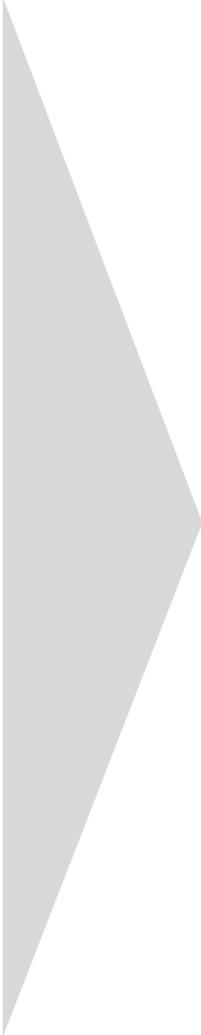




TIER 1 FINAL ENVIRONMENTAL IMPACT STATEMENT
VOLUME 1 (PREFERRED ALTERNATIVE)



7.16 Section 4(f) and Section 6(f) Resources

7.16 SECTION 4(f) AND SECTION 6(f) RESOURCES

7.16.1 Section 4(f) Resources

7.16.1.1 Introduction

This chapter provides a preliminary assessment of potential resources protected under Section 4(f) of the Department of Transportation Act of 1966 (Section 4(f)) that could be affected by the Preferred Alternative.

Section 4(f) was enacted as a means of protecting the following resources from conversion to transportation uses: significant publicly owned parks, recreation areas, and wildlife/waterfowl refuges, as well as publicly- or privately owned historic sites of local, state, or national significance that must be on or eligible for listing on the National Register of Historic Places (NRHP).¹ Traditional cultural properties may also be protected under Section 4(f) if they are on or eligible for listing on the NRHP. The Federal Railroad Administration (FRA) identified counties with tribal resources using the National Park Service (NPS) 2010 database, the Housing and Urban Development Tribal Directory Assessment Tool database, and based on correspondence with identified tribes (see Chapter 7.9, Cultural Resources and Historic Properties, and Appendix GG).

This Tier 1 Final Environmental Impact Statement (Tier 1 Final EIS) identifies Section 4(f) resources that could be used under Section 4(f) based on an analysis of the Representative Route of the Preferred Alternative and representative service information. The identification of a Section 4(f) resource in this Tier 1 assessment does not necessarily mean that resource will be used. The FRA's intent during Tier 1 is to identify potential uses of known Section 4(f) resources and to ensure that opportunities to avoid and minimize harm to Section 4(f) resources at subsequent stages in the development process have not been precluded by decisions made at the Tier 1 stage.² As described in Section 7.16.9, the information contained in this analysis will inform Tier 2 evaluations, including in the evaluation of possible avoidance alternatives.

Section 4(f) Resources

- Section 4(f) of the U.S. DOT Act protects significant publicly owned parks, recreation areas, and wildlife/waterfowl refuges, and publicly- or privately-owned historic properties that must be on or eligible for listing on the National Register of Historic Places. Impacts on these resources are discouraged and require additional analysis to determine the type of impact and whether or not identified impacts can be avoided or minimized.
 - Use of these resources requires the evaluation of avoidance alternatives and a determination that there is no prudent and feasible alternative to avoid or minimize the impact or a finding that the impacts are de minimus.
 - Type of effects can include conversion of parkland resources to non-recreational uses, visual changes, noise and vibration, and access; and loss of or damage to cultural resources and historic properties.
 - Section 4(f) determinations will be made during Tier 2 studies.
-

¹ The definition of protected Section 4(f) resources is consistent with the Federal Highway Administration (FHWA) regulations, 23 CFR 774.7(e)(1).

² In the absence of relevant FRA regulations regarding Section 4(f), the FRA has chosen to use the FHWA regulations, 23 CFR 774.1 *et seq.*, to inform the analysis for NEC FUTURE. The approach explained above is consistent with FHWA regulations, 23 CFR 774.7(e)(1).

The FRA will not make a Section 4(f) determination as part of this Tier 1 EIS process. Such determination(s) will be made as part of the Tier 2 environmental compliance process, when more-detailed and specific information is available regarding the project location and design (i.e., location of alignments, duration and extent of construction, specific construction methods, and staging areas) and more-detailed information regarding the location, boundaries, and significance of Section 4(f) resources is known.

Under Section 4(f), a use occurs under the following conditions:

- ▶ When a U.S. Department of Transportation (U.S. DOT) project permanently incorporates land from a Section 4(f) property into transportation use (“permanent use”). Permanent incorporation includes a permanent easement required for the purpose of project construction or that grants a future right-of-access onto a Section 4(f) property, such as for the purpose of routine maintenance;
- ▶ When a project temporarily occupies land within a Section 4(f) property during construction activities that are adverse in terms of the statute’s preservation purpose (“temporary use”). Examples of temporary occupancy of Section 4(f) land include right-of-entry, a temporary easement, or other short-term arrangement involving a Section 4(f) property; or
- ▶ When a project introduces proximity effects, such as noise or visual effects, which substantially impair the protected activities, features, or attributes of the Section 4(f) property that qualify the property for protection under Section 4(f) (“constructive use”). Substantial impairment occurs when the protected activities, features, or attributes of the Section 4(f) property are substantially diminished.

7.16.1.2 Resource Overview

Implementation of the Preferred Alternative would result in a potential use of Section 4(f) resources where modifications to existing rail infrastructure or construction of new rail infrastructure cross Section 4(f) resources. For purposes of this Tier 1 Final EIS, a potential use of a Section 4(f) property could result from the Representative Route of the Preferred Alternative crossing the resource.³ Implementation of the Preferred Alternative could also result in proximity effects to Section 4(f) resources, such as noise and vibration effects.

This Section 4(f) analysis focuses on potential uses that could result from environmental effects identified in Chapter 7.4, Parklands and Wild and Scenic Rivers, and Chapter 7.9, Cultural Resources and Historic Properties.

Key findings for the analysis of potential uses of Section 4(f) resources by the Preferred Alternative are listed below. Tier 2 subsequent analysis will further examine the potential uses as well as the appropriate measures to avoid or minimize harm and make the appropriate Section 4(f) determinations.

³ A crossing of a parkland resource indicates an area where, if the Preferred Alternative is implemented, land from a protected resource could be converted to a transportation use.

Section 4(f) Resources: Parks, Recreational Areas, and Wildlife and Waterfowl Refuges

- ▶ The Environmental Consequences analysis highlights the parks that would have the highest acreage of parkland that would have a potential use as well as the parks that would have the highest percentage of that park's land potentially converted to a transportation use by the Preferred Alternative. (Refer to Table 7.4-3 within Chapter 7.4, Parklands and Wild and Scenic Rivers, for the list of parks that would have a potential use under the Preferred Alternative.)
- ▶ The Preferred Alternative crosses 122 parks and approximately 675 acres of parklands in comparison to 111 parks and approximately 475 acres crossed by the Existing NEC + Hartford/Springfield Line. Of the 675 acres, approximately 210 acres fall outside of the footprint of the Existing NEC + Hartford/Springfield Line. The Preferred Alternative would therefore result in a potential use of 210 acres of parklands.
- ▶ The highest number of acres of parkland within the Representative Route of the Preferred Alternative occurs primarily within the Existing NEC, followed by locations where the Preferred Alternative diverges from the Existing NEC and creates new segments or extends off-corridor, notably in Rhode Island and Maryland.
- ▶ The following parks would have the highest acreage potentially converted to a transportation use by the Preferred Alternative:
 - The Rhode Island Greenway in Washington County, RI (over 50 acres)
 - Gunpowder Falls State Park in Baltimore County, MD (approximately 40 acres)
 - The following three parks would have the highest percentage of parkland potentially converted to a transportation use by the Preferred Alternative:
 - David Craig Park in Harford County, MD (100 percent)
 - Saugatuck River Water Access in Fairfield County, CT (100 percent)
 - Mianus River Water Access in Fairfield County, CT (67 percent)
- ▶ West Park and East Park (part of the Fairmount Park system) in Philadelphia, PA, would also have a potential use as the Preferred Alternative would follow an embankment and major bridge in this area. The FRA discussed the routing of the Preferred Alternative in this area with the City of Philadelphia in June 2016. Based on this outreach, the FRA understands that the potential uses that could occur to these resources depend on the construction type. The Tier 2 process will further address how to achieve the service under the Preferred Alternative while minimizing or avoiding potential use of this resource. Bartram's Garden in Philadelphia, PA, would also have a potential use under the Preferred Alternative.
- ▶ The Preferred Alternative crosses the following National Historic and Scenic Trails in a new location when compared to the Existing NEC:
 - Star-Spangled Banner National Historic Trail (Baltimore City)
 - Washington-Rochambeau National Historic Trail (Cecil County and Philadelphia County)
 - Captain John Smith Chesapeake National Historic Trail (Cecil County)

- ▶ The Preferred Alternative crosses a wild and scenic river: the White Clay Creek in New Castle, DE.⁴ The Preferred Alternative expands the Existing NEC crossing and creates a new bridge crossing adjacent to and south of the Existing NEC, which also crosses the river.

Section 4(f) Resources – Historic Resources

- ▶ There are 5 National Historic Landmarks (NHL), 108 NRHP-listed properties, and 34 identified National Register-eligible (NRE) properties in the Representative Route for the Preferred Alternative. These resources would have a potential use under the Preferred Alternative.
- ▶ NHLs are of particular concern because they are designated by the NPS as nationally significant properties. As a result, they require additional consultation under Section 106 of the National Historic Preservation Act (NHPA) to resolve adverse effects. The following NHLs are located in the Representative Route:
 - Andalusia, The Woodlands, the John Bartram House, and the municipally significant Fairmount Water Works (Philadelphia, PA)
 - College Hill Historic District (Providence, RI)
- ▶ The list of NRHP properties includes individually designated properties, like the Green Mount Cemetery in Baltimore and the Rhode Island Statehouse, as well as larger historic districts such as Havre de Grace, MD and Old Lyme, CT.
- ▶ Multiple NHL, NRHP-listed, and NRE stations would be modified, such as Princeton Junction Station, NJ.

7.16.1.3 Affected Environment

Table 7.16-1 presents a summary of the parks, recreational areas, and wildlife and waterfowl refuges located within the Affected Environments of the Existing NEC + Hartford/Springfield Line and Preferred Alternative, including the number of federal, state, and/or county parks, total park acreage, and percentage of the total park acreage within the Affected Environment. Table 7.16-2 presents a summary of the historic resources (i.e., NHLs, NRE, and NRHP sites) in the Affected Environments. Chapter 7.4, Parklands and Wild and Scenic Rivers, includes a detailed description of the parks, recreational areas, and wildlife and waterfowl refuges. Chapter 7.9, Cultural Resources and Historic Properties, includes a description of the cultural resources. Appendix EE.16, provides all data for each state and county. Appendix AA, Mapping Atlas of the Preferred Alternative, depicts resources by county.

⁴ For the purpose of this analysis, the crossing of a river designated as a wild and scenic river is considered a potential use. White Clay Creek qualifies for protection under Section 4(f) since the management plan for White Clay Creek addresses recreation and other Section 4(f) uses.

Table 7.16-1: Affected Environment: Section 4(f) Resources – Parks, Recreational Areas, and Wildlife and Waterfowl Refuges

Geography	Total Acres of Resources	Existing NEC + Hartford/Springfield Line			Preferred Alternative		
		# of Parks	Acres	% of Total Park Acres	# of Parks	Acres	% of Total Park Acres
D.C.	1,162	9	200	17%	9	200	17%
MD	107,939	79	1,020	1%	78	1,590	1%
DE	1,160	16	255	22%	16	260	22%
PA	9,660	51	565	6%	48	740	8%
NJ	4,772	15	210	4%	15	230	5%
NY	3,415	49	750	22%	57	760	22%
CT	126,615	32	1,170	1%	35	1,250	1%
RI	320,029	30	4,195	1%	31	4,775	1%
MA	105,999	9	205	<1%	9	205	<1%
TOTAL	680,751	290	8,570	1%	298	10,010	1%

Source: NEC FUTURE team, 2016

Note: The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the number of resources presented is inclusive of the Existing NEC + Hartford/Springfield Line as well as any new option or off-corridor route associated with the Preferred Alternative. There is one wild and scenic river, White Clay Creek, in the Affected Environment. It is located in New Castle, DE. White Clay Creek qualifies for protection under Section 4(f) since the management plan for White Clay Creek addresses recreation and other Section 4(f) uses.

* Most of the resources are only partially located in the Affected Environment. The total number of acres represents the total acreage of the parklands, including acreages outside and inside the Affected Environment of the Existing NEC + Hartford/Springfield Line or the Preferred Alternative.

Table 7.16-2: Affected Environment: Section 4(f) Resources – Cultural Resources and Historic Properties

Geography	Type	Existing NEC + Hartford/Springfield Line (Number of Resources)	Preferred Alternative (Number of Resources)
D.C.	NHL	10	10
	NRHP-Listed	21	21
	NRE	0	0
MD	NHL	3	3
	NRHP-Listed	66	72
	NRE	2	2
DE	NHL	3	3
	NRHP-Listed	64	67
	NRE	2	2
PA	NHL	12	14
	NRHP-Listed	97	100
	NRE	2	2
NJ	NHL	4	4
	NRHP-Listed	64	68
	NRE	7	7
NY	NHL	10	10
	NRHP-Listed	80	84
	NRE	8	8
CT	NHL	16	18
	NRHP-Listed	318	341
	NRE	8	8
RI	NHL	6	7
	NRHP-Listed	135	145
	NRE	3	3
MA	NHL	12	12
	NRHP-Listed	161	165
	NRE	2	2
TOTAL NHL		76	81
TOTAL NRHP-LISTED		1,006	1,063
TOTAL NRE		34	34

Source: NEC FUTURE team, 2016.

Note: The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the number of resources presented is inclusive of the Existing NEC + Hartford/Springfield Line as well as any new option or off-corridor route associated with the Preferred Alternative. Counts of National Register of Historic Places-listed sites and National Historic Landmarks include both individual sites and districts. Numbers have not been rounded since they are discrete occurrences identified by the NPS.

7.16.1.4 Environmental Consequences

This section provides a broad overview of potential uses of Section 4(f) resources that would occur under the Preferred Alternative. Generally, potential uses of Section 4(f) resources include direct physical disturbance to resources through the introduction of new elements that could result in a permanent use, contextual disturbance⁵ or proximity effects (i.e., visual, noise, vibration) that could result in a constructive use, and construction effects that could result in a temporary use. (Refer to Chapter 7.4, Parklands and Wild and Scenic Rivers, and Chapter 7.8, Cultural Resources and Historic Properties, for a detailed list of the general effects on Section 4(f) resources that could occur as a result of the various construction types and methods proposed.)

For purposes of this analysis, a potential use was noted for those parks, recreational areas, wildlife and waterfowl refuges, and historic resources that lie within the Representative Route of the Preferred Alternative. Resources identified within the Representative Route have a higher likelihood of being directly affected, resulting in a Section 4(f) potential use.

Section 4(f) Resources – Parklands, Recreational Areas, and Wildlife and Waterfowl Refuges

Table 7.16-3 summarizes the number and acreage of parks, recreational areas, and wildlife and waterfowl refuges that are within the Representative Routes of the Existing NEC + Hartford/Springfield Line and the Preferred Alternative, and thus could result in a potential use attributed to direct effects. (See Chapter 7.4, Parklands and Wild and Scenic Rivers, for a detailed description of potential effects to parks, recreational areas, and wildlife and waterfowl refuges. Appendix EE.04, provides all data for each state and county. Appendix AA, Mapping Atlas, depicts resources by county.)

Within the areas identified in Table 7.16-3, all or portions of parks that are within the footprint of areas where new infrastructure is proposed could be converted to a non-park use and, therefore, would experience greater effects than parks that are already within the footprint of the Existing NEC + Hartford/Springfield Line. The parks that fall outside of the footprint of the Existing NEC + Hartford/Springfield Line and would likely result in a potential use under the Preferred Alternative are identified in Chapter 7.4, Parklands and Wild and Scenic Rivers, within Table 7.4-3. The potential use for each park is also described within the table.

The Preferred Alternative would likely convert 210 acres to a transportation use and would therefore result in a potential use of these acres. Although the highest acreages of parks within the Representative Route of the Preferred Alternative are in Rhode Island, Maryland, and Connecticut (Table 7.16-3), only Maryland and Connecticut have the highest acreages of parks that fall outside of the footprint of the Existing NEC + Hartford/Springfield Line (i.e., outside of an existing transportation corridor).

⁵ A contextual disturbance is a change to the setting of the resource.

Table 7.16-3: Environmental Consequences: Representative Route – Section 4(f) Resources – Parks, Recreational Areas, and Wildlife and Waterfowl Refuges

Geography	Total Acres of Resources	Existing NEC + Hartford/Springfield Line			Preferred Alternative		
		# of Parks	Acres	% of Total Park Acres	# of Parks	Acres	% of Total Park Acres
D.C.	1,060	4	10	1%	4	10	1%
MD	62,460	23	10	<1%	26	90	<1%
DE	1,050	5	5	<1%	7	10	1%
PA	7,260	17	20	<1%	17	30	<1%
NJ	1,000	5	2	<1%	6	10	1%
NY	3,035	10	50	2%	11	50	2%
CT	126,250	21	70	<1%	24	90	<1%
RI	319,820	20	260	<1%	21	340	<1%
MA	105,905	6	45	<1%	6	45	<1%
TOTAL	627,845	111	475	<1%	122	675	<1%

Source: NEC FUTURE team, 2016

* The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the data presented include the Environmental Consequences inclusive of improvements to the Existing + Hartford/Springfield Line and any new route option or off-corridor route associated with the Preferred Alternative.

Note: Numbers and acreages presented include potential use attributed to direct effects and do not include potential uses attributed to proximity effects. While the totals for the Preferred Alternative include parks that are along the Existing NEC + Hartford/Springfield Line, some parks would have a potential use under the Preferred Alternative. For instance, West Park is located along the Existing NEC + Hartford/Springfield Line, but it would have an additional potential use under the Preferred Alternative because of the proposed bridge. There is one wild and scenic river—White Clay Creek in New Castle, Delaware—which is crossed by the Existing NEC + Hartford/Springfield Line and the Preferred Alternative, which creates a new crossing south and adjacent to where the Existing NEC + Hartford/Springfield Line crosses the river. White Clay Creek qualifies for protection under Section 4(f) since the management plan for White Clay Creek addresses recreation and other Section 4(f) uses.

In addition, parks adjacent to new infrastructure may also experience potential uses attributed to proximity effects, such as new noise and vibration impacts, from an increase in trains passing and visual impacts resulting from new construction and operations. It is possible that these proximity effects could result in a constructive use. Constructive use may occur from noise, access restrictions, vibration, ecological intrusions, and visual effects that substantially impair the activities features or attributes that make the resource eligible for protection under Section 4(f). For example, a constructive use might occur if increased noise levels substantially interfere with the use of a noise sensitive feature such as a campground or outdoor amphitheater. It should be noted, though, that constructive use determinations are rare. Subsequent analysis conducted during the planning process for Tier 2 projects will further evaluate potential for constructive use to occur from proximity effects.

During the public comment period, the NPS requested further evaluation and consideration of potential effects to National Historic and Scenic Trails. The FRA has included an evaluation of these trails in relationship to the Existing NEC + Hartford/Springfield Line and Preferred Alternative. Through a review of trail data, the FRA identified areas where the Existing NEC + Hartford/Springfield Line and the Preferred Alternative cross National Historic and Scenic Trails.

The Preferred Alternative crosses the following National Historic and Scenic Trails in a new location when compared to the Existing NEC:

- ▶ Star-Spangled Banner National Historic Trail (Baltimore City)
- ▶ Washington-Rochambeau National Historic Trail (Cecil County and Philadelphia County)
- ▶ Captain John Smith Chesapeake National Historic Trail (Cecil County)

Chapter 7.4, Parklands and Wild and Scenic Rivers, includes a more-detailed discussion of the effects and subsequent coordination which would occur in Tier 2. Appendix EE.04 documents where the Preferred Alternative crosses the National Historic and Scenic Trails, using the Existing NEC.

Section 4(f) Resource – Historic Properties

Table 7.16-4 presents the historic properties identified within the Representative Route of the Preferred Alternative, all of which would result in a potential use. (See Chapter 7.9, Cultural Resources and Historic Properties, for a discussion of potential effects. Appendix EE.09 presents data on the number of historic resources and qualitative highlights of potential effects by county.)

Table 7.16-4: Environmental Consequences: Representative Route – Section 4(f) Resources – Cultural Resources and Historic Properties

Geography	Type	Existing NEC + Hartford/Springfield Line (Number of Resources)	Preferred Alternative (Number of Resources)
D.C.	NHL	0	0
	NRHP-Listed	3	4
	NRE	0	0
MD	NHL	0	0
	NRHP-Listed	1	11
	NRE	2	2
DE	NHL	0	0
	NRHP-Listed	2	5
	NRE	1	2
PA	NHL	0	4
	NRHP-Listed	3	5
	NRE	2	2
NJ	NHL	0	0
	NRHP-Listed	3	5
	NRE	7	7
NY	NHL	0	0
	NRHP-Listed	1	4
	NRE	8	8
CT	NHL	0	0
	NRHP-Listed	33	53
	NRE	8	8
RI	NHL	0	1
	NRHP-Listed	1	11
	NRE	3	3
MA	NHL	0	0
	NRHP-Listed	4	10
	NRE	1	2
TOTAL NHL		0	5
TOTAL NRHP-Listed		51	108
TOTAL NRE		32	34

Source: NEC FUTURE team, 2016

* The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the data presented include the Environmental Consequences inclusive of improvements to the Existing NEC + Hartford/Springfield Line and any new route option or off-corridor route associated with the Preferred Alternative.

Note: Existing NEC numbers revised from Tier 1 Draft EIS (Vol. 2, Chapter 7.9, Table 7.9.4) to reflect the addition of NRE properties and the Hartford/Springfield Line Representative Route.

Counts of NRHP-listed sites and NHLs include both individual sites and districts with multiple structures that are counted as one individual site.

NHL: National Historic Landmark; NRHP: National Register of Historic Places; NRE: National Register eligible

Summary of Section 4(f) Resources by New Segment

Most of the parks, cultural resources, and historic properties that are within the Representative Route of the Preferred Alternative and do not also lie within the footprint of the Existing NEC + Hartford/Springfield Line are in the new or upgraded segments listed in Table 7.16-5.

Table 7.16-5: Environmental Consequences: Representative Route (New or Upgraded Segments) – Section 4(f) Resources

Location	Element	Parks, Recreational Areas, and Wildlife and Waterfowl Refuges	Cultural Resources and Historic Properties
South of New York City	Maryland/Delaware – Bayview to Newport (new segment)	85 acres within 18 parks	5 NRHP-listed properties
	Delaware – Wilmington Segment (bypasses Wilmington Station)	<1 acre within 1 park	2 NRHP-listed properties
	Pennsylvania – Philadelphia Segments (new segments)	30 acres within 12 parks	4 NHLs 5 NRHP-listed properties
	New Jersey – New Brunswick to Secaucus (new segment)	10 acres within 2 parks	1 NRHP-listed property
	New Jersey – Secaucus/Bergen loop (new segment)	None	None
North of New York City	New York/Connecticut – New Rochelle to Greens Farms (new segment)	10 acres within 3 parks	2 NRHP-listed properties
	Connecticut/Rhode Island – Old Saybrook-Kenyon (new segment)	90 acres within 13 parks	3 NRHP-listed properties
	Connecticut/Massachusetts – Hartford/Springfield Line (upgraded track/electrification)	15 acres within 4 parks	25 NRHP-listed properties

Source: NEC FUTURE team, 2016

Tribal Lands

As noted in the Tier 1 Draft EIS (Volume 2, Chapter 7.9, Section 7.9.4), the FRA did not identify property-specific tribal resources, but did identify several counties within the Study Area as having tribal resources. The FRA initiated government-to-government consultation and during Tier 2 project analysis, coordination with appropriate tribes would continue to identify tribal resources. Table 7.9-3 in Chapter 7.9, Cultural Resources and Historic Properties, identifies the tribes that, based on available data and government-to-government consultation, have interests in counties through which the Representative Route of the Preferred Alternative runs.

7.16.1.5 Stations

The Preferred Alternative includes continued service to existing stations along the NEC, modifications to existing stations, and new stations. Potential uses of Section 4(f) resources may occur at existing stations (which could be NRHP-listed or -eligible) where modifications, such as an increase in station footprint, are proposed, or to adjacent Section 4(f) resources. Based on a review of resources included on the NRHP, many of the existing stations along the NEC are NRHP-listed; however, if these stations are not modified under the Preferred Alternative, they are not

considered in this analysis. Potential uses may also occur at new stations if associated infrastructure or operations overlap with Section 4(f) resources.

Table 7.16-6 and Table 7.16-7 summarize the potential uses of Section 4(f) resources that could occur at proposed new and modified stations under the Preferred Alternative. Permanent infrastructure associated with the Preferred Alternative at these stations has the potential to result in a permanent use to Section 4(f) resources. (Appendices EE.4 and EE.9 provide detailed support data.)

Table 7.16-6: Environmental Consequences: Preferred Alternative – Modified or New Stations – Parklands and Wild and Scenic Rivers

State	County	Station ID	Station Type	Station Name	Acres	Parks*
PA	Delaware	34	New	Baldwin	3	<ul style="list-style-type: none"> ▪ Washington-Rochambeau National Trail ▪ BicyclePA Route E
NY	Bronx	81	New	Co-op City	10	<ul style="list-style-type: none"> ▪ Pelham Bay Park
Hartford/Springfield Line						
No effects.						

Source: NEC FUTURE team, 2016

* Tier 2 subsequent analysis will further examine the potential uses as well as the appropriate measures to avoid or minimize harm and make the appropriate Section 4(f) determinations.

Table 7.16-7: Environmental Consequences: Preferred Alternative – Modified or New Stations – Cultural Resources and Historic Properties

State	County	Station ID	Station Type	Station Name	Type*
MD	Cecil	23	New	Elkton	National Register of Historic Places
NJ	Mercer	61	Modified	Princeton Junction	National Register eligible
	Middlesex	62	New	North Brunswick	National Register eligible
		64	Modified	New Brunswick	National Register of Historic Places
		68	New	Metropark H.S.	National Register eligible
	Hudson	76	Modified	Secaucus	National Register eligible
Hartford/Springfield Line					
CT	New Haven	157	New	North Haven	National Register eligible
	Hartford	161	New	Newington	National Register of Historic Places
		163	Modified	Hartford	National Register of Historic Places
		186	New	West Hartford	National Register eligible
		187	New	Enfield	National Register of Historic Places

Source: NEC FUTURE team, 2016

*Presence of National Register of Historic Places-listed and/or National Register-eligible properties and potential effects within the station footprint; Tier 2 subsequent analysis will further examine the potential uses as well as the appropriate measures to avoid or minimize harm and make the appropriate Section 4(f) determinations.

Potential uses of Section 4(f) resources associated with stations under the Preferred Alternative would occur primarily from new stations and modifications to existing stations. Many existing stations along the Existing NEC + Hartford/Springfield Line are NRHP-listed or NRHP-eligible sites, meaning that changes to these structures could result in a potential use. However, further design and consultation with the applicable State Historic Preservation Office is necessary before finalizing

a Section 4(f) determination. That will occur at Tier 2 consistent with the Programmatic Agreement developed in compliance with Section 106 of the National Historic Preservation Act (see Appendix GG).

7.16.1.6 Context Area

The Preferred Alternative contains over 2,000 parks in the Context Area. If the Representative Routes shifted during further design at Tier 2, it is likely that different parks in the Context Area would be encountered, especially the larger parks (those over 100 acres). See Chapter 7.4, Parklands and Wild and Scenic Rivers, for a discussion of the parks, recreational areas, and wildlife and waterfowl refuges in the Context Area.

In addition, there are numerous geographic areas in the Context Area where there are high densities of NRHP-listed properties and NHLs; these areas are mainly in urban locations. The Preferred Alternative contains over 3,500 NHLs and NRHPs within the Context Area. NHLs are of particular concern because they are designated by the NPS as nationally significant properties. As a result, they require additional consultation under Section 106 of the NHPA to resolve adverse effects. Prominent NHLs in the Context Area are listed in Section 7.9.5 of Chapter 7.9, Cultural Resources and Historic Properties.

Appendices EE.4 and EE.9 provide support data for these Section 4(f) resources in the Context Area.

7.16.1.7 Preliminary Avoidance Alternatives Review

The analysis presented in this Tier 1 EIS process indicates that numerous Section 4(f) resources exist within and adjacent to the Representative Routes of the Action Alternatives and therefore the Action Alternatives may result in use of Section 4(f) resources. This Tier 1 analysis is intended to identify potential uses of known Section 4(f) resources and to ensure that opportunities to avoid and minimize harm to Section 4(f) resources at subsequent stages in the development process have not been precluded by decisions made at the Tier 1 stage. Alternatives for avoiding and minimizing harm to Section 4(f) resources will be evaluated further as part of Tier 2 project studies, and any decision to approve the use of Section 4(f) resources will be made as part of those Tier 2 studies.

Since the Preferred Alternative is a combination of various elements from the No Action Alternative and Action Alternatives, the number of Section 4(f) resources that would have a potential use under the Preferred Alternative is within the range of Section 4(f) resources that would have a potential use under the No Action Alternative and Action Alternatives. The Preferred Alternative would result in a potential use of 122 parks, which is in the middle of the range of parks that would have a potential use under Alternative 3. The number of acres that would have a potential use under the Preferred Alternative is lower than the number of acres that would have a potential use under Alternative 3, but higher than the number of acres that would have a potential use under Alternative 2. The Preferred Alternative would also result in a potential use of 5 NHLs and 142 NRHP-listed and NRE properties. It is similar to and improves upon Alternatives 1 and 2. Volume 2, Table 7.16-7, reports 4 NHLs and 142 NRHP-listed sites in Alternative 1, and 5 NHLs and 171 NRHP-listed properties in Alternative 2. The historic resources for which a potential use could occur under

the Preferred Alternative also include NRE properties, which were not included in the analysis of the Action Alternatives in the Tier 1 Draft EIS.

The Action Alternatives evaluated in the Tier 1 Draft EIS identified effects on the Patuxent Research Refuge in Maryland, the John Heinz National Wildlife Refuge in Pennsylvania, and the Salt Meadow unit of Stewart B. McKinney National Wildlife Refuge in Connecticut. However, the FRA has identified a Preferred Alternative that avoids substantial crossings of National Wildlife Refuges (such as the crossing shown in Alternative 3 in the area of Patuxent Research Refuge) and minimizes impacts to National Wildlife Refuges by shifting the Representative Route or incorporating new segments. The Preferred Alternative would minimize direct impacts to Patuxent Research Refuge and Salt Meadow unit of Stewart B. McKinney National Wildlife Refuge. The Preferred Alternative has been modified to stay within the existing rail corridor near the John Heinz National Wildlife Refuge to minimize effects. However, a sliver impact of less than one acre to the refuge has been identified. It is expected that during Tier 2 project studies, the routing in this area will continue to be refined and measures to minimize harm will be evaluated.

In addition, the FRA modified the Preferred Alternative from Alternatives 1 and 2 with the goal of avoiding the use of several historically important locations, specifically historic districts in Old Saybrook and Old Lyme, CT. Based on public comments and correspondence with representatives from Old Lyme, the FRA modified the construction type of the Representative Route for the Old Saybrook-Kenyon new segment to a tunnel to avoid the use of an aerial structure in the historic district to minimize impacts. The modification is described in Chapter 4, Section 4.5.2.6, which highlights locations where the Preferred Alternative differs or varies from the Representative Route of the Existing NEC + Hartford/Springfield Line in the state of Connecticut.

In other locations, as compared to the Action Alternatives, the Preferred Alternative utilizes existing tracks that parallel or split from the Existing NEC to minimize disturbance to identified resources and reduces potential uses of 4(f) resources. Proposed enhancements to existing track maintain existing construction types where feasible.

However, there are places where avoidance of use cannot be achieved either in Tier 1 or Tier 2 for the following reasons:

- ▶ Shifting the centerline (and the whole facility) to avoid one or more resources could result in greater impacts on other protected resources. For example, the areas in Connecticut and Rhode Island include a number of large Sections 4(f) resources. It may not be possible to fully avoid use of all of these resources because shifting the alignment to avoid one might result in the use of another.
- ▶ The Representative Route could not be shifted easily because of the large turning radii and other design considerations. A “minor” shift in one location along the Representative Route could result in a substantial shift further up or down the route, potentially resulting in use impacts on other Section 4(f) resources.
- ▶ Alternative construction methodologies (e.g., tunneling or cut-and-cover) may not always be possible due to other constraints such as topography, geology, utilities, and drainage.

In Tier 2, it may be possible to avoid the use of other Section 4(f) resources through minor redesign or narrowing of the disturbance limits. Resources may also be avoided or impacts minimized by tunneling, cut-and-cover, or other construction techniques to reduce surface disruption, and/or land acquisition needs at and near Section 4(f) resources. It may also be possible to reduce the proximity effects to protected resources by building noise walls or visual screening.

In future Tier 2 project analyses, the prudence and feasibility of avoidance alternatives would be evaluated. A potential avoidance alternative may not be prudent if, for example, it does not meet the Purpose and Need, or results in severe social, economic, or environmental impacts.

7.16.1.8 Measures to Minimize Harm

This section describes the measures to minimize harm on Section 4(f) resources.

Section 4(f) Resources – Parks, Recreational Areas, and Wildlife and Waterfowl Refuges

Parkland, recreational areas, and wildlife and waterfowl refuges are unique in that they each provide different recreational opportunities and activities. Potential mitigation should be based on the specific resource affected and how the resource is affected. However, examples of potential mitigation strategies could include the following:

- ▶ Design or construction modifications to avoid encroaching on or bisecting a parkland resource
- ▶ The use of context-sensitive design in future stages of project development
- ▶ The incorporation of natural design features such as earthen berms and tree plantings
- ▶ Allocation of replacement parkland or open space

Measures to reduce harm for use impacts, such as noise walls, could result in adverse visual impacts on Sections 4(f) resources. The identification and implementation of measures to minimize harm at each resource need to be conducted in consultation with the owners of the resources to ensure that measures to minimize harm do not adversely affect the values of the resources.

Section 4(f) Resources – Cultural Resources and Historic Properties

Potential mitigation strategies, or treatment measures developed as part of resolution of adverse effects during the Section 106 consultation process, depend on the type of cultural resource or historic property affected and the type of impact(s). The Programmatic Agreement presented in Appendix GG lists standard treatments, stipulations, and methods to resolve adverse effects. With respect to Tier 2 project studies, the Programmatic Agreement lays out roles and responsibilities as well as guidance for Tier 2 project-level identification and evaluation of historic properties, and mitigation.

For the development of the Preferred Alternative, the FRA identified some examples of measures to avoid, minimize, or mitigate adverse effects to cultural resources and historic properties that were presented in Volume 2, Chapter 7.9, including modification of construction type and shifting location. Other recommended mitigation strategies include the following:

- ▶ Modify construction methods to minimize impacts.
- ▶ Incorporate the use of context-sensitive design.
- ▶ Undertake other design modifications in order to blend proposed infrastructure into the existing setting.
- ▶ Complete Historic American Building Survey/Historic American Engineering Record–level documentation as appropriate for properties that cannot be avoided.
- ▶ Complete archaeological data recovery for sites that cannot be avoided or preserved in place.
- ▶ Install interpretive signage in locations where above- or below-ground historic properties must be removed (or otherwise adversely affected) in order to accommodate new construction.
- ▶ Implement alternative mitigation measures such as the development of educational programs or interpretive booklets for resources that cannot be avoided.

7.16.1.9 Subsequent Tier 2 Analysis

Since the Preferred Alternative could result in uses of Section 4(f) resources through modifications to existing rail infrastructure or construction of new rail infrastructure through Section 4(f) resources, Section 4(f) evaluation will be needed during Tier 2 project studies.

Section 4(f) applies to projects that receive funding from or require approval by the U.S. DOT. During environmental compliance efforts associated with Tier 2 projects, project-level Section 4(f) evaluations will be completed and any potential uses of Section 4(f) resources will be fully evaluated. A Section 4(f) evaluation will include the evaluation of possible avoidance alternatives and identification of measures to minimize harm. The identification of a Selected Alternative in the Tier 1 Record of Decision will not preclude consideration of avoidance alternatives and measures to minimize harm from being considered in subsequent Tier 2 project studies. Continued consultation with the officials with jurisdiction for Section 4(f) properties (including tribes for tribal resources) will be undertaken as part of Tier 2 project studies.

For any Tier 2 projects requiring approval of a U.S. DOT agency, Section 4(f) evaluations and determinations would be completed during future Tier 2 NEPA analyses through the following process. The Tier 2 project proponent(s) would:

- ▶ Prepare detailed plans and profiles of the alternatives under review at Tier 2.
- ▶ Prepare cultural resource surveys and coordinate with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Officers (THPO) or tribal representatives, and other consulting parties to determine resource eligibility for listing in the NRHP. These efforts would be used to determine whether and where a use of protected Section 4(f) property(s) would occur.
- ▶ Coordinate with officials with jurisdiction over other potentially affected Section 4(f) properties, such as parklands and recreation areas, to confirm property boundaries and to identify planned facilities.

- ▶ Complete an analysis to identify the type of potential use of each protected property (temporary, permanent, or constructive), if any, that would occur, as well as determine whether a permanent use can meet the criteria for a *de minimis* impact.
- ▶ Where there is a potential use of a 4(f) property, determine, through more-detailed design and coordination with officials with jurisdiction, if a Section 4(f) property can be avoided or the use minimized, including analysis of alignment refinements, or design techniques.
- ▶ Coordinate with the public to obtain their input on the potential uses.
- ▶ Conduct a least overall harm analysis if more than one alternative is developed as part of the Tier 2 NEPA document and no feasible and prudent alternative to using a Section 4(f) property exists. The least harm analysis would determine which alternative would cause the least overall harm in light of the Section 4(f) statute's preservation purposes and the alternative with the least harm to Section 4(f) resources would be selected in that case.
- ▶ Develop appropriate mitigation measures for any unavoidable potential uses of Section 4(f) properties, undertake and document all possible planning to minimize harm to each property where a Section 4(f) property cannot be avoided.

The lead agencies in the Tier 2 project studies would take into account, where applicable, any amendments to Section 4(f) pursuant to the Fixing America's Surface Transportation Act or other federal laws that may be enacted in the future.

7.16.1.10 Coordination with Officials with Jurisdiction and Tier 2 Consultation

The Tier 2 project proponents would identify and consult with the officials with jurisdiction for potential Section 4(f) resources to determine the potential applicability of Section 4(f). Consultation would be performed with public officials, property owners/officials with jurisdiction, SHPOs, THPOs and tribal representatives, and other consulting parties regarding the use of Section 4(f) resources and potential impacts and measures to minimize harm. In addition, Section 4(f) requires the U.S. DOT to seek comments from the U.S. Department of the Interior (and in some cases, other agencies) before making any findings.

7.16.2 Section 6(f) Resources

7.16.2.1 Introduction

This section provides a preliminary assessment of Section 6(f) resources evaluated as part of this Tier 1 Final EIS. Section 6(f) is included in the Land and Water Conservation Fund Act (LWCF) of 1965, which provides funds and matching grants to federal, state, and local governments to acquire land and water for recreational purposes. In general, federal agencies are required to assess the effects of their actions on these resources. Section 6(f) prohibits the conversion of properties acquired or developed with LWCF funds to a use other than public outdoor recreation without the approval of the Secretary USDO, acting through the NPS and at the request of the state delegate/state liaison officer. Under the LWCF Act, if there is a conversion of a Section 6(f) resource (in whole, or in part), to a non-recreational use, replacement of the property is required.

7.16.2.2 Resource Overview

Implementation of the Preferred Alternative could result in a conversion of Section 6(f) resources due to modification of existing rail infrastructure, such as expansion of rail rights-of-way, and/or construction of new rail infrastructure, such as railroad tracks or stations.

Section 6(f) resources are scattered throughout the Affected Environment. Maryland, Pennsylvania, Connecticut, and Rhode Island contain the highest numbers of Section 6(f) resources within the Affected Environments of the Preferred Alternative and the Existing NEC + Hartford/Springfield Line. Higher acreages of Section 6(f) parklands are located in areas where the Preferred Alternative diverges from the Existing NEC and creates new segments or extend off-corridor, most notably in Maryland.

The Preferred Alternative crosses 24 Section 6(f) resources, 21 of which are also crossed by the Existing NEC + Hartford/Springfield Line. The Preferred Alternative would convert land within eight Section 6(f) resources.

7.16.2.3 Affected Environment

Under the Preferred Alternative, Table 7.16-8 identifies the number of Section 6(f) resources, total Section 6(f) resource acres, and percentage of the total Section 6(f) resources acres within the Affected Environments of the Existing NEC + Hartford/Springfield Line and Preferred Alternative. (See Appendix HH for a complete list of all Section 6(f) resources identified.)

Table 7.16-8: Affected Environment: Section 6(f) Resources

Geography	Total Acres of Resource	Existing NEC + Hartford/Springfield Line			Preferred Alternative		
		# of 6(f) Resources	Acres	% of Total Resource Acres	# of 6(f) Resources	Acres	% of Total Resource Acres
D.C.	1,042	4	165	16%	4	165	16%
MD	99,942	8	495	1%	13	865	1%
DE	93	2	95	100%	2	95	100%
PA	3,550	8	165	5%	7	210	6%
NJ	409	2	40	10%	2	40	10%
NY	3	1	0	2%	1	1	31%
CT	18,559	6	370	2%	6	370	2%
RI	1,778	5	320	41%	6	365	21%
MA	0	0	0	0%	0	0	0%
TOTAL	125,375	36	1,650	2%	41	2,110	2%

Source: NEC FUTURE team, 2016

Note: The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the number of resources presented is inclusive of the Existing NEC + Hartford/Springfield Line as well as any new option or off-corridor route associated with the Preferred Alternative.

*Most of the resources are only partially located in the Affected Environment. The total number of acres represents the total acreage of the parklands, including acreages outside and inside the Affected Environment of the Existing NEC + Hartford/Springfield Line or the Preferred Alternative.

7.16.2.4 Environmental Consequences

Table 7.16-9 presents the number and acres of Section 6(f) resources that the Preferred Alternative crosses. The Preferred Alternative crosses three more Section 6(f) resources (up to 24) than the Existing NEC + Hartford/Springfield Line, as well as about 50 acres more (up to 110 acres) than the Existing NEC + Hartford/Springfield Line. Maryland contains the highest number of resources crossed by the Preferred Alternative. Out of the six resources crossed, the Existing NEC + Hartford/Springfield Line crosses four resources.

Table 7.16-9: Environmental Consequences: Representative Route – Section 6(f) Resources

Geography	Total Acres of Resource	Existing NEC + Hartford/Springfield Line			Preferred Alternative		
		# of 6(f) Resources	Acres	% of Total Resource Acres	# of 6(f) Resources	Acres	% of Total Resource Acres
D.C.	1,026	2	5	0%	2	5	0%
MD	56,949	4	3	0%	6	45	0%
DE	91	1	2	2%	1	2	2%
PA	3,324	4	10	<1%	5	20	1%
NJ	0	0	0	0%	0	0	0%
NY	0	0	0	0%	0	0	0%
CT	18,510	5	25	0%	5	25	0%
RI	1,732	4	10	1%	5	15	1%
MA	0	0	0	0%	0	0	0%
TOTAL	81,632	20	55	0%	24	110	0%

Source: NEC FUTURE team, 2016

* The Preferred Alternative assumes improvements to the Existing NEC + Hartford/Springfield Line; therefore, the data presented include the Environmental Consequences inclusive of improvements to the Existing NEC + Hartford/Springfield Line and any new route option or off-corridor route associated with the Preferred Alternative.

Note: While the totals for the Preferred Alternative includes parks that are along the Existing NEC + Hartford/Springfield Line, some parks would have additional effects under the Preferred Alternative. For instance, West Park is located along the Existing NEC + Hartford/Springfield Line, but it would have additional impacts under the Preferred Alternative because of the proposed bridge.

Under the LWCF Act, if there is a conversion of a Section 6(f) resource to a non-recreational use, replacement of the property is required. Section 6(f) resources that could have a potential conversion by the Preferred Alternative are summarized below. The discussion focuses only on those affected Section 6(f) resources outside of the Existing NEC + Hartford/Springfield Line, since those areas would have the highest likelihood of being converted to a new use as a result of the Preferred Alternative.

- ▶ About 40 acres of Gunpowder Falls State Park in Baltimore County, MD, would be converted by the Preferred Alternative where aerial structure is proposed. The conversion of land represents less than 1 percent of the total park area.
- ▶ Less than 1 acre of Bush Declaration Natural Resources Management Area in Harford County, MD, would be converted by the Preferred Alternative where embankment and aerial structure are proposed. The conversion of land represents less than 1 percent of the total park area.

- ▶ Less than 1 acre of Havre de Grace Activity Center in Harford County, MD, would be converted by the Preferred Alternative where at-grade construction type is proposed. The conversion of land represents approximately one-fifth of the total park area.
- ▶ A proposed major bridge would affect about 5 acres of West Park in Pennsylvania.
- ▶ Less than 1 acre of Burlingame Management Area/Burlingame Management in Washington County, RI, would be converted by the Preferred Alternative where trench is proposed. The conversion of land represents less than 1 percent of the total park area.
- ▶ Approximately 5 acres of Burlingame Management Area/Drew in Washington County, RI, would be converted by the Preferred Alternative where embankment and aerial structure are proposed. The conversion of land represents about 2 percent of the total park area.
- ▶ Less than 1 acre of Burlingame Management Area/Holley in Washington County, RI, would be converted by the Preferred Alternative where trench is proposed. The conversion of land represents approximately 1 percent of the total park area.
- ▶ Approximately 1 acre of Burlingame Management Area/Phantom Bog in Washington County, RI, would be converted by the Preferred Alternative where embankment is proposed. The conversion of land represents less than 1 percent of the total park area.

7.16.2.5 Stations

Modifications to the existing Secaucus Station in Hudson County, NJ, proposed under the Preferred Alternative, could affect Laurel Hill Park, which is a Section 6(f) resource located adjacent to the station. However, during Tier 2 project studies, further analysis will determine if a conversion will occur.

7.16.2.6 Context Area

There are about 180 Section 6(f) resources in the Context Area for the Preferred Alternative. If the Representative Route were to shift, it is possible that a Section 6(f) resource in the Context Area would be encountered. As such, a summary of the Section 6(f) resources with large areas in the Context Area is provided below:

- ▶ In Washington, D.C., there are three Section 6(f) resources with 100 or more acres in the Context Area: Anacostia Park, the National Arboretum, and East Potomac Park.
- ▶ In Maryland, some of the larger Section 6(f) resources that cross more than one county include Patuxent River Park, Patuxent Research Refuge, Patapsco Valley State Park, and Gunpowder Falls State Park.
- ▶ In Delaware, there are five Section 6(f) resources with 100 or more acres: Bellevue State Park, Middle Run Valley Natural Area, Alapocas Run State Park, Iron Hill Park, and White Clay Creek State Park.
- ▶ In Pennsylvania, there are eight Section 6(f) resources with 100 or more acres in the Context Area: Cobbs Creek Park, Cobbs Creek South/Cobbs Creek Park, East Park, West Park, Pennypack Creek Park, Pennypack on the Delaware River, Tacony Creek Park, and Franklin D. Roosevelt Park.

- ▶ In New Jersey, there are four Section 6(f) resources with 100 or more acres in the Context Area: D&R Canal State Park, Branch Brook Park, Weequahic Park, and Laurel Hill Park.
- ▶ In New York, there are three Section 6(f) resources with 100 or more acres in the Context Area: Central Park, Crotona Park, and Soundview Park.
- ▶ In Connecticut, there are 10 Section 6(f) resources with 100 or more acres in the Context Area. Those with over 300 acres, some of which cross more than one county include the following: Cockaponset State Forest, Bluff Point State Park, Quinnipiac River State Park, Silver Sands State Park, Harkness Memorial State Park, Rocky Neck State Park, Hammonasset Beach State Park, and Hammonasset Natural Area Preserve.
- ▶ In Rhode Island, some of the larger Section 6(f) resources include the following: Burlingame Management Area, Lincoln Woods State Park, Goddard Park, and Cocumcussoc. Burlingame Management Area is a large, multi-parcel recreational area.
- ▶ In Massachusetts, there are two Section 6(f) resources: Tom Larson Recreational Complex / Dagget Field and Stony Brook Reservation.

Volume 2, Section 7.4.5, contains more-detailed descriptions of many of these resources.

7.16.2.7 Comparison to the Action Alternatives

The Preferred Alternative is similar to Alternative 2 with regard to total number and acreages of effects on Section 6(f) resources. The resources affected under the Preferred Alternative, however, represent a mix of the resources that would be affected under the different Action Alternatives. For example, Gunpowder Falls State Park would be affected by Alternative 3, West Park by Alternative 2, and Burlingame Management Area/Phantom Bog by Alternative 1.

7.16.2.8 Potential Mitigation Strategies

Examples of potential mitigation strategies include design or construction modifications to avoid the conversion of a Section 6(f) resource to a non-recreational use; the use of context-sensitive design in future stages of project development so as to not preclude recreational uses; the incorporation of natural design features such as earthen berms and tree plantings; and/or the allocation of replacement parkland or open space.

7.16.2.9 Subsequent Tier 2 Analysis

This Tier 1 Final EIS identifies areas where there is potential for effects on Section 6(f) resources. Since the Preferred Alternative could result in a conversion of Section 6(f) resources through modifications to existing rail infrastructure or construction of new rail infrastructure through Section 6(f) resources, Section 6(f) evaluation will be appropriate during Tier 2 project analysis. Analyses conducted as part of the Tier 2 planning processes will conclude whether a conversion of a Section 6(f) land is necessary, and will include the development of mitigation measures and designs that will avoid or minimize effects on Section 6(f) lands. Under the LWCF Act, if there is a conversion of a 6(f) resource to a non-recreational use, replacement of the property is required and certain requirements must be met. (Refer to Volume 2, Section 7.16.2.7, for a description of these requirements.)