



Final
Volume 1

Programmatic Environmental Impact Statement For Northern Border Activities

Department of Homeland Security
U.S. Customs and Border Protection



July 2012

PAGE INTENTIONALLY LEFT BLANK

Final

Programmatic Environmental Impact Statement For Northern Border Activities

Executive Summary



July 2012

PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

INTRODUCTION

U.S. Customs and Border Protection (CBP), a component of the Department of Homeland Security (DHS), proposes the use of a multilayered law enforcement approach to deploy border security program elements in the most effective combination to respond to any evolution of cross-border terrorist, criminal, and public safety threats along the northern border over the next five to seven years. Border security program elements consist of facilities; technologies for communication, detection, inspection, and surveillance; and land-based security infrastructure. These assets are used by agents, officers, specialists, and other personnel to pursue effective control of air, land, and sea borders between the United States and Canada. Under this proposal, CBP is evaluating alternative programmatic approaches that focus on augmenting particular elements for future responses to evolving threats and changes in security or trade and travel facilitation priorities.

CBP is charged with the dual mission of securing the Nation's borders while facilitating legitimate trade and travel through the legal ports of entries (POE). CBP enforces customs, immigration, agriculture, and numerous other laws and regulations at the Nation's borders. Its priority is to prevent terrorists and terrorist weapons from entering the United States (U.S.), but it is responsible for deterring all cross-border violations, including illegal immigration and the trafficking of human beings, narcotics, and other contraband. As the guardian of U.S. borders, CBP protects the border between the United States and Canada, 1,900 miles of international border with Mexico, and the 95,000 miles of shoreline in the contiguous United States. (Note: Although CBP operates POEs along the border between Alaska and Canada, this PEIS addresses only the 4,000-mile contiguous border from Maine to Washington, referred to in this document as the "northern border." The 1,500 mile border between Alaska and Canada represents a distinct and separate operational environment.)

This PEIS was prepared in accordance with the National Environmental Policy Act (NEPA). It focuses on broad actions. It provides a reference document for future site-specific and project-specific NEPA documentation (tiering) that will analyze effects of CBP proposals along the northern border. CBP will continue to comply with NEPA while carrying out its mission and this document is part of that process.

PURPOSE AND NEED

The purpose of the proposed action is to provide CBP with the flexibility to expand or alter its activities as needed to maintain effective control of the northern border in response to changes in priorities along that border. The proposed action is needed to better enable CBP agents and officers to operate in support of the CBP mission to safeguard the Nation. Improved border security will exist when CBP is able to stay abreast of current border activities; that is, to maintain situational awareness, determine the level of threat involved in given situations, and work in collaborative partnerships with local, state, and tribal law enforcement partners. To provide the needed flexibility, CBP is evaluating alternative approaches, including making changes to the mixture and amount of operations, facilities, tactical infrastructure, and technology implemented along the northern border through the Office of Field Operations (OFO), the United States Border Patrol (USBP), and the Office of Air and Marine (OAM). CBP

prepared this PEIS to address the potential impacts of these changes with respect to the evolution of environmental conditions since CBP's inception in March 2003.

PUBLIC INVOLVEMENT

CBP is committed to continued public involvement under NEPA. On July 6, 2010, CBP published in the Federal Register a Notice of Intent (NOI) (75 FR 38822) to prepare individual PEISs for four regions along the northern border. After conducting a public scoping process, CBP determined that it would be preferable to produce one document covering the entire northern border to ensure that CBP effectively analyzes and conveys impacts that occur across the region of the northern border. Therefore, CBP published a second Notice on November 9, 2010, (75 FR 68810) stating that a single PEIS would be prepared for the entire northern border. The PEIS analyzes impacts for four regions and also summarizes impacts for the northern border as a whole.

A series of 11 public scoping meetings were held along the northern border, 6 during the week of July 12, 2010, and 5 during the week of July 19, 2010. Scoping letters were sent to approximately 1,200 agencies, organizations, and individuals. The letters described the proposed project and invited comments in response. Display advertisements were published in local newspapers and public service announcements were sent to radio stations making the public aware of the meetings and the public scoping program. The results of the scoping process, including public input, are provided in Appendix A.

Scoping comments were received at the public meetings, as well as through e-mails, faxes, phone calls, and posted letters. A total of 223 communications were received during the public scoping process.

On September 16, 2011 CBP issued a Notice of Availability for the Draft PEIS and asked for public comment. CBP held 12 public meetings in various locations within the area of study and one additional meeting in the Washington, DC, metropolitan area. CBP received 123 individually identifiable pieces of correspondence providing comments and over 700 identifiable comments on the Draft PEIS. The Final PEIS reflects the consideration and incorporation of public comments received. Commenters expressed concerns with the range of alternatives proposed, impacts to transboundary areas and movement of species, and impacts to specific cultural resources. There were also concerns that CBP would build a "border fence" after completing this PEIS. The Final PEIS addresses these concerns programmatically and clarifies that CBP is not contemplating a "border fence" for the northern border.

CBP also invited the U.S. Department of the Interior and the U.S. Department of Agriculture - Forest Service to be cooperating agencies and requesting their participation in the preparation of the PEIS.

DESCRIPTION OF PROPOSED ACTION

To ensure its continued effectiveness protecting the United States from existing and evolving threats to the Nation's physical and economic security, and to facilitate legitimate trade and travel, CBP is proposing changes to the mixture of facilities, operations, tactical infrastructure, and technology implemented along the northern border through its uniformed law enforcement components: OFO, USBP, and OAM.

ALTERNATIVES

This document considers several alternative ways for CBP to address the purpose and need; that is, to maintain effective control of the northern border. These alternatives emphasize emerging technologies and increased use of security measures; at the same time, they continue to deploy existing CBP personnel in the most effective manner and to maintain the safety of CBP law enforcement personnel and the public. Indeed, one of the principal aims of each alternative is to leverage CBP personnel; that is, to provide CBP personnel with the tools or assets necessary to maximize their effectiveness in securing the Nation's borders. Following are several alternatives considered in the PEIS. Implicit in each alternative is the concept that strong partnerships remain a central component of CBP's northern border strategy. The use of partnerships is and will continue to be common to all alternatives outlined below. It will always be a program direction because it is efficient and effective.

The No Action Alternative, or status quo, would be to continue with the same facilities, technology, infrastructure, and approximate level of personnel currently in use, deployed, or currently planned by CBP. Normal maintenance of existing facilities is included in this alternative. This alternative would not fully meet the need for the proposed program because it would not allow CBP to improve its capability to interdict cross-border violators or to identify and resolve threats at the POEs in a manner that avoids adverse effects on legal trade and travel. However, it is evaluated in this PEIS because it provides a baseline against which the impacts of the other reasonable alternatives can be compared.

The Facilities Development and Improvement Alternative would focus on replacing or providing new permanent facilities, such as Border Patrol stations, housing, and other facilities, or making major modifications to permanent facilities, such as POEs, to allow agents, officers, and agricultural specialists within CBP to operate more efficiently and respond to situations more quickly. This alternative also includes the construction of temporary or long-term facilities such as forward operating bases (FOBs) and checkpoints, and other facilities necessary to support CBP law enforcement agents and officers as they carry out operational duties. This alternative would help meet the need for the proposed program because the new and improved facilities would make it more difficult for cross-border violators to cross the border. It would also divert traffic from or increase the capacity of the more heavily used POEs; and thus decrease wait times. The applicability of this alternative would be limited, as most roads crossing the northern border already have a POE. As demonstrated in Table ES-1 "Comparison of Action Alternatives," this alternative partially meets the purpose and need for the proposed action.

The Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative would focus on deploying more effective surveillance and communications technologies in support of CBP activities. It would include improvements to the identification and inspection technologies used by OFO and USBP. It would include continuing intelligence network developments and other Office of Technology, Innovation, and Acquisition (OTIA) and Office of Information Technology (OIT) technological developments and plans. These plans involve fielding upgraded surveillance and telecommunications systems (e.g., remote sensors, short-range radar, remote and mobile video surveillance and communications systems, new camera systems, and upgrades to stationary communications systems) that would enable USBP and OAM to focus their efforts on identified threat areas, improve agent and officer communication systems, and deploy personnel to resolve incidents with maximum efficiency.

This alternative would help meet the need for the proposed program by improving CBP's situational awareness and allowing it to more efficiently and effectively direct its resources for interdicting cross-border violators. This alternative would have the least potential for major adverse environmental impacts among the action alternatives and so is selected as the environmentally preferable alternative. As demonstrated in Table ES-1, this alternative fully meets the purpose and need for the proposed action and is selected as the preferred alternative.

The Tactical Security Infrastructure Deployment Alternative would focus on constructing additional barriers, access roads, and related facilities. The barriers would include selective fencing and vehicle barriers at selected points along the border and would deter and delay cross-border violators. The access roads and related facilities would increase the mobility of USBP agents, enhancing their capabilities for surveillance and response to international border violations. This alternative would help meet the need for the proposed program to discourage cross-border violators and improve CBP's capability to respond to threats, but would not assist CBP in identifying and classifying threats. As demonstrated in Table ES-1, this alternative partially meets the purpose and need for the proposed action.

The Flexible Direction Alternative would allow CBP to follow any of the above directions either across the entire border or in a particular region based on what would be most effective in responding to a changing threat environment along the northern border. It is impossible to predict what measures will be needed at any point in time, and the needed mix is likely to change constantly because the threat environment changes constantly. Accordingly, the Flexible Direction Alternative would allow CBP to pursue the optimal mix of facilities, technology, and tactical infrastructure in order to respond to the changing environment and allow CBP personnel to be deployed in the most effective manner possible. As demonstrated in Table ES-1, this alternative fully meets the purpose and need for the proposed action.

Table ES-1 Comparison of Action Alternatives

CRITERIA CONTRIBUTING TO EFFECTIVE CONTROL OF THE BORDER ENVIRONMENT				
ALTERNATIVES	Maintain Situational Awareness	Identify and Classify Threats	Respond Efficiently and Effectively	Resolve Law Enforcement Situations to Satisfaction
No Action Alternative	Status Quo	Status Quo	Status Quo	Status Quo
Facilities Development and Improvement Alternative	Indirect: Provides agents and officers with more modernly equipped facilities distributed closer to CBV threat environment	Indirect: Provides agents and officers and with more modern facilities for inspecting cargo, vehicles, and people	Direct: Reduces agent and officer distance from patrol areas or trade and travel processing areas	Indirect: Provides agents and officers with more modernly equipped facilities to process CBVs
Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative (Preferred Alternative)	Direct: Improves the common operating picture and effective communication regarding CBV threats	Direct: Improves ability to screen potential CBVs and relay intelligence about potential threats	Direct: Increases accuracy of information about the location of threats and increases the operational tempo of agents and officers ready for response	Direct: Potentially increases interdiction rate by accelerating operational tempo and improving situational awareness
Tactical Security Infrastructure Deployment Alternative	Indirect: Provides selective barriers to impede CBV access and movement and provides road upgrades to increase agent and officer access to more points along the border	Status Quo	Direct: Reduces potential average response time and distance by upgrading existing or adding new roads thereby increasing access to more points along the border	Indirect: Provides road upgrades and additions to increase border area accessibility and likely make CBP interdictions more effective
Flexible Direction Alternative	Direct: Improves the common operating picture and effective communication regarding CBV threats	Direct: Improves ability to screen potential CBVs and relay intelligence about potential threats	Direct: Increases information accuracy, border accessibility, and operational tempo	Direct: Potentially increases interdiction rate by accelerating operational tempo and improving situational awareness

SUMMARY OF ENVIRONMENTAL IMPACTS

In compliance with NEPA, Council on Environmental Quality (CEQ) regulations, and the DHS Directive 023-01 *Environmental Planning Program*, this PEIS describes the existing environmental conditions potentially affected by the proposed action, as well as the potential environmental impacts of implementing the alternatives. Sections 3.2 and 3.3 of the PEIS explain the analytical methodology. Analyzing program directions as proposed action alternatives allows for comparison of the impacts of each measure in different geographic settings. Analyses will show that some measures are better suited than others to each geographic area. This will assist CBP in developing planning guidelines for its operations and facilities. Table ES-1 summarizes the potential impacts anticipated under each alternative considered, broken down by resource area or impact topic for the entire northern border. Chapters 4 through 7 of this PEIS evaluate these impacts for each of the four regions.

Table ES-2. Summary of Potential Environmental Impacts by Alternative

Resource Area	Alternatives				
	No Action	Facilities Development and Improvement	Detection, Inspection, Surveillance, and Communications Technology Expansion	Tactical Security Infrastructure Deployment	Flexible Direction
Air quality	Minor	Minor	Minor	Minor	Minor
Biological resources	Moderate	Moderate	Moderate	Moderate	Moderate
Geology and soils	Moderate	Moderate	Moderate	Moderate	Moderate
Water resources	Minor	Minor	Minor	Minor	Minor
Noise	Minor	Moderate	Minor	Minor	Moderate
Climate change	Minor (with beneficial)	Minor (with beneficial)	Minor (with beneficial)	Minor (with beneficial)	Minor (with beneficial)
Land use	Moderate	Moderate	Moderate	Moderate	Moderate
Aesthetic and visual resources	Minor	Moderate	Moderate	Moderate	Moderate
Socioeconomic resources	Moderate	Moderate	Moderate	Moderate	Moderate
Cultural and paleontological resources	Major (with beneficial)	Major (with beneficial)	Major (with beneficial)	Major (with beneficial)	Major (with beneficial)
Environmental justice and protection of children	Minor	Minor	Minor	Minor	Minor
Human health and safety	Moderate (with beneficial)	Moderate (with beneficial)	Moderate (with beneficial)	Moderate (with beneficial)	Moderate (with beneficial)

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Resource Area	Alternatives				
	No Action	Facilities Development and Improvement	Detection, Inspection, Surveillance, and Communications Technology Expansion	Tactical Security Infrastructure Deployment	Flexible Direction
Hazardous materials	Minor (with beneficial)	Minor	Minor	Minor	Minor
Utilities and infrastructure	Negligible	Negligible	Negligible	Negligible	Negligible
Roadways and traffic	Major	Major	Major	Major	Major
Recreation	Minor	Moderate	Moderate	Moderate	Moderate

PAGE INTENTIONALLY LEFT BLANK

MASTER TABLE OF CONTENTS

Executive Summary	ES-1
Master Table of Contents	I
Abbreviations	ABBR-1
Table of Contents	1-i
1 Introduction	1-1
1.1 Purpose of the PEIS	1-2
1.2 CBP Northern Border Activities	1-3
1.2.1 CBP Organization	1-3
1.2.2 Operational Perspective	1-4
1.2.3 CBP Northern Border Operations, Facilities, Tactical Infrastructure, and Technologies	1-7
1.3 Purpose and Need	1-17
1.3.1 Purpose of the Proposed Action	1-17
1.3.2 Need	1-18
1.4 Proposed Action and Alternatives	1-18
1.5 Other Considerations for Northern border planning	1-19
1.5.1 Policy and Budgetary Considerations	1-19
1.5.2 ongoing Interagency Cooperation	1-20
1.5.3 Compliance Framework	1-20
1.5.4 Permits, Approvals, and Interagency Coordination	1-21
1.5.5 Actions/Activities with Little or No Potential for Impact on the Environment.	1-22
1.5.6 Public Involvement	1-22
1.6 PEIS Cooperating and Coordinating Agencies	1-23
Table of Contents	2-i
2 Proposed Action and Alternatives	2-1
2.1 Proposed Action Alternatives	2-2
2.1.1 Descriptions of Alternatives	2-3
2.2 Activities to be Evaluated	2-5
2.3 No Action Alternative	2-8
2.4 Facilities Development and Improvement Alternative	2-10
2.5 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative (Preferred Alternative/Environmental Preferable Alternative)	2-11
2.6 Tactical Security Infrastructure Deployment Alternative	2-14
2.7 The Flexible Direction Alternative	2-14
2.8 Alternative Considered But Removed From Further Consideration	2-15
2.9 Summary Comparison of Action Alternatives	2-15
2.9.1 Other Mission Considerations	2-18
2.9.2 Environmental Stewardship and Social Responsibility	2-19
Table of Contents	3-i
3 Framework for Analysis	
3.1 Environmental Resource Areas Analyzed for Impacts	3-1

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

3.1.1 Methodology for Resource Analysis	3-2
3.1.2 Impact Determinations	3-3
3.2 Air Quality	3-4
3.2.1 Context for Affected Environment	3-4
3.2.2 Framework for Characterizing Resource Impacts	3-8
3.2.3 Activities with Environmental Consequences to Air Quality	3-9
3.3 Biological Resources	3-10
3.3.1 Context for Affected Environment	3-10
3.3.2 Framework for Characterizing Resource Impacts	3-13
3.3.3 Activities with Environmental Consequences to Biological Resources	3-14
3.4 Geology and Soils	3-15
3.4.1 Context for Affected Environment	3-15
3.4.2 Framework for Characterizing Resource Impacts	3-18
3.4.3 CBP Activities with Environmental Consequences to Geologic and Soil Resources	3-19
3.5 Water Resources	3-20
3.5.1 Context for Affected Environment	3-20
3.5.2 Framework for Characterizing Resource Impacts	3-21
3.5.3 Activities with Environmental Consequences to Water Resources	3-22
3.6 Noise	3-23
3.6.1 Context for Affected Environment	3-23
3.6.2 Framework for Characterizing Resource Impacts	3-24
3.6.3 Activities with Environmental Consequences to the environment	3-25
3.7 Climate Change and Sustainability	3-26
3.7.1 Context for Affected Environment	3-26
3.7.2 Framework for Characterizing Resource Impacts	3-28
3.7.3 Activities with Environmental Consequences to Climate Change and Sustainability	3-29
3.8 Land Use	3-29
3.8.1 Context for Affected Environment	3-29
3.8.2 Framework for Characterizing Resource Impacts	3-34
3.8.3 Activities with Environmental Consequences to Land Use	3-35
3.9 Aesthetic and Visual Resources	3-36
3.9.1 Context for Affected Environment	3-36
3.9.2 Framework for Characterizing Resource Impacts	3-40
3.9.3 Activities with Environmental Consequences to Aesthetic and Visual Resources	3-43
3.10 Socioeconomic Resources	3-43
3.10.1 Context for Affected Environment	3-43
3.10.2 Framework for Characterizing Resources Impacts	3-44
3.10.3 Activities with Environmental Consequences to Socioeconomic Resources	3-45
3.11 Cultural and Paleontological Resources	3-45
3.11.1 Context for Affected Environment	3-45
3.11.2 Framework for Characterizing Resource Impacts	3-45
3.11.3 Activities with Environmental Consequences to Cultural and Paleontological Resources	3-46

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

3.12 Environmental Justice and Protection of Children	3-46
3.12.1 Context for Affected Environment	3-46
3.12.2 Framework for Characterizing Resource Impacts	3-48
3.12.3 Activities with Environmental Consequences to Environmental Justice and Protection of Children	3-49
3.13 Human Health and Safety	3-49
3.13.1 Context for Affected Environment	3-49
3.13.2 Framework for Characterizing Resource Impacts	3-50
3.13.3 Activities with Environmental Consequences to Human Health and Safety	3-50
3.14 Hazardous and Other Regulated materials	3-51
3.14.1 Context for Affected Environment	3-51
3.14.2 Framework for Characterizing Resource Impacts	3-57
3.14.3 Activities with Hazardous and Other Regulated Materials Environmental Consequences	3-57
3.15 Utilities and Infrastructure	3-58
3.15.1 Context for Affected Environment	3-58
3.15.2 Framework for Characterizing Resource Impacts	3-59
3.15.3 Activities with Environmental Consequences to Utilities and Infrastructure	3-59
3.16 Roadways and Traffic	3-60
3.16.1 Context for Affected Environment	3-60
3.16.2 Framework for Characterizing Resource Impacts	3-60
3.16.3 Activities with Environmental Consequences to Transportation Resources	3-61
3.17 Recreation	3-61
3.17.1 Context for Affected Environment	3-61
3.17.2 Framework for Characterizing Resource Impacts	3-64
3.17.3 Activities with Environmental Consequences to Recreation Resources	3-65
Table of Contents	4-i
4 West of the Rockies Region	4-1
4.1 Introduction	4-1
4.2 Air Quality	4-4
4.2.1 Introduction	4-4
4.2.2 Affected Environment	4-4
4.3 Biological Resources	4-8
4.3.1 Introduction	4-8
4.3.2 Affected Environment	4-10
4.4 Geology and Soils	4-23
4.4.1 Introduction	4-23
4.4.2 Affected Environment	4-23
4.5 Water Resources	4-39
4.5.1 Introduction	4-39
4.5.2 Affected Environment	4-39
4.6 Noise	4-45
4.6.1 Introduction	4-45
4.6.2 Affected Environment	4-45
4.7 Climate Change and Sustainability	4-51

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

4.7.1 Introduction	4-51
4.7.2 Affected Environment	4-51
4.8 Land Use	4-54
4.8.1 Introduction	4-54
4.8.2 Affected Environment	4-54
4.9 Aesthetic and Visual Resources	4-68
4.9.1 Introduction	4-68
4.9.2 Affected Environment	4-68
4.10 Socioeconomic Resources	4-71
4.10.1 Introduction	4-71
4.10.2 Affected Environment	4-71
4.11 Cultural and Paleontological Resources	4-91
4.11.1 Introduction	4-91
4.11.2 Affected Environment	4-91
4.12 Environmental Justice and Protection of Children	4-108
4.12.1 Introduction	4-108
4.12.2 Affected Environment	4-108
4.13 Human Health and Safety	4-114
4.13.1 Introduction	4-114
4.13.2 Affected Environment	4-114
4.14 Hazardous and Otherwise Regulated materials	4-122
4.14.1 Introduction	4-122
4.14.2 Affected Environment	4-123
4.15 Utilities and Infrastructure	4-124
4.15.1 Introduction	4-124
4.15.2 Affected Environment	4-124
4.16 Roadways and Traffic	4-127
4.16.1 Introduction	4-127
4.16.2 Affected Environment	4-127
4.17 Recreation	4-133
4.17.1 Introduction	4-133
4.17.2 Affected Environment	4-135
Table of Contents	5-i
5 East of the Rockies Region	5-1
5.1 Introduction	5-1
5.2 Air Quality	5-4
5.2.1 Introduction	5-4
5.2.2 Affected Environment	5-4
5.3 Biological Resources	5-8
5.3.1 Introduction	5-8
5.3.2 Affected Environment	5-10
5.4 Geology and Soils	5-22
5.4.1 Introduction	5-22
5.4.2 Affected Environment	5-22
5.5 Water Resources	5-36

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

5.5.1 Introduction	5-36
5.5.2 Affected Environment	5-36
5.6 Noise	5-42
5.6.1 Introduction	5-42
5.6.2 Affected Environment	5-42
5.7 Climate Change and Sustainability	5-47
5.7.1 Introduction	5-47
5.7.2 Affected Environment	5-47
5.8 Land Use	5-49
5.8.1 Introduction	5-49
5.8.2 Affected Environment	5-49
5.9 Aesthetic and Visual Resources	5-65
5.9.1 Introduction	5-65
5.9.2 Affected Environment	5-65
5.10 Socioeconomic Resources	5-70
5.10.1 Introduction	5-70
5.10.2 Affected Environment	5-70
5.11 Cultural and Paleontological Resources	5-92
5.11.1 Introduction	5-92
5.11.2 Affected Environment	5-92
5.12 Environmental Justice and Protection of Children	5-110
5.12.1 Introduction	5-110
5.12.2 Affected Environment	5-110
5.13 Human Health and Safety	5-117
5.13.1 Introduction	5-117
5.13.2 Affected Environment	5-117
5.14 Hazardous Materials	5-127
5.14.1 Introduction	5-127
5.14.2 Affected Environment	5-128
5.15 Utilities and Infrastructure	5-129
5.15.1 Introduction	5-129
5.15.2 Affected Environment	5-129
5.16 Roadways and Traffic	5-132
5.16.1 Introduction	5-132
5.16.2 Affected Environment	5-132
5.17 Recreation	5-138
5.17.1 Introduction	5-138
5.17.2 Affected Environment	5-140
Table of Contents	6-i
6 Great Lakes Region	6-1
6.1 Introduction	6-1
6.2 Air Quality	6-4
6.2.1 Introduction	6-4
6.2.2 Affected Environment	6-4
6.3 Biological Resources	6-8

6.3.1 Introduction	6-8
6.3.2 Affected Environment	6-10
6.4 Geology and Soils	6-21
6.4.1 Introduction	6-21
6.4.2 Affected Environment	6-21
6.5 Water Resources	6-36
6.5.1 Introduction	6-36
6.5.2 Affected Environment	6-36
6.6 Noise	6-41
6.6.1 Introduction	6-41
6.6.2 Affected Environment	6-41
6.7 Climate Change and Sustainability	6-46
6.7.1 Introduction	6-46
6.7.2 Affected Environment	6-46
6.8 Land Use	6-48
6.8.1 Introduction	6-48
6.8.2 Affected Environment	6-48
6.9 Aesthetic and Visual Resources	6-66
6.9.1 Introduction	6-66
6.9.2 Affected Environment	6-66
6.10 Socioeconomic Resources	6-71
6.10.1 Introduction	6-71
6.10.2 Affected Environment	6-71
6.11 Cultural and Paleontological Resources	6-98
6.11.1 Introduction	6-98
6.11.2 Affected Environment	6-98
6.12 Environmental Justice and Protection of Children	6-123
6.12.1 Introduction	6-123
6.12.2 Affected Environment	6-123
6.13 Human Health and Safety	6-131
6.13.1 Introduction	6-131
6.13.2 Affected Environment	6-131
6.14 Hazardous and Otherwise Regulated Materials	6-140
6.14.1 Introduction	6-140
6.14.2 Affected Environment	6-141
6.15 Utilities and Infrastructure	6-142
6.15.1 Introduction	6-142
6.15.2 Affected Environment	6-142
6.16 Roadways and Traffic	6-145
6.16.1 Introduction	6-145
6.16.2 Affected Environment	6-145
6.17 Recreation	6-151
6.17.1 Introduction	6-151
6.17.2 Affected Environment	6-153

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

7 New England Region	7-1
7.1 Introduction	7-1
7.2 Air Quality	7-4
7.2.1 Introduction	7-4
7.2.2 Affected Environment	7-4
7.3 Biological Resources	7-8
7.3.1 Introduction	7-8
7.3.2 Affected Environment	7-10
7.4 Geology and Soils	7-18
7.4.1 Introduction	7-18
7.4.2 Affected Environment	7-18
7.5 Water Resources	7-30
7.5.1 Introduction	7-30
7.5.2 Affected Environment	7-30
7.6 Noise	7-36
7.6.1 Introduction	7-36
7.6.2 Affected Environment	7-36
7.7 Climate Change and Sustainability	7-41
7.7.1 Introduction	7-41
7.7.2 Affected Environment	7-41
7.8 Land Use	7-43
7.8.1 Introduction	7-43
7.8.2 Affected Environment	7-43
7.9 Aesthetic and Visual Resources	7-60
7.9.1 Introduction	7-60
7.9.2 Affected Environment	7-60
7.10 Socioeconomic Resources	7-65
7.10.1 Introduction	7-65
7.10.2 Affected Environment	7-65
7.11 Cultural and Paleontological Resources	7-85
7.11.1 Introduction	7-85
7.11.2 Affected Environment	7-85
7.12 Environmental Justice and Protection of Children	7-107
7.12.1 Introduction	7-107
7.12.2 Affected Environment	7-107
7.13 Human Health and Safety	7-114
7.13.1 Introduction	7-114
7.13.2 Affected Environment	7-114
7.14 Hazardous Materials	7-122
7.14.1 Introduction	7-122
7.14.2 Affected Environment	7-123
7.15 Utilities and Infrastructure	7-124
7.15.1 Introduction	7-124
7.15.2 Affected Environment	7-124
7.16 Roadways and Traffic	7-127
7.16.1 Introduction	7-127

7.16.2 Affected Environment	7-127
7.17 Recreation	7-133
7.17.1 Introduction	7-133
7.17.2 Affected Environment	7-135
Table of Contents	8-i
8 Environmental Consequences	8-1
8.1 Introduction	8-1
8.2 Environmental Consequences to Air Quality	8-4
8.2.1 No Action Alternative	8-5
8.2.2 Facilities Development and Improvement Alternative	8-7
8.2.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-11
8.2.4 Tactical Security Infrastructure Deployment Alternative	8-15
8.2.5 Flexible Direction Alternative	8-16
8.2.6 Best Management, Minimization, and Mitigation	8-19
8.2.7 Summary of Potential Impacts	8-20
8.3 Environmental Consequences to Biological Resources	8-22
8.3.1 No Action Alternative	8-24
8.3.2 Facilities Development and Improvement Alternative	8-33
8.3.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-37
8.3.4 Tactical Security Infrastructure Deployment Alternative	8-38
8.3.5 Flexible Direction Alternative	8-42
8.3.6 Best Management, Minimization, and Mitigation	8-42
8.3.7 Summary of Potential Biological Resources Impacts	8-48
8.4 Environmental Consequences to Geology and Soils	8-51
8.4.1 No Action Alternative	8-51
8.4.2 Facilities Development and Improvement Alternative	8-55
8.4.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-56
8.4.4 Tactical Security Infrastructure Deployment Alternative	8-57
8.4.5 Flexible Direction Alternative	8-58
8.4.6 Best Management, Minimization, and Mitigation	8-58
8.4.7 Summary of Potential Geology, Topography, and Soils Impacts	8-59
8.5 Environmental Consequences to Water Resources	8-62
8.5.1 No Action Alternative	8-63
8.5.2 Facilities Development and Improvement Alternative	8-68
8.5.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-70
8.5.4 Tactical Security Infrastructure Deployment Alternative	8-71
8.5.5 Flexible Direction Alternative	8-72
8.5.6 Best Management, Minimization, and Mitigation	8-74
8.5.7 Summary of Potential Water Resources Impacts	8-76
8.6 Environmental Consequences of Noise	8-79
8.6.1 No Action Alternative	8-79

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

8.6.2 Facilities Development and Improvement Alternative	8-79
8.6.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-83
8.6.4 Tactical Security Infrastructure Deployment Alternative	8-91
8.6.5 Flexible Direction Alternative	8-91
8.6.6 Best Management, Minimization, and Mitigation	8-93
8.6.7 Summary of Potential Noise Impacts	8-93
8.7 Environmental Consequences for Climate and Resource Sustainability	8-96
8.7.1 No Action Alternative	8-96
8.7.2 Facilities Development and Improvement Alternative	8-99
8.7.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-101
8.7.4 Tactical Security Infrastructure Deployment Alternative	8-102
8.7.5 Flexible Direction Alternative	8-102
8.7.6 Best Management, Minimization, and Mitigation	8-103
8.7.7 Summary of Impacts	8-106
8.8 Environmental Consequences to Land Use	8-108
8.8.1 No Action Alternative	8-109
8.8.2 Facilities Development and Improvement Alternative	8-114
8.8.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-114
8.8.4 Tactical Security Infrastructure Expansion Alternative	8-115
8.8.5 Flexible Direction Alternative	8-116
8.8.6 Best Management, Minimization, and Mitigation	8-116
8.8.7 Summary of Potential Impacts	8-117
8.9 Environmental Consequences to Aesthetic and Visual Resources	8-120
8.9.1 No Action Alternative	8-123
8.9.2 Facilities Development and Improvement Alternative	8-133
8.9.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-134
8.9.4 Tactical Security Infrastructure Deployment Alternative	8-135
8.9.5 Flexible Direction Alternative	8-135
8.9.6 Best Management, Minimization, and Mitigation	8-136
8.9.7 Summary of Impacts	8-138
8.10 Environmental Consequences to Socioeconomic Resources	8-140
8.10.1 No Action Alternative	8-153
8.10.2 Facilities Development and Improvement Alternative	8-158
8.10.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-159
8.10.4 Tactical Security Infrastructure Deployment Alternative	8-159
8.10.5 Flexible Direction Alternative	8-160
8.10.6 Best Management, minimization, and Mitigation	8-161
8.10.7 Summary of Potential Socioeconomic Impacts	8-162
8.11 Environmental Consequences To Cultural and Paleontological Resources	8-165
8.11.1 No Action Alternative	8-166
8.11.2 Facilities Development and Improvement Alternative	8-166

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

8.11.3	Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-167
8.11.4	Tactical Security Infrastructure Deployment Alternative	8-167
8.11.5	Flexible Direction Alternative	8-168
8.11.6	Best Management, Minimization, and Mitigation	8-168
8.11.7	Summary of Potential Impacts on Cultural and Paleontological Resources	8-168
8.12	Environmental Consequences to Environmental Justice and the Protection of Children	8-173
8.12.1	No Action Alternative	8-176
8.12.2	Facilities Development and Improvement Alternative	8-178
8.12.3	Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-180
8.12.4	Tactical Security Infrastructure Deployment Alternative	8-181
8.12.5	Flexible Direction Alternative	8-182
8.12.6	Best Management, Minimization, and Mitigation	8-184
8.12.7	Summary of Potential Impacts	8-185
8.13	Environmental Consequences to Human Health and Safety	8-188
8.13.1	No Action Alternative	8-189
8.13.2	Facilities Development and Improvement Alternative	8-205
8.13.3	Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-206
8.13.4	Tactical Security Infrastructure Deployment Alternative	8-207
8.13.5	Flexible Direction Alternative	8-208
8.13.6	Best Management, Minimization, and Mitigation	8-210
8.13.7	Summary of Potential Impacts	8-211
8.14	Environmental Consequences of Hazardous Materials	8-214
8.14.1	No Action Alternative	8-214
8.14.2	Facilities Development and Improvement Alternative	8-220
8.14.3	Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-222
8.14.4	Tactical Security Infrastructure Deployment Alternative	8-223
8.14.5	Flexible Direction Alternative	8-224
8.14.6	Best Management, Minimization, and Mitigation	8-224
8.14.7	Summary of Impacts	8-225
8.15	Environmental Consequences to Utilities and Infrastructure	8-229
8.15.1	No Action Alternative	8-230
8.15.2	Facilities Development and Improvement Alternative	8-234
8.15.3	Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-236
8.15.4	Tactical Security Infrastructure Deployment Alternative	8-237
8.15.5	Flexible Direction Alternative	8-237
8.15.6	Best Management, Minimization, and Mitigation	8-238
8.15.7	Summary of Potential Impacts	8-239
8.16	Environmental Consequences to Roadways and Traffic Resources	8-241
8.16.1	No Action Alternative	8-242

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

8.16.2 Facilities Development and Improvement Alternative	8-242
8.16.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-243
8.16.4 Tactical Security Infrastructure Deployment Alternative	8-246
8.16.5 Flexible Direction Alternative	8-246
8.16.6 Best Management, Minimization, and Mitigation	8-247
8.16.7 Summary of Potential Impacts	8-248
8.17 Environmental Consequences to Recreation Resources	8-250
8.17.1 No Action Alternative	8-251
8.17.2 Facilities Development and Improvement Alternative	8-261
8.17.3 Detection, Inspection, Surveillance, and Communications Technology Expansion Alternative	8-262
8.17.4 Tactical Security Infrastructure Deployment Alternative	8-263
8.17.5 Flexible Direction Alternative	8-264
8.17.6 Best Management, Minimization, and Mitigation	8-265
8.17.7 Summary of Potential Impacts	8-265
8.18 Cumulative Impacts	8-269
8.18.1 Introduction	8-269
8.18.2 Air Quality	8-269
8.18.3 Biological Resources	8-270
8.18.4 Geology and Soils	8-271
8.18.5 Water Resources	8-272
8.18.6 Noise	8-273
8.18.7 Climate and Resource Sustainability	8-274
8.18.8 Land Use	8-275
8.18.9 Aesthetics	8-276
8.18.10 Socioeconomics	8-277
8.18.11 Cultural and Paleontological Resources	8-278
8.18.12 Environmental Justice and the Protection of Children	8-279
8.18.13 Human Health and Safety	8-280
8.18.14 Hazardous Materials	8-283
8.18.15 Utilities and Infrastructure	8-283
8.18.16 Roadways and Traffic	8-287
8.18.17 Recreation	8-288
Table of Contents	9-i
9 Environmental Design and Planning Considerations	9-1
9.1 Introduction	9-1
9.2 Air Quality	9-2
9.3 Biological Resources	9-2
9.3.1 Mitigation for Impacts to General Wildlife and Habitat	9-2
9.3.2 Mitigation for Impacts to Wetlands and Aquatic Resources	9-2
9.3.3 Mitigation for Impacts to Protected Species	9-3
9.4 Geology and Soils	9-4
9.5 Water Resources	9-5
9.6 Noise	9-6

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

9.7 Climate Change and sustainability	9-7
9.8 Land Use	9-9
9.9 Aesthetic and Visual Resources	9-9
9.10 Socioeconomic Resources	9-11
9.11 Cultural and Paleontological Resources	9-11
9.12 Environmental Justice/Protection of Children	9-12
9.13 Human Health and Safety	9-12
9.14 Hazardous Materials	9-13
9.15 Utilities and Infrastructure	9-14
9.16 Roadways and Traffic	9-15
9.17 Recreation	9-15
Table of Contents	10-i
10 Future Planning and NEPA Compliance	10-1
10.1 NEPA Compliance	10-1
10.2 Future Planning	10-2
11 List of Preparers	11-1
12 References	12-1
13 Glossary	13-1
14 Index	14-1

ABBREVIATIONS

212	Laurentian Mixed Forest Province (ecoregion)
221	Eastern Broadleaf Forest (Oceanic) Province (ecoregion)
222	Eastern Broadleaf Forest (Temperate) Province (ecoregion)
242	Pacific Lowland Mixed Forest Province (ecoregion)
251	Prairie Parkland (Temperate) Province (ecoregion)
331	Great Plains Palouse Dry Steppe Province (ecoregion)
332	Great Plains Steppe Province (ecoregion)
342	Intermountain Semi-Desert Province (ecoregion)
ACM	asbestos-containing material
A.D.	Anno Domini
AEW	airborne early warning
AGL	above ground level
AIRFA	American Indian Religious Freedom Act
ALARA	as low as reasonably achievable
ANSI	American National Standards Institute
APE	area of potential effect
APHIS	Animal and Plant Health Inspection Service
APIS	Advance Passenger Information System
AQCR	Air Quality Control Region
ARPA	Archaeological Resources Protection Act
ARRA	American Recovery and Reinvestment Act of 2009
AT/FP	antiterrorism/force protection
ATV	all-terrain vehicle
A/V	audio visual (equipment or communication)
BACT	best available control technology
BHP	Bureau for Historic Preservation
BIA	Bureau of Indian Affairs (DOI)
BLM	Bureau of Land Management (DOI)
BLS	Bureau of Labor Statistics (DOL)
BMP	best management practice
BOR	Bureau of Reclamation (DOI)
BORTAC	Border Patrol Tactical Unit
BORSTAR	Border Patrol Search, Trauma and Rescue program
USBP	Border Patrol
B.P.	before present
BPF Guide	U.S. Border Patrol Facilities Design Guide

BPS	Border Patrol station
BTS	Bureau of Transportation Statistics (DOT)
C-E-Q	Causes-Effects-Questions
C-TPAT	Customs Trade Partnership against Terrorism
C&D	construction and demolition
ca.	circa
CAA	Clean Air Act
CASC	Customs Area Surveillance Center
CATEX	Categorical Exclusion
CBP	U.S. Customs and Border Protection
CBPO	U.S. Customs and Border Protection officer
CCEA	Canadian Council on Ecological Areas
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIPM	Center for Invasive Plant Management
CMA	census metropolitan area
CO	carbon monoxide
CO ₂	carbon dioxide
COA	Certificate of Waiver or Authorization process
COTS	commercial off-the-shelf
CPR	cardiopulmonary resuscitation
CRM	cultural resource management
CRT	communication relay tower
¹³⁷ Cs	cesium-137
CWA	Clean Water Act
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
dB	decibel
dBA	A-weighted decibel
dBC	C-weighted decibel
DHS	Department of Homeland Security
DMM	discarded military munitions
DNL	day-night sound level
DNR	Department of Natural Resources
DOC	U.S. Department of Commerce
DOD	U.S. Department of Defense

DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EED	Environmental and Energy Division (CBP)
EIS	Environmental Impact Statement
EM	electromagnetic
EMS	environmental management system
EO	Executive Order
EOE	Encyclopedia of Earth
EOR	East of the Rockies
USEPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESP	Electronics Stewardship Plan
FAA	Federal Aviation Administration (DOT)
FAR	Federal Acquisition Regulation
FAST	Free and Secure Trade program
fc	foot candles
FCA	full compliance audit
FCC	Federal Communications Commission
FDA	U.S. Food and Drug Administration (U.S. Department of Health and Human Services)
FEC	Federal Electronics Challenge
FEMA	Federal Emergency Management Agency
FEMP	Federal Energy Management Program
FL	flight level
FLETC	Federal Law Enforcement Training Center
FLIR	forward-looking infrared radar
FM&E	Facilities Management and Engineering (CBP)
FOB	forward operating base
FONSI	Finding of No Significant Impact
FP&F	finances, penalties, and forfeitures
FPEIS	Final Programmatic Environmental Impact Statement
FPPA	Farmland Protection Policy Act
ft	foot
FY	Federal fiscal year
GAO	U.S. Government Accountability Office

GCR	General Conformity Rule
GDP	gross domestic product
GHG	greenhouse gas
GHz	Gigahertz
GIS	geographic information system
GFAFB	Grand Forks Air Force Base
GSA	U.S. General Services Administration
HAP	hazardous air pollutant
HEXRIS	High-Energy X-Ray Inspection System
HH&S	human health and safety
HPSB	high-performance sustainable building
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
IAFIS	Integrated Automated Fingerprint Identification System
IBET	Integrated Border Enforcement Team
ICE	U.S. Immigration and Customs Enforcement
ID	Idaho
IDA	intentional destructive act
IDFG	Idaho Fish and Game
IEEE	Institute of Electrical and Electronics Engineers
IL	Illinois
IN	Indiana
IPCC	Intergovernmental Panel on Climate Change
kW	kilowatt
LBP	lead-based paint
LEED	Leadership in Energy and Environmental Design
Leq	equivalent sound level
linac	linear accelerator
LOS	level of service
LPOE	land port of entry
LPOE Guide	U.S. Land Port of Entry Design Guide
LRT	long-range tracker
LSU	Louisiana State University
MBTA	Migratory Bird Treaty Act
MC	munitions constituents
MDA	Maritime Domain Awareness
ME	Maine
MEC	munitions and explosives of concern

mgd	million gallons per day
MHPC	Maine Historic Preservation Commission
MI	Michigan
MMBtu/hr	million British thermal units per hour
MMPA	Marine Mammal Protection Act
MN	Minnesota
MNDOT	Minnesota Department of Transportation
MOU	memorandum of understanding
MPE	maximum permissible exposure
mph	miles per hour
MRLC	Multi-Resolution Land Characteristics Consortium
MRZ	machine-readable zone
MSA	metropolitan statistical area
MSS	mobile surveillance system
MT	Montana
MT FWP	Montana Fish, Wildlife and Parks
NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement
NAGPRA	Native American Graves Protection & Repatriation Act
NAS	National Airspace, National Airspace System
National Register	National Register of Historic Places
ND	North Dakota
NDGFD	North Dakota Game and Fish Department
NDSHPO	North Dakota State Historic Preservation Office
NE	New England
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NEPA	National Environmental Policy Act
NEXUS	[Not an acronym. A NEXUS card is a kind of travel document.]
NF	National Forest
NH	New Hampshire
NHFGD	New Hampshire Fish and Game Department
NHPA	National Historic Preservation Act
NII	nonintrusive inspection
NLCD	National Land Cover Database
NMFS	National Marine Fisheries Service (NOAA)
NNSR	nonattainment new source review (under the Clean Air Program)
NO ₂	nitrogen dioxide
NOAA	National Oceanic Atmospheric Administration

NOB	Northern Border
NOHVCC	National Off-Highway Vehicle Conservation Council
NOI	Notice of Intent
NP	National Park
NPDES	National Pollutant Discharge Elimination System
NRA	National Recreation Area
NPS	National Park Service (DOI)
NRC	Natural Resources Canada, Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service (USDA)
NRHP	National Register of Historic Places
NRL	National Register listed
NSPS	New Source Performance Standards
NSR	new source review
NTIA	National Telecommunications and Information Administration (DOC)
NWR	National Wildlife Refuge
NY	New York
O ₃	ozone
OA	Office of Administration (CBP)
OAM	Office of Air and Marine (CBP)
OES	Occupational Employment Statistics Survey
OFO	Office of Field Operations
OH	Ohio
OHDNR	Ohio Department of Natural Resources
OHV	off-highway vehicle
OIC	Operational Integration Centers
OIT	Office of Information Technology
ORV	off-road vehicle
OSHA	Occupational Safety and Health Act, Occupational Safety and Health Administration
OSPP	Operational Sustainability Performance Plan
OTIA	Office of Technology, Innovation, and Acquisition
PA	Pennsylvania
Pb	lead
PCBs	polychlorinated biphenyls
PEIS	Programmatic Environmental Impact Statement
PM	particulate matter
PM _{2.5}	Particulate matter with an aerodynamic diameter of 2.5 microns or less
PM ₁₀	Particulate matter with an aerodynamic diameter of 10 microns or less

POL	petroleum, oil, and lubricants
POV	privately owned vehicle
PRD	personal radiation detector
PRPA	Paleontological Resources Preservation Act
PSD	prevention of significant deterioration
POE	port of entry
PTE	potential to emit
R&A	repairs and alterations
RCRA	Resource Conservation and Recovery Act
REC	Record of Environmental Consideration
RF	radio frequency
RFID	radio-frequency identification devices
RIID	radiation isotope identification device
ROD	Record of Decision
RV	recreational vehicle
ROW	right of way
RVSS	remote video surveillance system
SARA	Species at Risk Act (Canada)
SAV	submerged aquatic vegetation
SBI	Secure Border Initiative
SDWA	Safe Drinking Water Act
SEL	sound exposure level
SEQRA	State Environmental Quality Review Act
sf	square feet
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SOW	scope of work
SUV	sport-utility vehicle
SVP	Society of Vertebrate Paleontology
SWMA	State Wildlife Management Area
SWPPP	storm water pollution prevention plan
T&E	threatened and endangered (species)
TCP	traditional cultural property
THPO	Tribal Historic Preservation Officer
TNC	The Nature Conservancy
tpy	tons per year
TR	thematic resource

TSCA	Toxic Substances Control Act
U.S.	United States
UAS	unmanned aircraft system
UAV	unmanned aerial vehicle
UESC	utility energy service contract
UGS	unattended ground sensor
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USBP	U.S. Border Patrol
USC	U.S. Code
USCB	U.S. Census Bureau
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service (USDA)
USFWS	U.S. Fish and Wildlife Service
USGBC	U.S. Green Building Council
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geological Survey
UXO	unexploded ordnance
VDHP	Vermont Division for Historic Preservation
VOC	volatile organic compound
VRM	visual resource management
VT	Vermont
WA	Washington (State)
WDFW	Washington Department of Fish and Wildlife
WAC	Washington Administrative Code
WHTI	Western Hemisphere Travel Initiative
WI	Wisconsin
WIDNR	Wisconsin Department of Natural Resources
WMA	Wildlife Management Area
WOR	West of the Rockies
WWF	World Wildlife Fund
⁶⁰ Co	cobalt-60

ABBREVIATIONS (IN APPENDICES ONLY)

AC	
ACE	Automated Commercial Environment
ACEC	Areas of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
AHPD	Archeology and Historic Preservation Division
ANR	Agency of Natural Resources
B.C.	Before Christ
CARMA	Cultural Architectural Resources Management Archive
CCC	Civilian Conservation Corps
CCD	Coastal Consistency Determination
CLG	Certified Local Government
CRIS	Cultural Resource Information System
C-TPAT	Customs Trade Partnership against Terrorism
CRABS	Cultural Resources Annotated Bibliography System
CRGIS	Cultural Resources Geographic Information System
CSI	Container Security Initiative
CZM	Coastal Zone Management
DAHP	Department of Archeology and Historic Preservation
DEP	Department of Environmental Protection
DEQ	Department of Environmental Quality
EPCRA	Emergency Planning and Community Right-to-Know Act
FMP	Forest Management Plan
GM	General Motors
GOIA	Governor's Office of Indian Affairs
GRANIT	New Hampshire online mapping tool
HBC	Hudson Bay Company
IDEM	Indiana Department of Environmental Management
IDNR	Indiana Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
ISHS	Idaho State Historical Society
M212	Adirondack New England Mixed Forest Coniferous Forest Alpine Meadow Province (ecoregion)
M242	Cascade Mixed Forest Coniferous Forest Alpine Meadow Province (ecoregion)
M332	Middle Rocky Mountain Steppe Coniferous Forest Alpine Meadow Province
M333	Northern Rocky Mountain Steppe Coniferous Forest Alpine Meadow Province

MHS	Minnesota Historical Society, Montana Historical Society
MOA	Memorandum of Agreement
MPS	multiple property submissions
MSHDA	Michigan State Housing Development Authority
NAGPRA	Native American Graves Protection & Repatriation Act
NDCRS	North Dakota cultural resource database
NDDH	North Dakota Department of Health
NHDHR	New Hampshire Division of Historical Resources
NHL	National Historic Landmark
NHP	National Heritage Partnership
NRPA	National Resources Protection Act
NTC	National Targeting Center
NYAC	New York Archeological Council
NYCRR	New York Code of Rules and Regulations
NYDEC	New York Department of Environmental Conservation
NYOPRHP	New York Office of Parks, Recreation & Historic Preservation
OEPA	Ohio Environmental Protection Agency
OHPO	Ohio Historic Preservation Office
OHS	Ohio Historical Society
OHSPAB	Ohio Historic Site Preservation Advisory Board
OPLMA-PRP	Omnibus Public Land Management Act, Subtitle D, “Paleontological Resources Preservation”
OSA	Office of the State Archeologist
PS	Paleontological Society
PSA	paleontological study area
PHMC	Pennsylvania Historical & Museum Commission
RCW	Revised Code of Washington
RHA	Rivers and Harbors Act
RMP	resource management planning
RPR	request for project review
SENTRI	Secure Electronic Network for Travelers Rapid Inspection
SHSND	State Historic Society of North Dakota
SLRU	Sensitivity Level Rating Units (BLM)
SMP	Shoreline Master Program
SPGP	State Program General Permit
SVP	Society of Vertebrate Paleontology
SQRU	Scenic Quality Rating Units (BLM)
T&E	threatened and endangered (species)

THPO	Tribal Historic Preservation Officer
TR	Thematic Resource
UCMP	University of California Museum of Paleontology
US-VISIT	United States Visitor and Immigrant Status Indication Technology
VSA	Vermont Statutes Annotated
VRM	Visual Resource Management (BLM)
WA DFW	Washington Department of Fish and Wildlife
WHPD	Wisconsin Historical Preservation Database
WHS	Wisconsin Historical Society
WISAARD	Washington Information System for Architectural and Archaeological Research Data
WPA	Works Progress Administration
WSR	Wild and Scenic River

PAGE INTENTIONALLY LEFT BLANK

Final

Programmatic Environmental Impact Statement For Northern Border Activities

Section 1: Introduction



July 2012