downstream takeaway capability greater than 1.0 bcfd; and

[1] The "purposes and need" is also referred to in this document as the Project objective.

- Be able to ensure facility and connecting pipeline operability for a minimum 30-year project life.

In response to the request of the NYSDOS, Broadwater further discussed alternatives to the proposed Project, keeping in mind the Project purpose and need criteria listed above. As a result of this continued discussion of alternatives, Broadwater continues to conclude that the Project is the preferred alternative, and is the alternative that best meets these specific criteria.

3.0 Overview of Atlantic Alternatives

In response to inquiries by NYSDOS Staff concerning potentially feasible south shore Atlantic Ocean sites, Broadwater evaluated six additional pipeline routes based upon the four additional Atlantic locations raised by the NYSDOS.[2] All of these Atlantic alternative locations included an offshore facility location and a connecting pipeline comprised of offshore and onshore segments. In addition, all of these routing alternatives were intended to connect to the Iroquois Gas Transmission system, which, as discussed in Section 10.4.1 of Resource Report 10, is the preferred pipeline transportation alternative in the Region.

The six alternative pipeline routes analyzed in addition to those evaluated to date are identified in Figure 1 and are as follows:

- S1A-1 – western facility location with an offshore pipeline route through New York Bay and the East River with connection to Iroquois at Hunt's Point;
- S1A-2 – western facility location with an offshore pipeline route and a crossing at Long Beach and onshore pipeline route through Queens and a sub-sea tie-in to the Iroquois Eastchester Extension;
- S1A-3 – western facility location with an offshore pipeline route and a crossing at Jones Inlet and onshore pipeline route with a tie-in to Iroquois at South Commack;
- S1B-1 – central facility location with an offshore pipeline route and a crossing at Fire Island Inlet and Conklin Point and onshore pipeline route with a tie-in to Iroquois at South Commack;

[2] Broadwater previously evaluated Atlantic Ocean sites as well as alternative terminal concepts such as Shuttle Regasification Units ("SRVs").

- S2-1 – central facility location with an offshore pipeline route and a crossing at Fire Island Inlet and Conklin Point and onshore pipeline route with a tie-in to Iroquois at South Commack; and
- S3-1 – eastern facility location with an offshore pipeline route and a crossing of Fire Island and onshore pipeline route through Smith Point with a tie-in to Iroquois' proposed Brookhaven Lateral project at the Caithness LI Energy Center.

4.0 Pipeline Constraints

Based on these alternative locations, Broadwater performed an engineering and environmental constraint analysis in comparison to the preferred Project location in Long Island Sound. This analysis included constraints related to impacts during construction and operation of the offshore facility as well as to the connecting pipeline. Impacts considered included both human and ecological effects. The constraints are summarized in Tables 1 and 2 below.

Broadwater also prepared a series of twelve figures depicting the major constraints associated with the Atlantic alternatives, including existing navigation channels, anchorages, cable and shoal areas, parks and significant coastal fish and wildlife habitat, ship wrecks, dumping grounds, regulated zones, onshore land use and coastal zone areas. These figures are provided as Attachment 1. All of these pipeline alternatives are 50% longer than the preferred alternative and all involve shore crossings which are avoided with the preferred Project alternative.

The constraints analysis, performed through mapping and tabularization of comparative route features, revealed numerous environmental impacts related to the alternative locations proposed by NYSDOS in comparison to Broadwater's Preferred Alternative in Long Island Sound.

One major environmental constraint is the shore crossings in the coastal zone which would occur in highly sensitive areas which are mapped and recognized by NYSDOS as significant and critical habitat and contain submerged aquatic vegetation. The crossing of significant and critical habitat areas for the Atlantic alternatives ranges from 0.19 to 5.37 miles and the crossing of submerged aquatic vegetation for the Atlantic Alternatives ranges from 0.19 to 5.3 miles, as shown in Table 2. These coastal areas are often associated with shallow waters used as nursery habitat for marine organisms and provide important food and shelter for marine life. Construction in these areas would disrupt and potentially destroy habitat and result in increased sediment loading in these shallow waters, resulting in high turbidity and potential water quality impacts. The Preferred

Additional Alternatives Analysis

Alternative does not cross any sensitive habitat areas and will not cause these associated impacts.

Another major environmental and engineering constraint is the multiple crossing types that would be encountered including wetlands, bridges, highways, cables and other utilities. Crossing of wetland areas would result in some level of habitat destruction and disturbance related to clearing of vegetation and possible diversion or damming in open water areas. In addition, the crossing or intersections with bridges and highways often requires the closing of these areas during construction and extra work space which is constrained in many of the highly populated areas of Long Island and would result in construction of the pipeline adjacent to residences and other developed areas. This can result in safety concerns, as well as significant levels of disturbance related to noise and lighting, since onshore pipeline installation on Long Island would tend to be carried out at night along congested areas (e.g. highway corridors) to minimize disruption to facility users during the day. As shown in Table 1, the number of roadways/bridges/tunnels crossed is significant ranging from 6 to 28 and the number of residences adjacent to the construction ROW ranges from 3 to 1,143 in the more densely populated areas. In comparison the number for these categories along the Preferred Alternative is zero. Cables are another significant concern during construction, since submarine crossings with a pipeline are very complicated procedures (especially compared to cables crossing other cables) and the number of pipeline crossings of cables for the Atlantic alternatives ranges from 6 to 20, while only two are needed for the Preferred Alternative.

Lastly, another major constraint to consider is the park areas and significant shoreline locations including Fire Island National Seashore, which would be crossed during pipeline construction for the Atlantic alternatives. For the Atlantic alternatives, federal and local parkland impacts range from 0.06 to 1.47 miles. These areas are a concern since the shoreline crossings will require specialized construction techniques including horizontal directional drilling or HDD. This is often difficult and unsuccessful in non-cohesive sediments such as sands which comprise the majority of the southern Long Island shoreline. If the HDD is unsuccessful, the secondary installation approach is an open cut trench to install the pipeline which disrupts a large area and would result in habitat destruction and beach impacts to a sensitive shoreline environment and potentially the National Seashore area. However, impacts to these areas and habitats of this type are completely avoided by the entirely water-based Preferred Alternative in Long Island Sound.

Additional Alternatives Analysis

Table 1: Pipeline Alternatives - Engineering Discriminators

Factor	units	Preferred Alternative	S1A-1	S1A-2	S1A-3	S1B-1	S2-1	S3-1
New Build Pipeline Length	miles	21.7	47.79	34.59	41.71	36.61	37.59	32.89
New Build Compressor Stations	site	0	Hunts Point	Little Neck	0	0	0	South Commack
Long Island Railroad Co-location (safety)	miles	0	0	8.26	3.09	1.49	1.49	0
Residences Adjacent to Construction ROW	no.	0	0	623	1,143	37	3	10
Major Shore Crossings	no.	0	1	6	3	3	3	3
Submarine Cable / Utility Crossings	no.	2	20	14	13	9	8	6
Navigation Channels Crossed	no.	0	16	6	3	3	4	3
Marine Obstructions within 1 Mile	no.	0	103	34	1	0	2	0
Roadways / Bridges / Tunnels Crossed	no.	0	7	27	28	15	15	6
Pipeline in Traffic Separation Areas / Shipping Fairways	miles	0	0	4.8	9.95	15.11	17.43	2.5

Additional Alternatives Analysis

Table 2: Pipeline Alternatives - Environmental Discriminators

Factor	units	Preferred Alternative	S1A-1	S1A-2	S1A-3	S1B-1	S2-1	S3-1
Fisheries Use Areas Traversed	miles	0	34.38	7.23	8.74	8.85	9.15	3.66
Significant Critical Fish and Wildlife Habitat	miles	0	0	3.12	5.37	4.16	4.16	0.19
Submerged Aquatic Vegetation (inshore area)	miles	0	0	1.78	5.3	5.05	5.05	0.19
Tidal Wetland Crossings	no.	0	0	6	12	14	14	4
Contaminated Sediments	type	Not present based on site-specific data	Heavy Metals & PCBs	unknown	unknown	unknown	unknown	unknown
Wrecks within 1 Mile	no.	9	153	43	3	0	3	0
Federal and Local Park land Impacts	miles	0	0	0.06 (Long Beach Park)	0.52 (Jones Beach, Wantagh, Milpond Parks)	0.15 (Gilgo, Captree Parks	0.15 (Gilgo, Captree Parks)	1.47 (Fire Island National Seashore)

5.0 Regasification Technology Constraints

In addition to alternative pipeline routing locations in the Atlantic, additional discussion about alternative offshore LNG terminal concepts, such as SRV, occurred. The NYSDOS inquired whether SRVs could replace the Floating Storage Regasification Unit ("FSRU") or be used in conjunction with the FSRU. The SRV alternative had been evaluated by Broadwater but was not considered to be a viable alternative to an FSRU, based upon reliability and operability issues discussed in Section 10.5.2 of Resource Report 10 (Alternatives). Table 10-8 of that Resource Report provides a detailed comparison of the offshore LNG terminal concepts.

The SRV alternative utilizes specialized LNG vessels that contain onboard regasification equipment. The SRV would enter the unloading area and instead of docking with a terminal, it would regassify its LNG cargo and transfer the gas directly into a subsea natural gas pipeline system. Unlike standard LNG carriers, which typically offload LNG in 18 hours or less, SRVs offload natural gas (i.e., regasified LNG) and inject it into a subsea natural gas pipeline at standard pipeline flow rates and pressures, as the offloading capacity is defined by the rate at which the LNG can be vaporized. As a result, this process can take six days or more to unload a full cargo of natural gas, and continuous reliable off-loading operations are essential to minimize fluctuations in the amount of natural gas entering the pipeline system.

To achieve the Project objectives, including capacity to deliver 1 bcf of gas per day, three offloading buoys would need to be constructed under the SRV alternative. Each unloading buoy would require as many as eight mooring lines to anchor points on the seabed, interconnecting pipelines to a central manifold, and a large diameter pipeline to transport the gas to the regional distribution network. For safe operability, the buoys should be located approximately two miles apart. The necessity of three buoys to meet Broadwater project needs would result in restricted access to a significantly greater bottom surface area of approximately 22,000,000 m^2, than necessitated by an FSRU of approximately 548,000 m^2 which includes the full turning radius of the FSRU at the mooring tower. These and other comparative details are presented in Table 10-8 of Resource Report 10.

Additionally, since SRV technology does not provide on-site storage capabilities, any disruption of the shipping supply chain would result in an inability to deliver a reliable supply of natural gas to the Region. Thus, based on continued consideration of the operational and connecting pipeline impacts, SRV technology continues to not be a reasonable or viable alternative to an FSRU; altering the location from Long Island Sound to an Atlantic location does not affect the conclusion that an SRV alternative will not achieve the Project objectives.

6.0 Atlantic Metocean Conditions

As discussed in Section 10.6 of Resource Report 10, Broadwater examined Atlantic metocean conditions (as part of an assessment of general marine operability) during its site and concept selection work. Further to this, Broadwater completed a simulation evaluation of the marine operations for the Project. This evaluation is documented in Section 11.4.2.3 (LNG Carrier Berthing Considerations) in Resource Report 11 and resulted in an assessment of operational limits for LNG carrier operations.

These limits were assessed as being the following combination of wind, wave and current conditions:

Table 3 Summary of Operational Limits

Operational Limit	Significant Wave Height		Wind Velocity		Current Velocity	
	(m)	(ft)	(knots)	(mph)	(knots)	(ft/sec)
Approach Limits	2	6.6	33	38	0.9	1.5
Side-by-Side Mooring Limits	3	9.8	39	45	0.9	1.5
Departure Limits	2	6.6	33	38	0.9	1.5

As part of the site and concept selection exercise, Broadwater reviewed historical data for NOAA buoys #44025 and #44017 on the Atlantic side of Long Island as well as the Hydrobase database of ship observations. A review of this data showed that wave heights exceed 2 meters, the maximum limit for approach and departure operations, during a significant proportion of the time, particularly during the winter months. The fact that the least reliable operation occurs during the winter months, when delivery reliability is most important, is a significant concern in terms of meeting the Project objective of year-round reliable deliveries.

As an illustration, refer to Figure 2 below, which contains summary information with respect to significant wave heights for NOAA buoy #44025, located in the general area of terminal sites S1A, S1B, S2 and S3 (shown on Figure 1).[3] Wave data summarized in Figure 3 covers approximately a 10 year period from April 1991 to December 2001. Of the three points plotted for each month, the highest point represents the largest value observed in the month, the lower point represents the smallest value observed and the middle point represents the mean value. The red bars for each month represent +/- 1 standard deviation from the mean. As can be seen from the figure, wave heights greater than 2 meters can occur for a significant proportion of the time during the months of December through March, in some instances as much as 20% of the time. By

[3] This information can be obtained from NOAA's National Data Buoy Center (http://www.ndbc.noaa.gov/).

comparison, marine operability in the relatively benign conditions of Long Island Sound is estimated to be greater than 98% on a year-round basis.

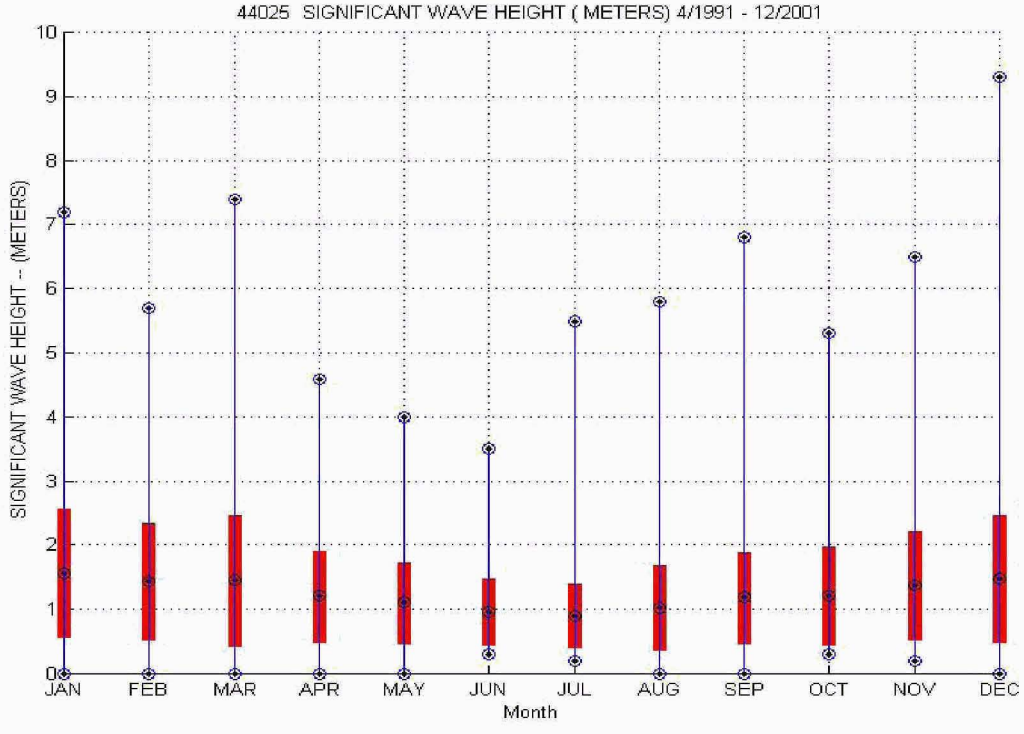
Inspection of Figure 2 also raises another significant concern from a design perspective, which is the extreme wave height condition. In December, 1992 a wave event of 9.3 meters (30.5 feet) was recorded at Station #44025. Normal industry design practice in the Gulf of Mexico is to design for a 1 in 100 year storm event. As this event was observed over a recent 10 year period, one could conclude that a 1 in 100 year event would be significantly greater than 9.3 meters. By way of contrast, Broadwater has assessed a 1 in 100 year wave height at the proposed location in Long Island Sound as approximately 4.3 meters (14.1 feet).

The benign conditions of Long Island Sound allow for greater margin of safety in the design than would be the case in the Atlantic Ocean. The actual design of the yoke mooring system in Long Island Sound is for an extreme wave event of 7.0 meters (23.0 feet), which is significantly greater than a 1 in 100 year storm event. Further, the yoke mooring system is also designed to withstand weather conditions associated with a Category 5 hurricane in Long Island Sound.

In the open ocean of the Atlantic, it must be expected that hurricane conditions would be significantly greater than those in Long Island Sound; hence the design would need to consider wind and wave events of a much greater magnitude. Broadwater cannot conclude that a yoke mooring system, which would need to consider a much more stringent design criteria than for Long Island Sound and which would certainly require a structure designed to withstand wave events greater than 10 meters in height, could be designed to withstand such conditions or would otherwise be technically feasible.

In addition to difficulties of designing a yoke mooring system to withstand an extreme wave event, these events also entail a risk to the facility due to sloshing phenomena. LNG sloshing in partially filled tanks induces both fatigue and high loads upon the containment system, the hull structure and the pump tower in the tank. While sloshing is an issue to be addressed in any marine LNG storage facility, such as the Broadwater FSRU, the forces are significantly reduced in the benign conditions of Long Island Sound. Exposure to large wave events at a fixed location would have significant cost and reliability implications for the design and operability of a FSRU in an Atlantic location.

Figure 2 – Wave Data for NOAA Buoy #44025



7.0 Conclusions

After engaging with the NYSDOS on alternatives, Broadwater's conclusion previously presented and supported in Resource Report 10, that a FSRU located in Long Island Sound is the preferred option, has not changed.

(1) Metocean conditions for the south shore Atlantic Ocean sites would preclude reliable operation of an FSRU at these locations and otherwise would not meet Project objectives.

(2) Locating an SRV instead of an FSRU at these sites would permit a technological alternative that could be better able to cope with the more extreme metocean conditions, but would still require a much greater operational area and would not provide onsite storage, the latter which is critical to the Project objective of providing a reliable supply of 1 bcfd.

(3) The pipeline routes associated with the Atlantic alternatives locations analyzed to connect the offshore LNG facilities to the Iroquois Gas Transmission system are not

viable based on operability, reliability, engineering, and environmental constraints. The major constraints include:

- Significant impacts to onshore/shoreline resources in the coastal zone.
- Construction of multiple crossing types (e.g. wetlands, bridges, highways, cables, utilities), constrained workspaces, unknown underground obstructions, safety and disruption issues adjacent to roadway and railway corridors, and residential properties.
- Excessive pipeline lengths compared to the Project as proposed; in some cases, new onshore compressor stations would have to be constructed.
- The presence of numerous marine obstructions and wrecks compared to the Project pipeline route.
- A likely requirement for installation at deeper depths of cover in navigation channels, resulting in greater disturbance and increased sedimentation, and the need for sediment disposal and increased unit installation costs and duration.

Accordingly, the south shore Atlantic Ocean alternative locations and the SRV component of them are not viable alternatives, especially when compared to the preferred Project alternative.

April 27, 2007

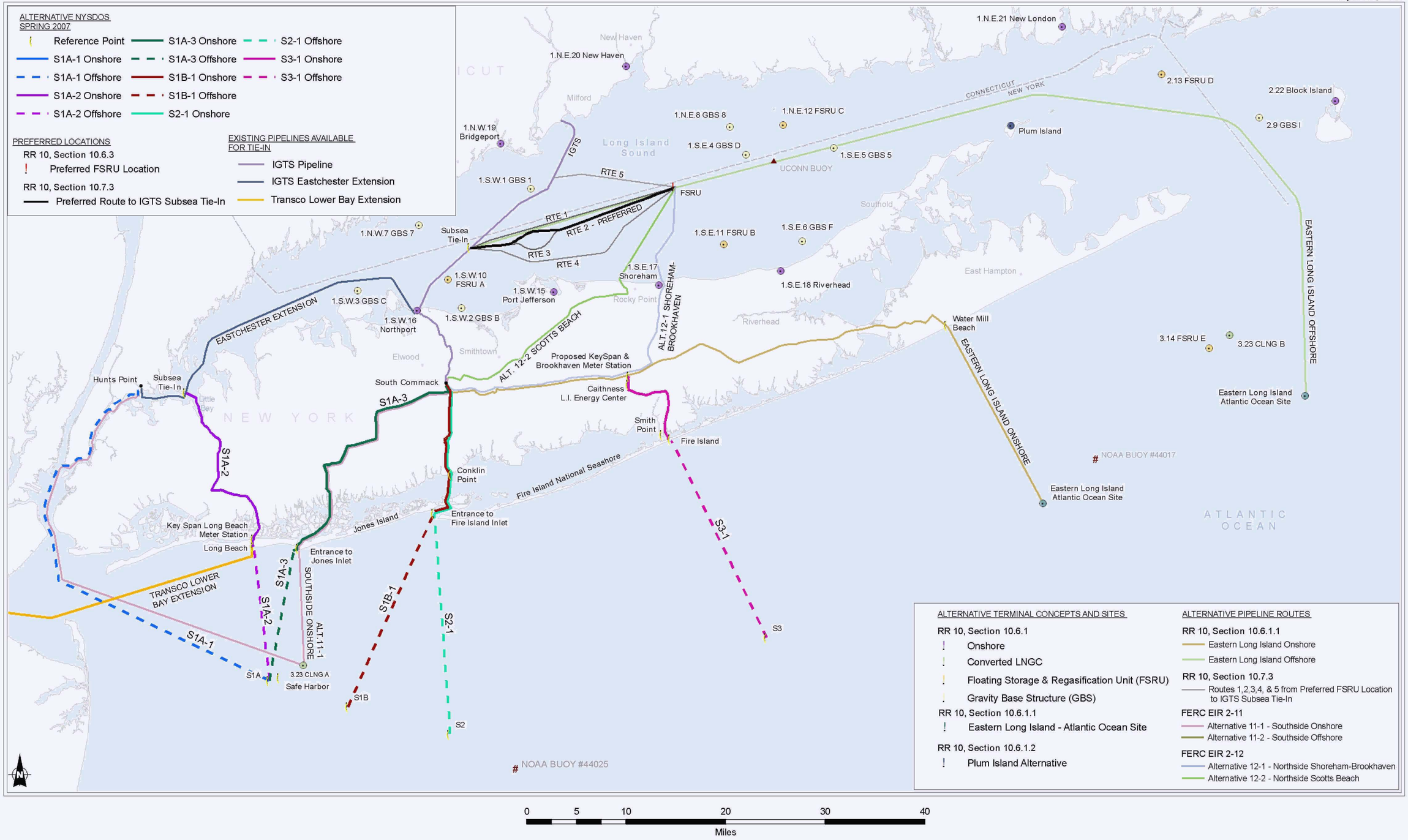


Figure 1 REV 2 Alternative Terminal Sites and Pipeline Routes Considered by Broadwater

Attachment 1

Constraint Maps of Atlantic Alternatives

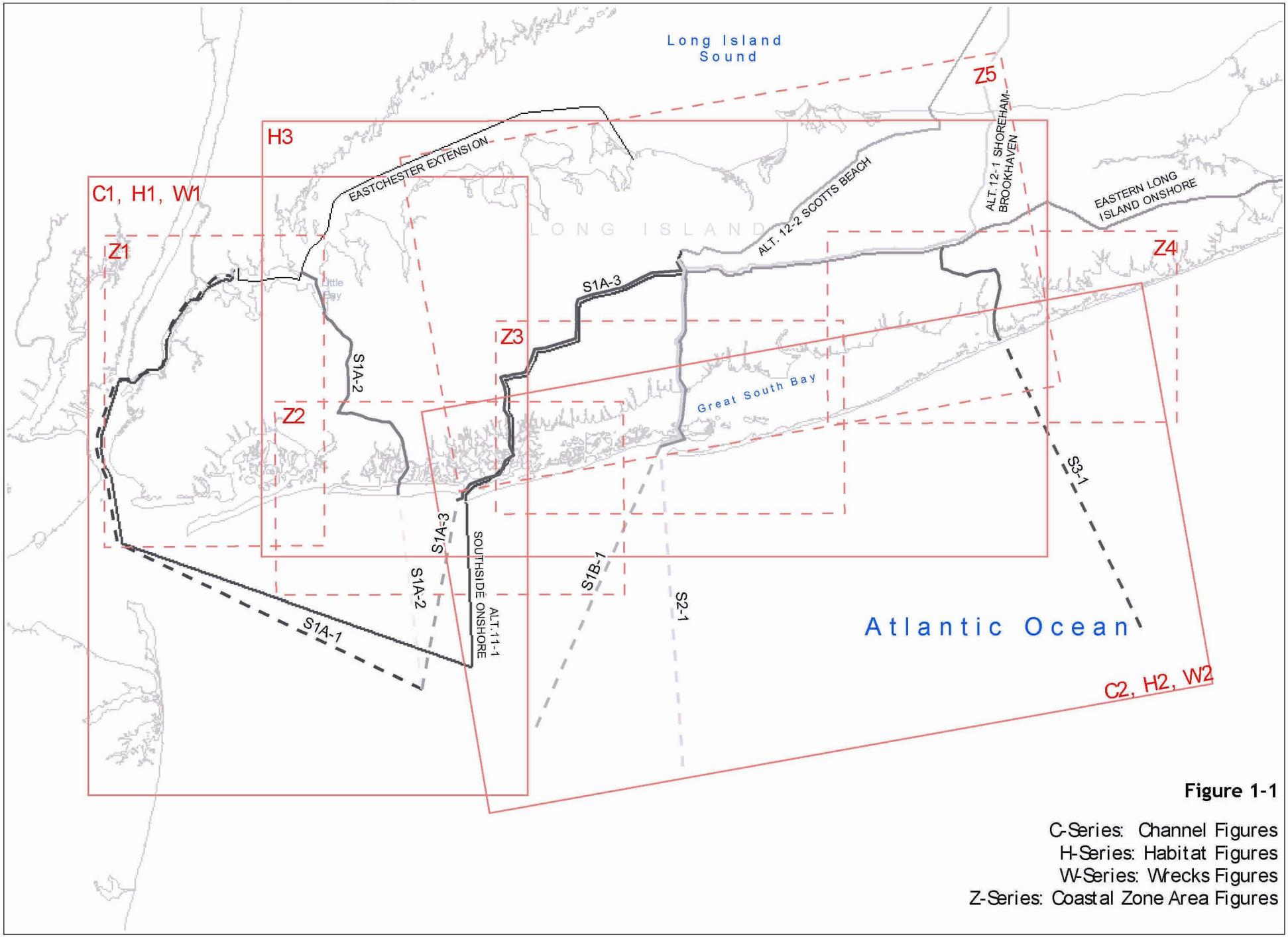
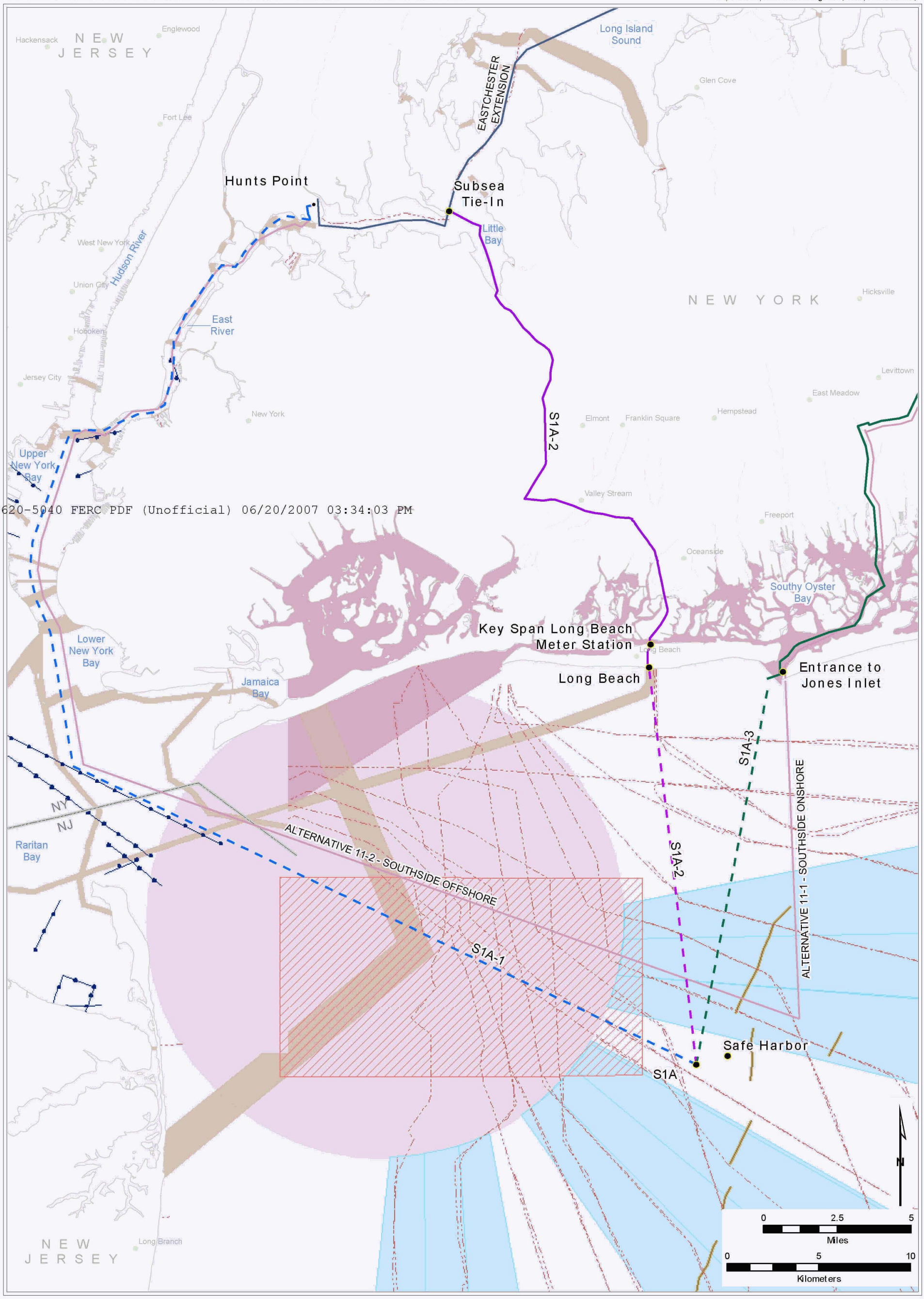


Figure 1-1

C-Series: Channel Figures
H-Series: Habitat Figures
W-Series: Wrecks Figures
Z-Series: Coastal Zone Area Figures

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007; NYSDOS 2006;



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastchester Extension
- Alternative 11-1 - Southside Onshore
- Alternative 11-2 - Southside Offshore
- Reference Point
- Utility Line
- Navigation Line Feature
- New York Bight Fault Zone
- Cable / Pipeline Area
- Precautionary Area
- Cautionary / Danger Area
- Fairway
- Inshore Traffic Zone
- Traffic Separation Zone

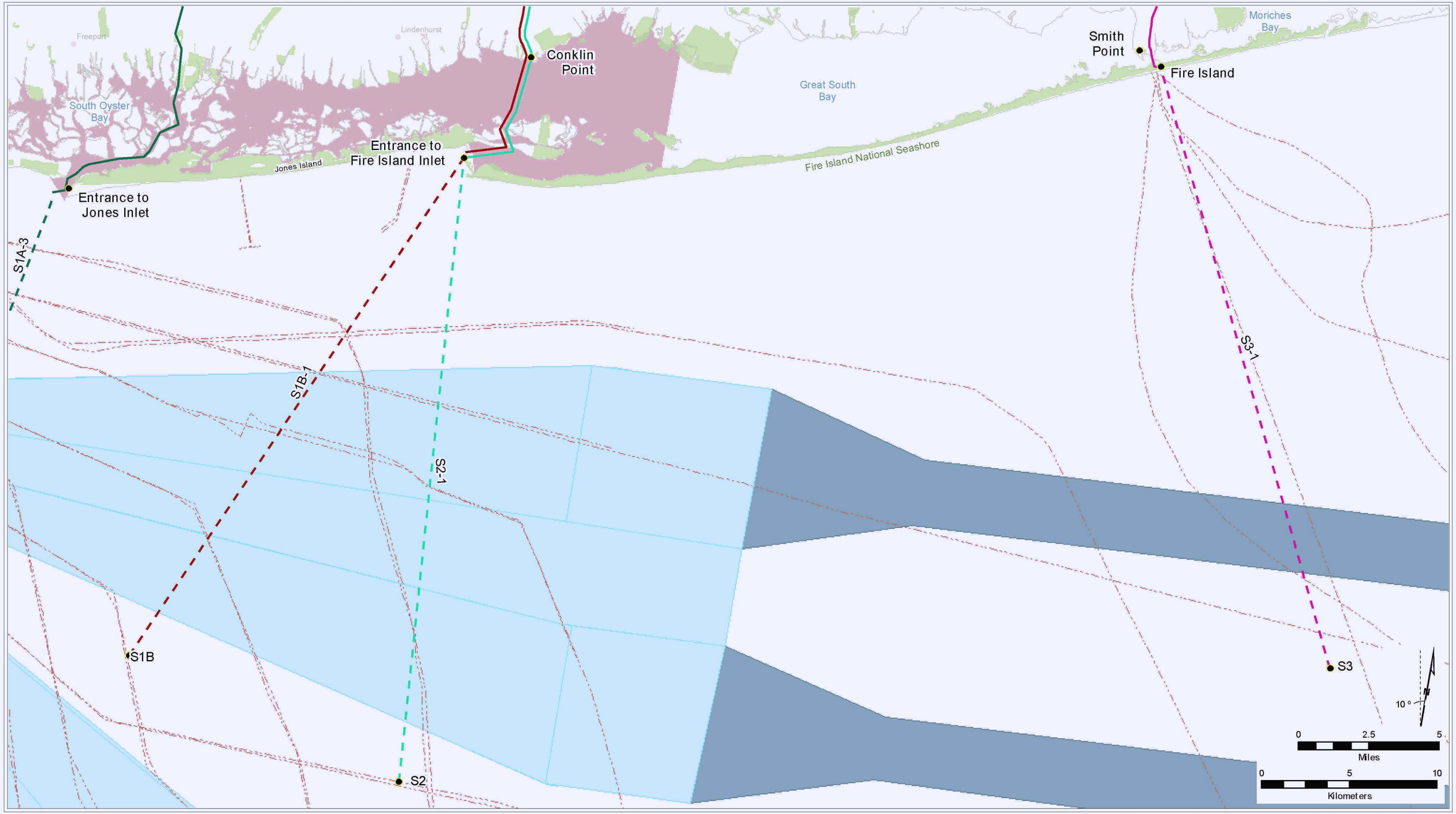
Figure 1-2

Navigation Channels, Anchorage, Cable and Shoal Areas

S1A-1, S1A-2 and S1A-3

BW018214

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/ 07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS
SPRING 2007

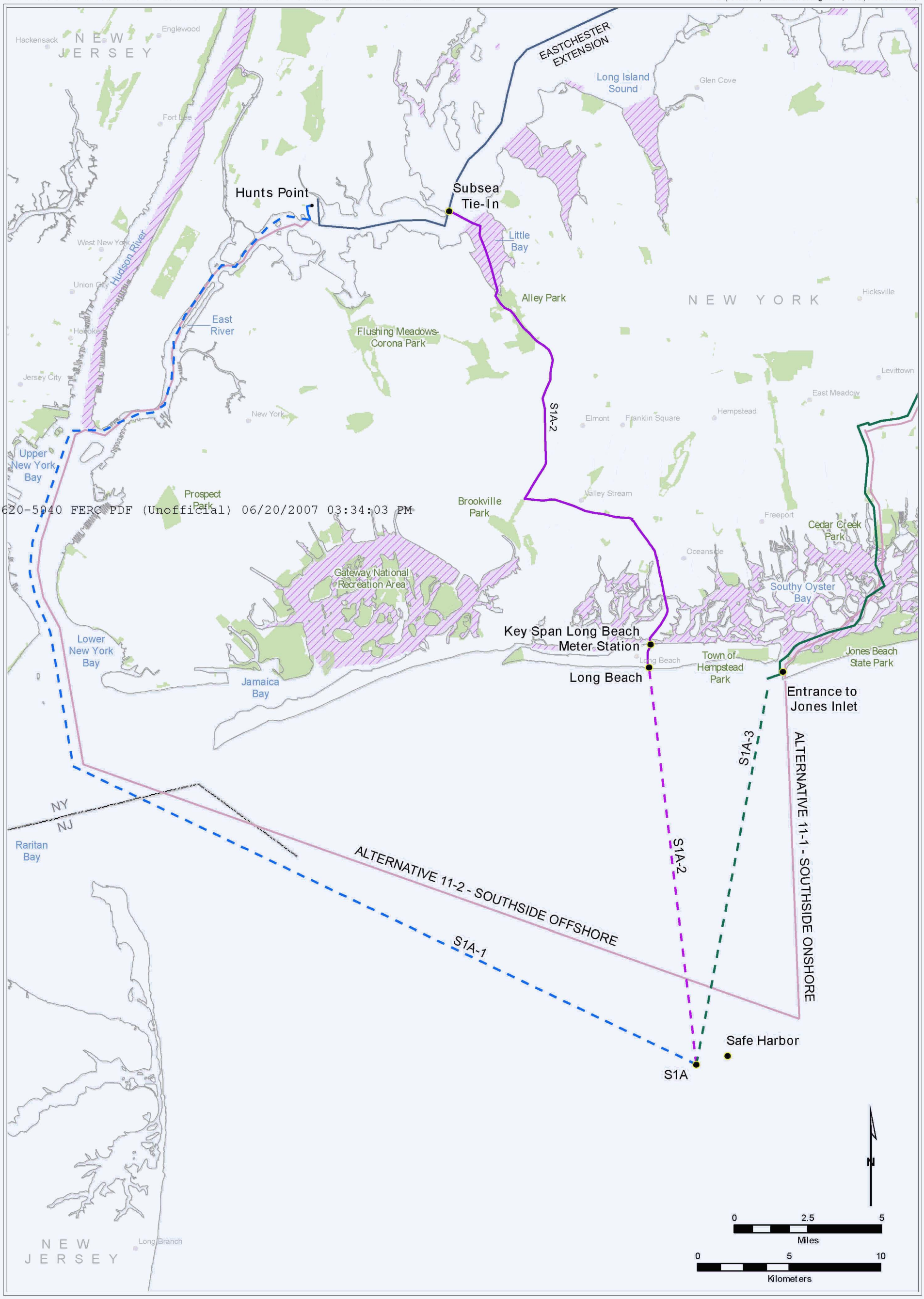
- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Reference Point
- Utility Line
- Navigation Line Feature
- Federal, State, and Local Parks
- Cable / Pipeline Area
- Fairway
- Inshore Traffic Zone
- Traffic Separation Zone

Figure 1-3

Navigation Channels, Anchorage, Cable and Shoal Areas

S1B-1, S2-1 and S3-1

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/ 07; NYSGIS Clearinghouse, 2007; NYSDOS 2006;



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastchester Extension
- Alternative 11-1 - Southside Onshore
- Alternative 11-2 - Southside Offshore
- Reference Point
- Federal, State, and Local Parks
- Significant Coastal Fish and Wildlife Habitat (NYSDOS)

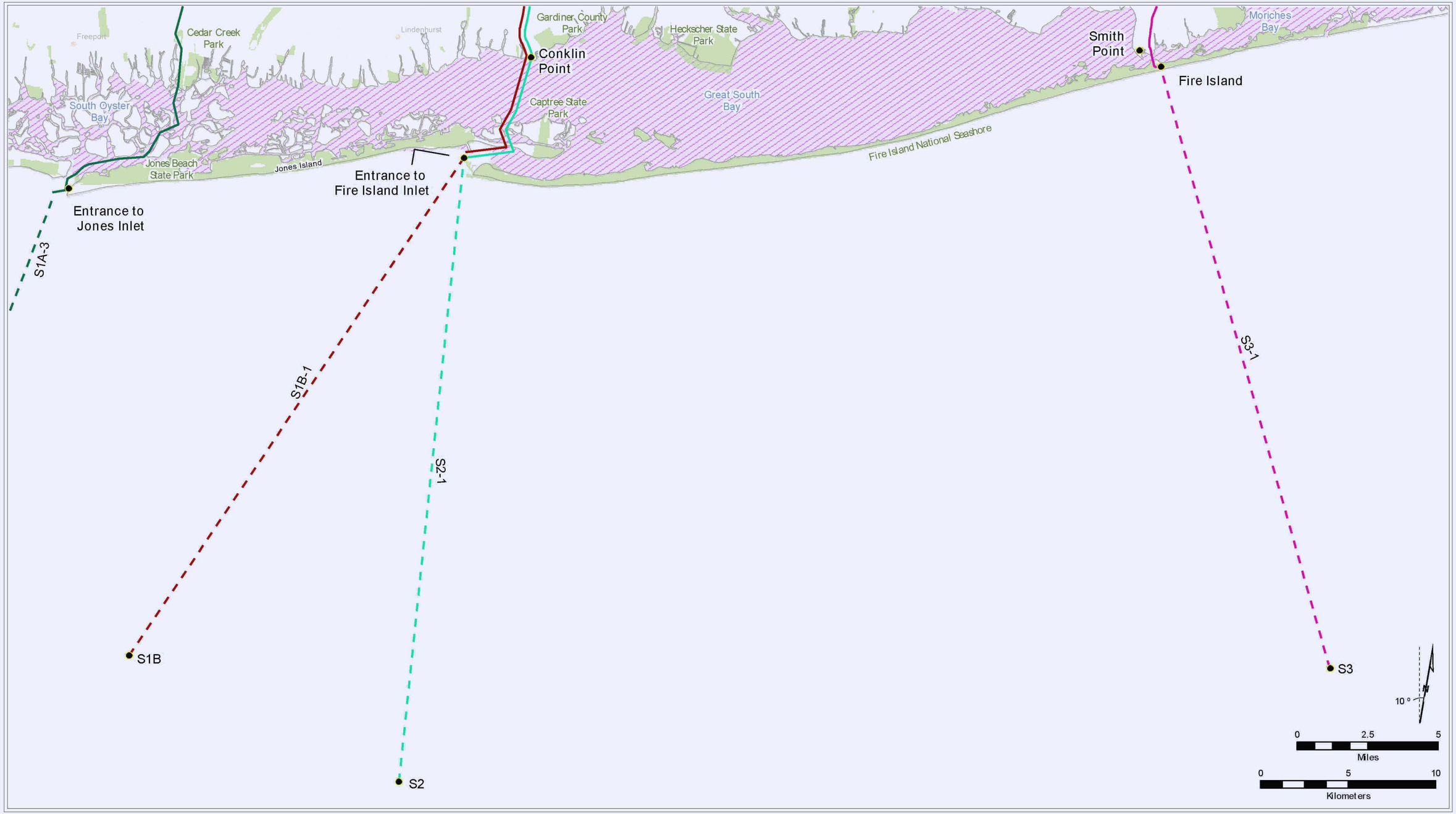
Figure 1-4

Parks and Significant Coastal Fish and Wildlife Habitat

S1A-1, S1A-2 and S1A-3

BW018216

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Reference Point
- Federal, State, and Local Parks
- Significant Coastal Fish and Wildlife Habitat (NYSDOS)

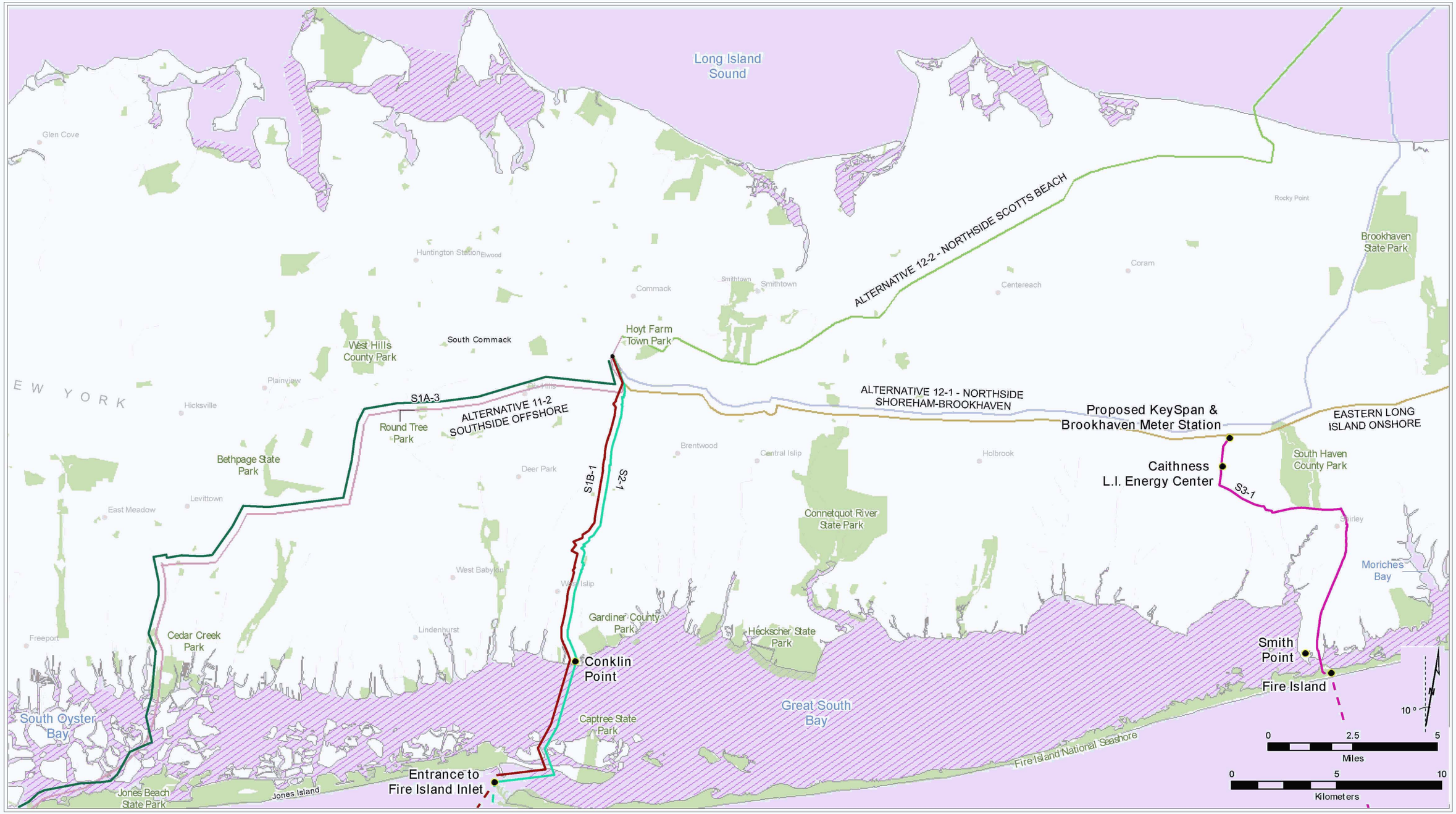
Figure 1-5

Parks and Significant Coastal Fish and Wildlife Habitat

S1B-1, S2-1 and S3-1

BW018217

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Alternative 12-1 - Northside Shoreham-Brookhaven
- Alternative 12-2 - Northside Scotts Beach
- Alternative 11-1 - Southside Onshore
- Eastern Long Island Onshore
- Reference Point
- Federal, State, and Local Parks
- Significant Coastal Fish and Wildlife Habitat (NYSDOS)

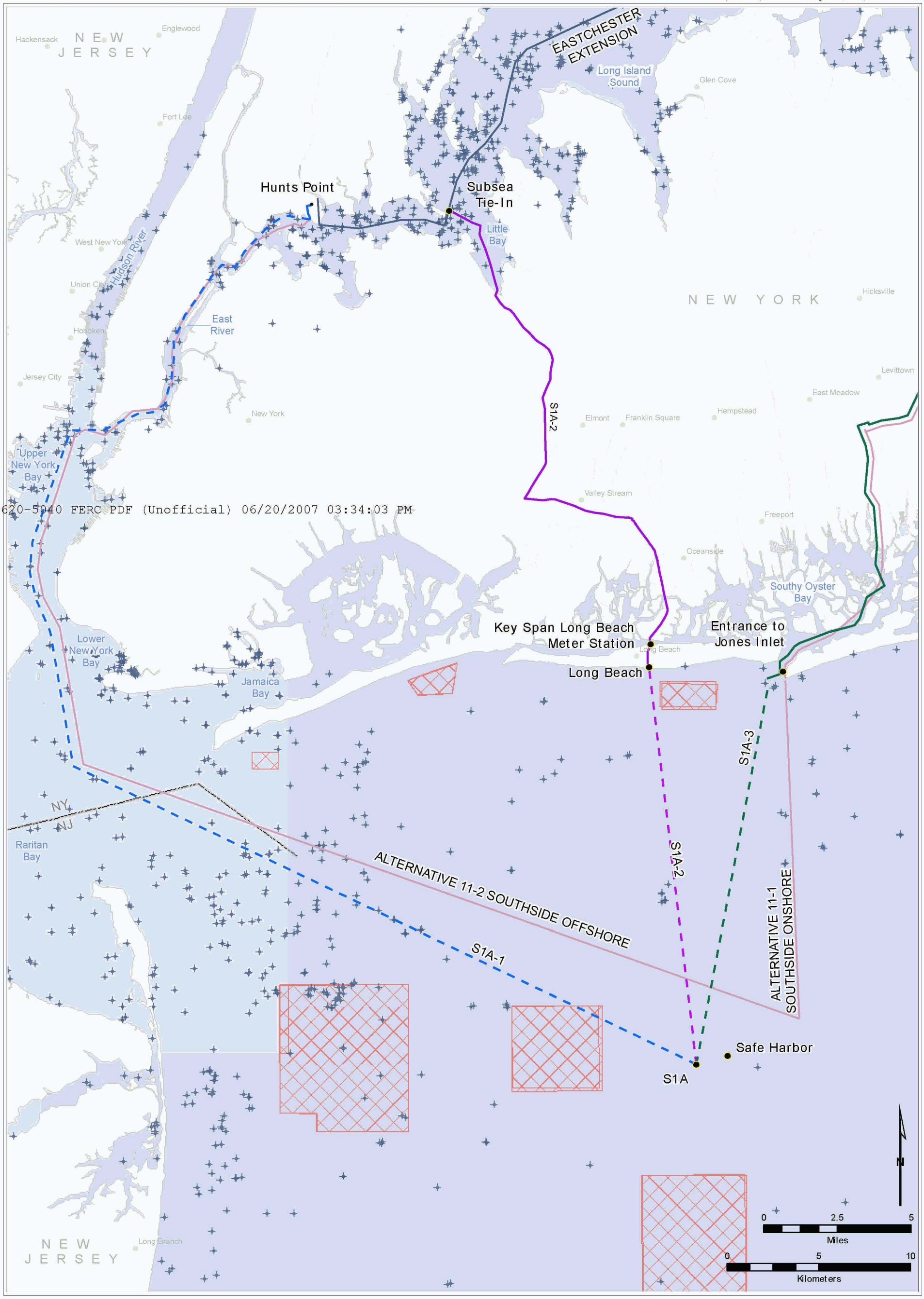
Figure 1-6

Parks and Significant Coastal Fish and Wildlife Habitat

S1B-1, S2-1 and S3-1 - Onshore

BW018218

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007; NYSDOS 2006;



ALTERNATIVE NYSDOS
SPRING 2007

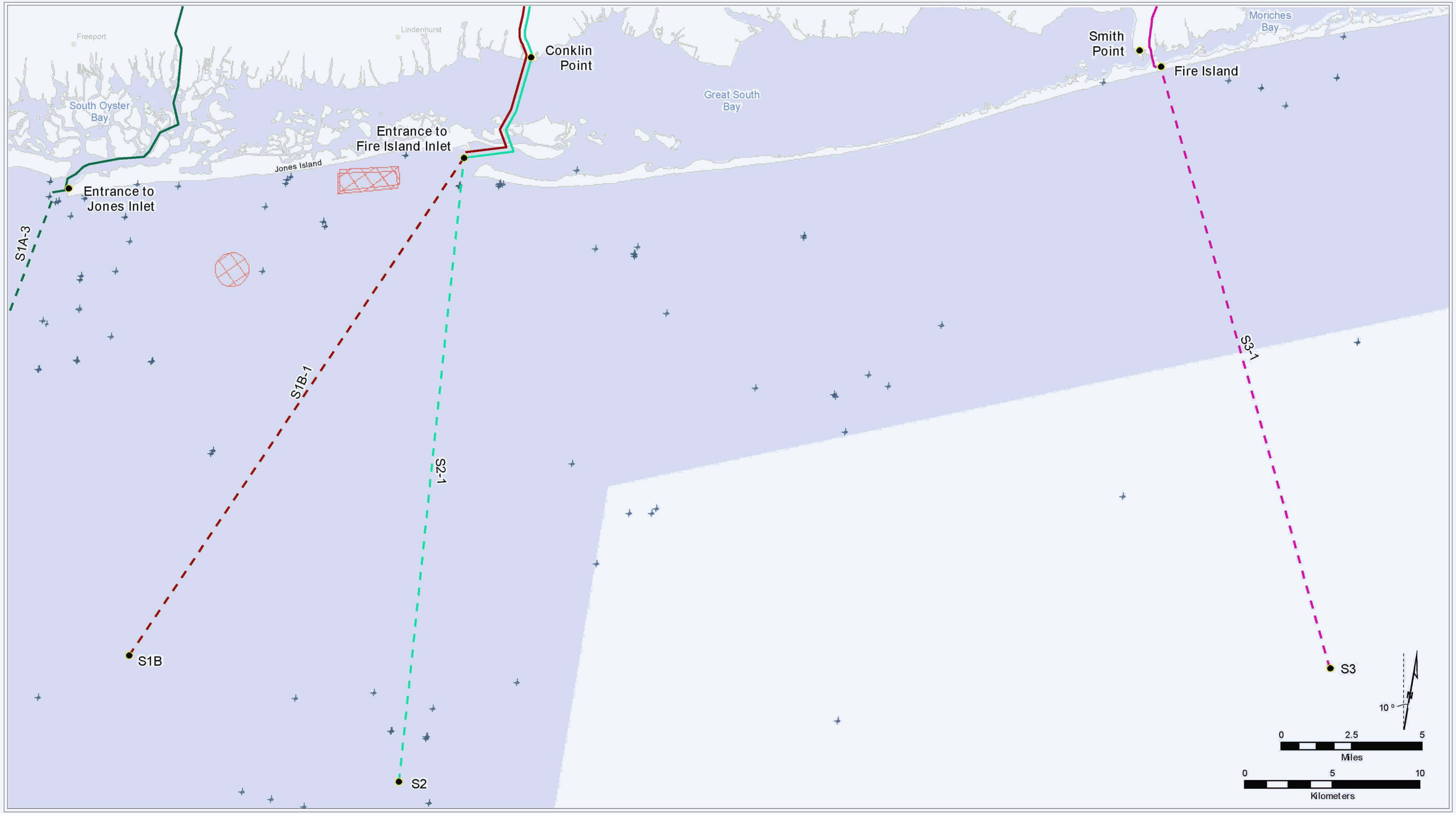
- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastchester Extension
- Alternative 11-1 - Southside Onshore
- Alternative 11-2 - Southside Offshore
- Reference Point
- Wreck Location
- Dumping Ground Area
- NY Marine Inspection Zone

Figure 1-7

Ship Wrecks, Dumping Grounds and Regulated Zones

S1A-1, S1A-2 and S1A-3

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Reference Point
- Wreck Location
- Dumping Ground Area
- NY Marine Inspection Zone

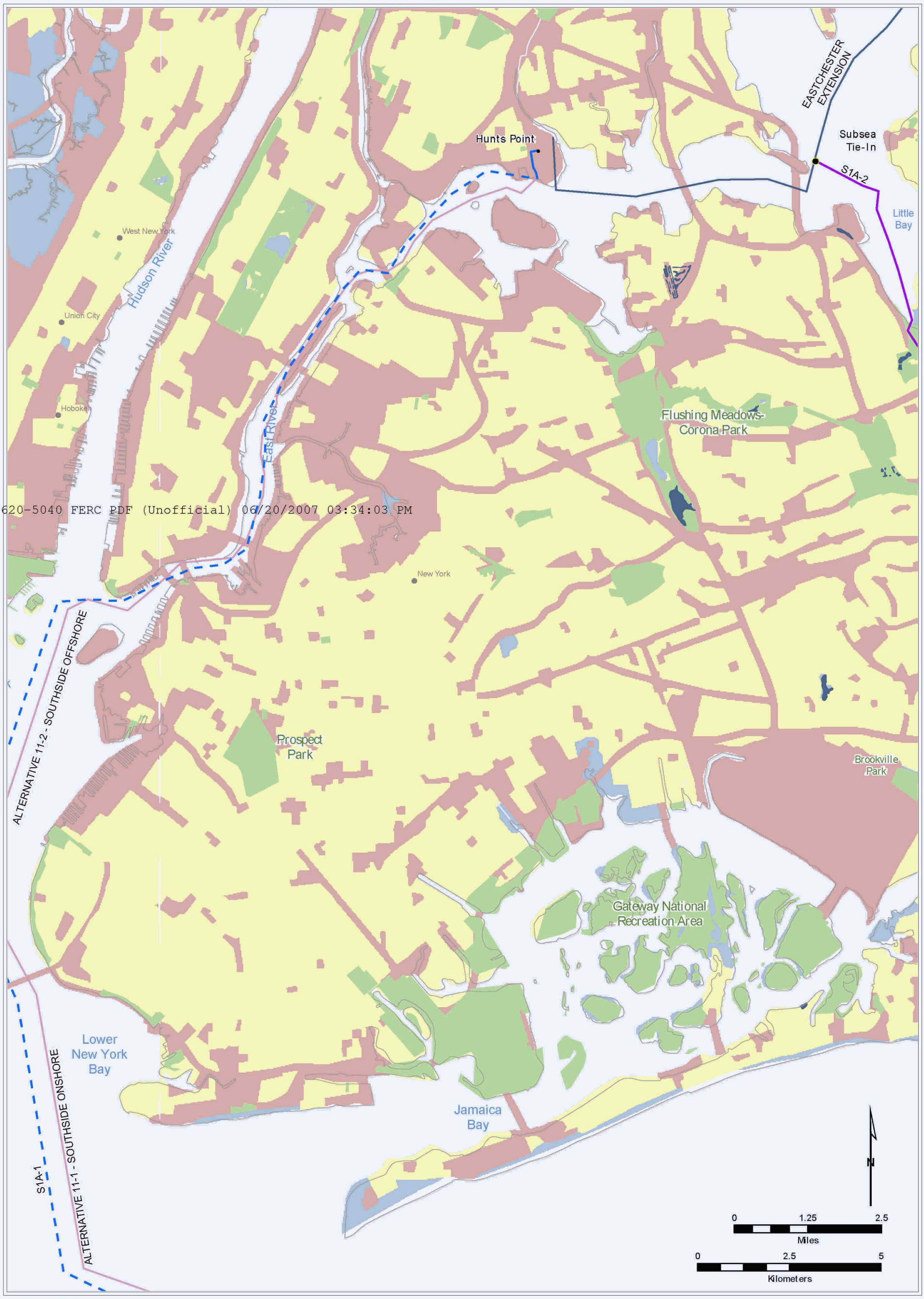
Figure 1-8

Ship Wrecks, Dumping Grounds and Regulated Zones

S1B-1, S2-1 and S3-1

BW018220

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYS GIS Clearinghouse, 2007; NYSDOS 2006; NYSDEC, 2007; USFWS, 2007;



ALTERNATIVE NYSDOS
SPRING 2007

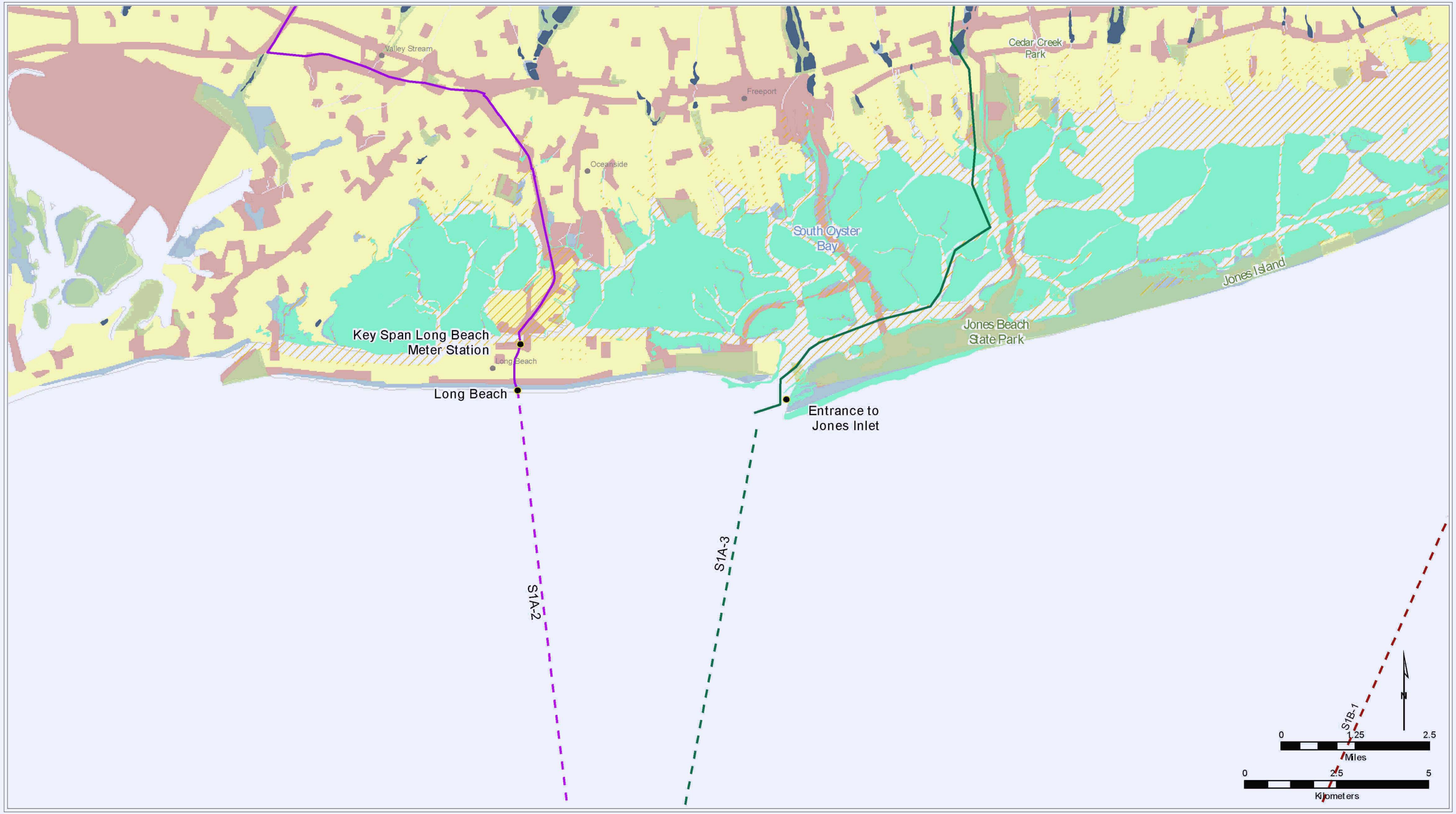
- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastchester Extension
- Alternative 11-1 - Southside Onshore
- Alternative 11-2 - Southside Offshore
- Reference Point
- Federal, State, and Local Parks
- Tidal Wetland
- Freshwater Wetland
- Submerged Aquatic Vegetation
- Water Bodies
- Commercial and Industrial
- Agricultural and Forested
- Residential

Figure 1-9

Onshore Land Use and Coastal Zone Areas

S1A-1

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Reference Point
- Federal, State, and Local Parks
- Tidal Wetland
- Submerged Aquatic Vegetation
- Freshwater Wetland
- Water Bodies
- Commercial and Industrial
- Agricultural and Forested
- Residential

Figure 1-10

Onshore Land Use
Coastal Zone Areas

S1A-2 and S1A-3

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007

ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Reference Point
- Federal, State, and Local Parks
- Tidal Wetland
- Submerged Aquatic Vegetation
- Freshwater Wetland
- Water Bodies
- Commercial and Industrial
- Agricultural and Forested
- Residential

Figure 1-11

Onshore Land Use
Coastal Zone Areas

S1B-1 and S2-1

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007

ALTERNATIVE NYSDOS
SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastern Long Island Onshore
- Alternative 12-1 - Northside Shoreham-Brookhaven
- Reference Point
- Federal, State, and Local Parks
- Tidal Wetland
- Submerged Aquatic Vegetation
- Freshwater Wetland
- Water Bodies
- Commercial and Industrial
- Agricultural and Forested
- Residential

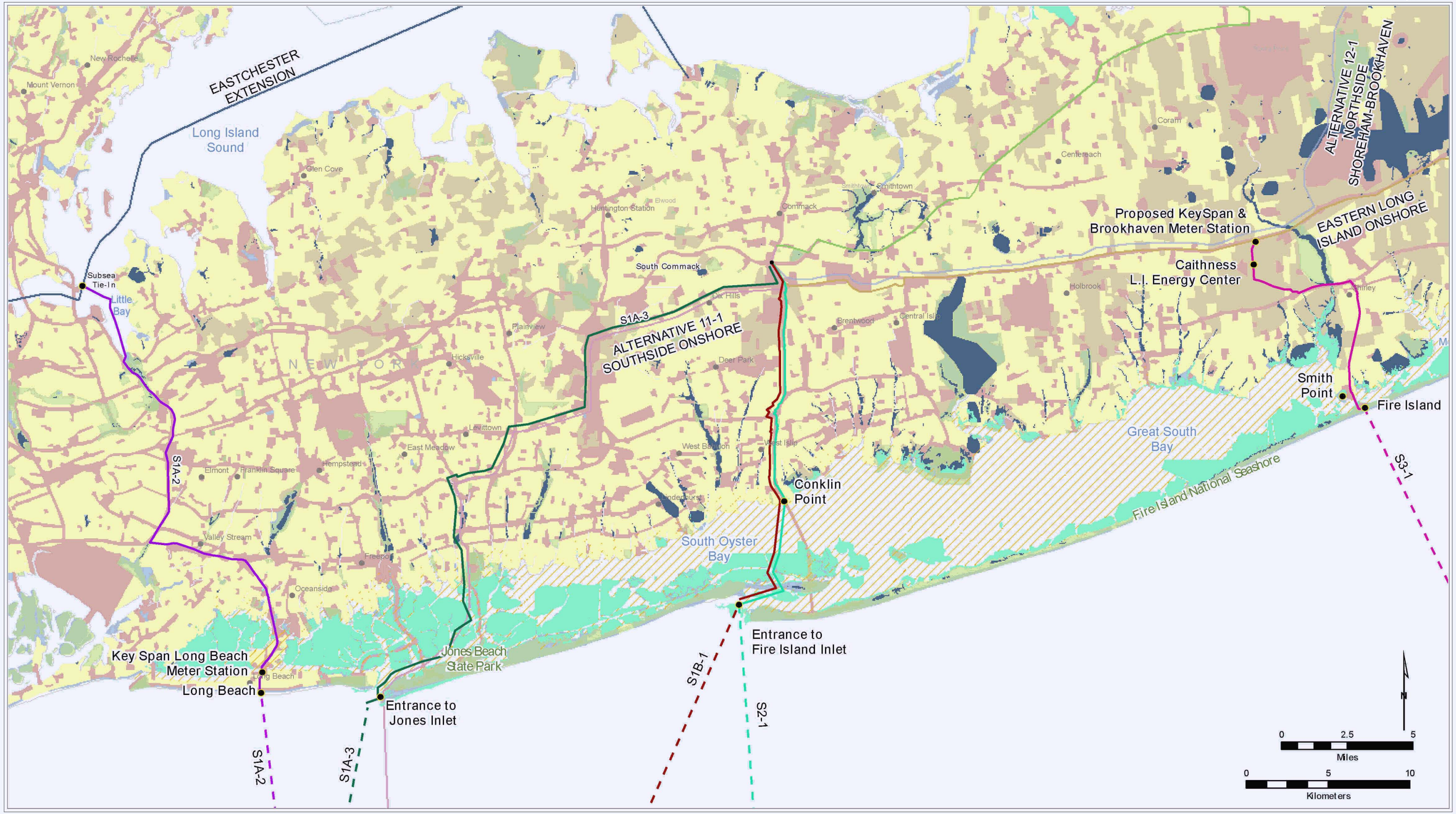
Figure 1-12

Onshore Land Use
Coastal Zone Areas

S3-1

BW018224

Source: Ecology & Environment, Inc. 2007; TransCanada, 2007; ESRI, 2006/07; NYSGIS Clearinghouse, 2007



ALTERNATIVE NYSDOS SPRING 2007

- S1A-1 Onshore
- S1A-1 Offshore
- S1A-2 Onshore
- S1A-2 Offshore
- S1A-3 Onshore
- S1A-3 Offshore
- S1B-1 Onshore
- S1B-1 Offshore
- S2-1 Onshore
- S2-1 Offshore
- S3-1 Onshore
- S3-1 Offshore
- Eastchester Extension
- Alternative 11-1 - Southside Onshore
- Alternative 12-1 - Northside Shoreham-Brookhaven
- Alternative 12-2 - Northside Scotts Beach
- Eastern Long Island Onshore

- Reference Point
- Federal, State, and Local Parks
- Tidal Wetland
- Submerged Aquatic Vegetation
- Freshwater Wetland
- Water Bodies
- Commercial and Industrial
- Agricultural and Forested
- Residential

Figure 1-13

Onshore Land Use and Coastal Zone Areas

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Washington, D.C. this 20th day of June 2007.

/s/ Brett A. Snyder
Brett A. Snyder

Submission Contents