



**Environmental Impact Statement
for BRAC 95 Disposal and Reuse
of Property at the
Seneca Army Depot Activity, New York**



Prepared for
US Army Materiel Command

and Cooperating Agencies
New York State Department of Environmental Conservation

and
Seneca County, New York

by
**US Army Corps of Engineers
Mobile District**

with Technical Assistance from
**Tetra Tech, Inc.
Fairfax, Virginia**

March 1998

ENVIRONMENTAL IMPACT STATEMENT ORGANIZATION

This Environmental Impact Statement (EIS) addresses the proposed action of disposal and reuse of the Seneca Army Depot Activity, Romulus, New York. As required by AR 200-2 and the National Environmental Policy Act, the potential environmental and socioeconomic impacts are analyzed.

An **EXECUTIVE SUMMARY** briefly describes the proposed action, environmental and socioeconomic consequences, and proposed mitigation measures.

SECTION 1.0 PURPOSE, NEED, AND SCOPE summarizes the purpose of and need for the proposed action and describes the scope of the environmental impact analysis process.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION describes the proposed action of disposal and reuse of the Seneca Army Depot Activity.

SECTION 3.0 ALTERNATIVES CONSIDERED examines alternatives for implementing the proposed action.

SECTION 4.0 AFFECTED ENVIRONMENT describes the existing environmental and socioeconomic setting of the Seneca Army Depot Activity.

SECTION 5.0 ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES identifies potential environmental and socioeconomic effects of implementing the proposed action.

SECTION 6.0 LIST OF PREPARERS identifies persons who prepared the document and their areas of expertise.

SECTION 7.0 DISTRIBUTION LIST indicates recipients of this EIS.

SECTION 8.0 REFERENCES provides bibliographical information for cited sources.

SECTION 9.0 PERSONS CONSULTED provides a listing of persons and agencies consulted during preparation of this EIS.

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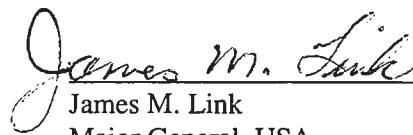


**ENVIRONMENTAL IMPACT STATEMENT
DISPOSAL AND REUSE
SENECA ARMY DEPOT ACTIVITY**

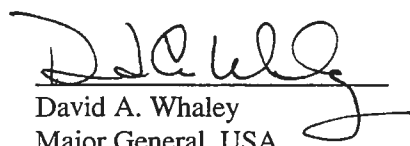
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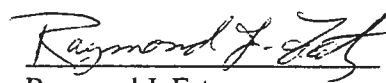

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ENVIRONMENTAL IMPACT STATEMENT

LEAD AGENCY: U.S. Army Materiel Command

COOPERATING AGENCIES: New York State Department of Environmental Conservation and Seneca County, New York

TITLE OF PROPOSED ACTION: Disposal and Reuse of the Seneca Army Depot Activity, Romulus, New York

AFFECTED JURISDICTION: Seneca County and the city of Geneva (located in Ontario County), New York

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APPROVED BY: Raymond J. Fatz, Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health)

ABSTRACT: This Environmental Impact Statement addresses actions directed by the Defense Base Closure and Realignment Commission: disposal of approximately 10,594 acres of property made available by the closure of Seneca Army Depot Activity and no longer needed. Two disposal alternatives (encumbered and unencumbered) are presented and evaluated in this environmental analysis, as are three reuse scenarios representing low, medium-low, and medium intensity reuse. In addition to the proposed action, a no action alternative, with the property remaining in caretaker status, is evaluated. Other alternatives are discussed but not analyzed because they were considered infeasible. The effects of the proposed action on the environment and on social and economic systems are analyzed in the document. Implementation of the preferred action (encumbered disposal) would be expected to result in significant beneficial and adverse impacts on land use, infrastructure, and biological resources under the disposal and reuse alternatives.

REVIEW COMMENT DEADLINE: Public comments may be provided to Mr. Hugh McClellan at the Corps of Engineers, Mobile District (ATTN: SAMPD), P.O. Box 2288, Mobile, Alabama 36628-0001, or by facsimile at (334) 690-2605.

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EXECUTIVE SUMMARY

INTRODUCTION

The 1995 Base Closure and Realignment Commission (BRAC 95) made recommendations for realignment and closure actions for military installations. On July 13, 1995, the President of the United States approved the BRAC 95 Commission's recommendations. The United States Congress reviewed the recommendations, and they became law on September 28, 1995. Among the actions recommended by the BRAC 95 Commission was closure of the Seneca Army Depot Activity (SEDA) except for the retention of an enclave for the storage of hazardous materials and ores. This Environmental Impact Statement (EIS) analyzes the disposal and subsequent reuse of the BRAC property at SEDA.

BACKGROUND

SEDA is located on 10,594 acres of land in the Finger Lakes region of central upstate New York, to the south of Interstate 90, approximately equidistant from Rochester and Syracuse. Except for the enclave area, which encompasses about 30 acres, to be used for the storage of hazardous materials and ores, the entire installation, and improvements to it, were identified through the BRAC process as surplus to Department of Defense (DoD) needs. Closure of the BRAC property at SEDA, except for the retained enclave, is required by no later than July 13, 2001.

PROPOSED ACTION

The proposed action is the disposal of SEDA land and facilities. Redevelopment planning by others is treated as a secondary action resulting from disposal. Laws and regulations applicable to the proposed action include the Defense Base Closure and Realignment Act of 1990; the Federal Property and Administrative Services Act of 1949; DoD Base Closure Regulations implementing the Pryor Amendment, now at 32 CFR 174-176; and the Federal Property Management Regulations. Other major influences on the disposal and reuse of BRAC property at SEDA include federal statutes such as the Community Environmental Response Facilitation Act; Clean Air Act; Clean Water Act; Comprehensive Environmental Response, Compensation, and Liability Act; Endangered Species Act; National Historic Preservation Act; and Resource Conservation and Recovery Act. These laws impose standards for environmental compliance and planning and help to ensure the consideration of environmental values in the property transfer and reuse planning process. Issues related to implementation of actions consistent with the numerous relevant Executive orders pertaining to this BRAC action are also considered in the EIS.

DISPOSAL PROCESS

Methods available to the Army for property disposal include transfer to another federal agency, public benefit discount conveyance, economic development conveyance (EDC), negotiated sale, and competitive sale. The real estate screening process first invites expressions of interest by DoD and

other federal agencies, then the Seneca Army Depot Local Redevelopment Authority¹ (SEDLRA), state and local authorities, and homeless providers. Prior to disposal, the Army will complete an Environmental Baseline Survey to describe the environmental conditions of the property. The Army will prepare a report that identifies uncontaminated parcels, as required by the Community Environmental Response Facilitation Act.

Where closure and disposal are involved, the remediation or cleanup of contaminated sites is required under the Army's Installation Restoration Program. This program is separate from the National Environmental Policy Act process, but also includes public involvement and often occurs simultaneously during disposal of installation property. Remediation activities to occur prior to disposal of SEDA include cleanup of sites contaminated as a result of previous actions related to hazardous materials/hazardous waste handling and disposal. SEDA was placed on the National Priorities List in March of 1989. A Federal Facilities Agreement pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act involving the Army, the U.S. Environmental Protection Agency, and the state of New York, guides cleanup of SEDA's contaminated sites.

As a result of the BRAC screening process, the Army proposes to dispose of approximately 292 acres to the U.S. Coast Guard for continued use as a LORAN-C antenna station. The remainder of the installation, less those portions required for the enclave directed by the BRAC Commission, is available to the Seneca County Industrial Development Agency (SCIDA) for redevelopment in accordance with the SEDLRA reuse plan.

Based on the foregoing transfer and enclave establishment, 10,272 acres will be available for transfer or conveyance to the SCIDA. Expressions of interest in areas available to the SCIDA have been received from the following: there have been discussions with the New York State Department of Environmental Conservation's (NYSDEC) Division of Fish and Wildlife about possible interest in using the Ammunition Storage Area as a managed conservation and recreational area—there is no commitment from them at this time; the New York Army National Guard, interested in acquiring three warehouses within the Warehouse and Distribution Area; a private rail corporation, interested in using of the Warehouse and Distribution Area and distribution facilities in the Administrative Area; the Finger Lakes Law Enforcement Academy, interested in using the Airfield/Special Events Site for training of police and emergency personnel; the New York State Office of Parks, Recreation, and Historic Preservation (Finger Lakes Region) and the Finger Lakes Law Enforcement Academy in using the Training Area for firearms training; and a national youth soccer organization, interested in using the Institutional Area for training, summer camps, and regional tournaments.

The SEDLRA reuse plan, as amended, would seek transfer or conveyance of six of the seven areas at SEDA identified for redevelopment (i.e., all but the Conservation/Recreation Area). The amended reuse plan also identifies a 110-acre parcel adjacent to the Warehouse and Distribution Area and the Planned Office/Industrial Development (PID) Area for possible construction of a state prison.

¹The Seneca Army Depot Local Redevelopment Authority subsequently became the Seneca Army Depot Local Redevelopment Advisory Committee. Implementation of reuse plan actions will be conducted by the Seneca County Industrial Development Agency.

The SEDLRA would seek conveyance of these six areas through a no-cost rural EDC. Following conveyance through an EDC from the Army, the SCIDA would sell the Lake Housing Area and use proceeds of that transaction to fund operating and maintenance expenses for redevelopment of the PID Area. Other areas in the reuse plan could be sought, through various types of public benefit conveyances, by entities expressing interest in them, or the Army could sell portions of the property or retain them in caretaker status.

ALTERNATIVES

Immediately following closure (no later than July 13, 2001), the Army will place the property to be disposed of in caretaker status until transfer or conveyance occurs. The environmental effects of no action, with the property remaining indefinitely in caretaker status, are also evaluated. For property disposal, encumbrances may restrict certain future uses. Two disposal alternatives (encumbered and unencumbered) are presented and evaluated in this EIS. Three reuse scenarios (low, medium-low, and medium intensity), which are broad enough to encompass the community's reuse plan, are also discussed and evaluated.

ENVIRONMENTAL CONSEQUENCES

The No Action Alternative. The no action alternative would result in both minor beneficial and minor adverse impacts on the human and natural environment. The elimination of mission activities and greatly reduced human presence on the BRAC property during caretaker status would have minor beneficial effects on air quality, noise, geology, water, and hazardous and toxic substances. Minor adverse effects would be expected for economic development, sociological environment, and quality of life. Land use, infrastructure, biology, and cultural resources would experience both minor beneficial and minor adverse effects during caretaker status. Climate, permits and regulatory authorizations, legacy resources, and installation agreements would not be affected by implementation of the no action alternative.

The no action alternative would be expected to result in long-term minor adverse cumulative effects on the installation and surrounding area. Deterioration would set in if the property were to remain in caretaker status more than ten years. Factors contributing to deterioration would include reduced infrastructure maintenance, reduced building maintenance and repair, and decreased personnel on site (which could lead to increased vandalism). Deterioration could discourage private sector investment and delay redevelopment of the portions of the site that have economic potential, thereby delaying replacement of job losses brought about by the closure of SEDA.

Encumbered Disposal. The imposition of encumbrances for access easements, asbestos-containing material, easements and rights-of-way, groundwater use prohibition, historical resources, lead-based paint, remedial activities, unexploded ordnance (UXO), and wetlands would result in both minor beneficial and minor adverse impacts on the human and natural environment. Land use would be either adversely or beneficially affected by encumbering the property, depending on how members of the community view it. Where land use is viewed as development of real estate to its highest and best economic use, encumbrances related to historical resources, remedial activities, UXO, and wetlands would impair development of SEDA. However, the tendency for these encumbrances to deny development of SEDA would maintain and even increase the amount of lands within the region associated with conservation and preservation of environmental resources such as wildlife and

significant habitat. Economic development would also be both beneficially and adversely affected by encumbered disposal. At specific sites requiring remediation of hazardous substances, the remedial activities encumbrance would allow economic development activities to begin immediately, having a beneficial effect on local sales volume, employment, and income. Restrictive covenants prohibiting land uses that would eliminate or degrade wetlands would limit the potential reuse of areas surrounding the wetlands, resulting in an adverse impact on sales volume, employment, and income.

Air quality, soils, water resources, infrastructure, biological resources, the sociological environment, and quality of life would all be beneficially affected by implementation of the various encumbrances. Climate, hazardous and toxic substances, permits and regulatory authorizations, cultural resources, and legacy resources would be unaffected by implementation of the preferred alternative.

Remedial activities would have short-term adverse impacts on noise. Cultural resources could be indirectly adversely affected if following property transfer the new owner sought to lessen or remove the preservation deed restriction, resulting in loss or degradation of properties eligible for the National Register of Historic Places. Installation agreements would also be indirectly adversely affected.

Encumbered disposal would be expected to result in long-term minor beneficial cumulative impacts. The essence of disposal is the transfer of ownership and management of assets (real property and its natural resource components) from the Army to state and local government and the private sector. The Army's inclusion of encumbrances would result in positive effects on people and the land as future activities occurred.

Unencumbered Disposal. Unencumbered disposal would have some beneficial impacts related to land use and economic gain. Removal of land use prohibitive covenants (e.g., restrictions for wetlands, historical resources, UXO) would have beneficial economic impacts. In most cases, however, the removal of encumbrances would result in adverse impacts on the natural and human environment. Removal of the UXO encumbrance would require the detonation of UXO before transfer of the property. This would have short-term adverse impacts on noise, soils (including prime and unique farmland), microtopography, and habitat. Removal of the wetlands encumbrance would have long-term adverse impacts on biological resources and on water and habitat quality. Removal of the historical resources encumbrance would have long-term adverse effects on cultural resources. Removal of the remedial activities encumbrance would require that all remedial activities be completed before property transfer. This would forestall reuse and delay economic revitalization within the community. The elimination of access easements and rights-of-way could unduly burden management of resources and make cleanup activities difficult if not impossible. Removal of the asbestos and lead-based paint encumbrances would pose human health and safety risks.

Unencumbered disposal would be expected to result in long-term minor adverse cumulative impacts. Transfer or conveyance of SEDA property without encumbrances could place human health and safety at risk, could cause loss of cultural resources, and could unduly burden management of resources. Such risks and losses would reduce the value of the property, possibly to such an extent that private sector entities would seek other properties for their endeavors and, thereby, not replace the jobs lost as a result of closure of the installation.

Reuse Alternatives. Medium intensity reuse of SEDA would result in significant adverse impacts on land use. Reuse of SEDA at such an intensity level, representing greater amounts of built space and

higher levels of employment, would be inconsistent with adjacent agricultural and recreational land uses and would be incompatible with planned uses of portions of the installation for conservation management and recreation. Reuse of the installation at less than medium intensity would not present such significant impacts.

Medium intensity reuse of the installation would also result in significant adverse impacts on infrastructure by exceeding the capacities of the potable water system and wastewater treatment system. Reuse of the installation at less than medium intensity would not present such significant impacts.

Disposal and reuse of SEDA would result in a variety of lesser beneficial and adverse impacts, both short-term and long-term. Table ES-1 provides a graphic summary of the impacts on the 16 resource areas examined in the EIS.

MITIGATION SUMMARY

No Action Alternative. As discussed in Section 5.2, the no action alternative could, or in some areas would, be expected to, create impacts adversely affecting land use, infrastructure, installation agreements, and economic development.










The longer SEDA were to remain in caretaker status, the greater would be the potential for the predicted adverse impacts to affect various resources. The Army would implement the following mitigation measures to reduce or avoid adverse impacts associated with caretaker status as they might occur:

- Conduct installation security and maintenance operations to the extent provided by Army policies and regulations for the duration of the caretaker period, and transfer responsibilities for these functions to non-Army entities as soon as practicable to minimize disruption of service.
- Identify clean or remediated portions of the installation for disposal and reuse and prioritize restoration and cleanup activities to ensure timely disposal and reuse of remaining portions. Recycle solid wastes and debris where practicable.
- Maintain necessary natural resources management measures, including continued close coordination with other federal agencies such as the U.S. Fish and Wildlife Service and state agencies such as NYSDEC.
- Maintain perimeter fence and continue the controlled hunt of the deer herd, including white deer.
- Actively support interim leasing arrangements, where environmental restoration efforts permit, to provide for job creation, habitation and maintenance of structures, and rapid reuse of the installation.

**Table ES-1
Impacts Summary**

Resource Areas	No Action			Disposal			Reuse					
	Caretaker - Direct	Caretaker - Indirect	Cumulative Impacts	Encumbered Direct	Unencumbered Direct	Cumulative Impacts	Medium Intensity Direct	Medium Intensity Indirect	Medium-Low Intensity Direct	Low Intensity Direct	Low Intensity Indirect	Cumulative Impacts
Land Use	+	-		-	+	-	-	-				+
Climate												
Air Quality	+	+		+			-	-	-	-		
Noise	+	+		-			-	-	-	-		
Geology		+		+	+	-	+	-	-	-	-	-
Water Resources		+		+	+	-	-	-	-	-	-	-
Infrastructure	-	+	-	+	-	-	+	-	-	-		
Hazardous & Toxic Subs.	+			+	+	-						
Permits & Reg. Auths.							-					
Biological Resources	+	+		+	+	-	+	-	+	-	-	-
Cultural Resources	+	-		-	-	-	+					
Legacy Resources												
Economic Development	-	-	-	+	+	-	+	+	+	+	+	+
Sociological Environment	-			+	+	-	-					
Quality of Life	-			+	+	-	-	-				
Installation Agreements	-											

Impacts Legend

-  Long-term Minor Beneficial Impact
 -  Short-term Minor Adverse Impact
 -  Long-term Significant Adverse Impact
 -  Short-term Minor Beneficial Impact
 -  Long-term Significant Beneficial Impact
 -  Short-term Significant Adverse Impact
 -  Long-term Minor Adverse Impact
 -  Short-term Significant Beneficial Impact
 -  No Impacts Expected
- E - Encumbered Disposal U - Unencumbered Disposal

Disposal. To avoid, reduce, or compensate for adverse impacts that might occur as a result of disposal, the Army would do the following:

- Continue to work with local entities to identify available options for the use of buildings and grounds having dependent utility systems.
- Continue to work with the SCIDA (or with Seneca County) to ensure that, to the maximum extent feasible, encumbered disposal transactions are consistent with the adopted community reuse plan and implementation strategy.
- Prior to final disposal, conduct complete cultural resources surveys of SEDA property to the maximum extent possible so as to ensure no adverse effects on the resources that might be present.
- Until final disposal, maintain installation buildings, infrastructure, and natural resources in caretaker status to the extent provided by Army policy and regulations.

Conveyance documents would notify future owners of the property of particular obligations concerning natural and cultural resources that would be imposed as a result of the Army's determination of the applicability of an encumbrance. Conveyance documents would also identify past hazardous substance activities at each site, as required by Comprehensive Environmental Response, Compensation, and Liability Act and Community Environmental Response Facilitation Act.

Reuse. The Army does not propose the implementation of specific mitigation actions for intensity-based reuse scenarios. This is appropriate because reuse planning and execution of redevelopment actions are the responsibility of non-Army entities. The following general mitigation actions could be implemented by other parties for the reduction, avoidance, or compensation of impacts resulting from their actions. Potential mitigation actions are suggested for those resource areas most likely to be affected by adverse impacts as a result of reuse.

- **Land use.** Adverse impacts associated with development of SEDA to a level of intensity equal to an MIR could be at least partially reduced through sound site planning and design and creation of appropriate buffer zones. County and town officials could also evaluate the desirability of establishing land use zoning mechanisms to provide for orderly growth throughout the ROI.
- **Air quality.** The permit process established in the Clean Air Act provides effective controls over potential stationary air emission sources. Adherence to the State Implementation Plan's provisions for mobile sources could address that source category. Additional mechanisms, such as application of best management practices to control fugitive dust during construction, could be used to control airborne contaminants.
- **Water resources.** Application of best management practices to reduce sediment loading to surface waters could aid in reducing impacts on water quality. Construction of stormwater detention/retention systems could help mitigate impacts associated with stormwater runoff from impervious surfaces.

- *Geology.* Loss of prime agricultural soils should be minimized. Disturbance of highly erodible soils should be avoided wherever possible. Should these or other soil types be disturbed, desilting basins, sediment traps, silt fences, straw barriers, and other erosion control measures could be constructed.
- *Biological resources.* Adverse impacts on biological resources would occur primarily as a result of construction. Two principal measures for conservation of significant biological resources are ensuring consultation with natural resources experts and regulatory agencies prior to initiating actions and implementing best management practices in association with approved construction projects. Operational controls could also be applied to minimize any adverse effects of noise and light on sensitive biological resources. Preservation of the herd of white deer could be achieved by future landowners' maintenance of the fence around the present ammunition storage area and by application of best management practices such as periodically conducting controlled hunts in a manner similar to that practiced by the Army during its stewardship of the property. If active management measures were not continued, it is expected that the herd would likely cease to exist as a viable population.

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SECTION 1.0: PURPOSE, NEED, AND SCOPE

1.1 PURPOSE AND NEED

The Department of the Army is reducing its force structure in response to changing security requirements, resulting in fewer installations being needed. As the Army reduces, activities are being realigned and consolidated with maximum readiness to the most efficient installations capable of projecting and sustaining combat power in support of national military objectives.

Recommendations of the Defense Base Realignment and Closure (BRAC) Commission made in conformance with the provisions of the Base Closure and Realignment Act of 1990 (1990 Base Closure Act), Public Law 101-510, as amended, require the closure of Seneca Army Depot Activity, New York, except for an enclave to store hazardous (strategic) material and ores. The BRAC property at the installation is excess to Army military needs and will be disposed of according to applicable laws, regulations, and national policy. Pursuant to the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations, the Army has prepared this Environmental Impact Statement (EIS), which addresses the environmental and socioeconomic impacts of disposing of the property and reasonable, foreseeable reuse alternatives.

To recommend closure and realignment actions, the military services used criteria established by the Secretary of Defense and approved by Congress, as well as a force structure plan provided by the Joint Chiefs of Staff. The evaluation criteria used were military value, return on investment from cost savings, and environmental and socioeconomic impacts. A consolidated Department of Defense (DoD) list of recommended actions was submitted by the Secretary of Defense to an independent commission appointed by the President and confirmed by the Senate. The 1995 BRAC Commission evaluated the recommendations and sent the findings to the President, who forwarded the recommendations to Congress on July 13, 1995. The 1990 Base Closure Act stipulated that the recommendations would be implemented unless Congress disapproved them within a specified period of time. No disapproval was issued, and thus the Commission's recommendations became binding on September 28, 1995. These recommendations are being implemented as required by the 1990 Base Closure Act.

The Commission's recommendations for base realignments and closures made in 1995 are referred to in this document as BRAC 95. The Commission recommended the following action for Seneca Army Depot Activity (SEDA) in its 1995 report to the President: "Close Seneca Army Depot, except for an enclave to store hazardous material and ores."

Pursuant to the above recommendation, all Army missions at SEDA, except those related to the storage of hazardous materials and ores at an enclave to be managed by the Army, are to cease or be relocated by July 13, 2001. Following closure, the Army proposes to dispose of the 10,594 acres comprising SEDA, except for approximately 30 acres for the retained enclave. The purpose of the proposed action of disposal, as described more fully in Section 2.0, is to support the Army's need to transfer the excess property to new owners once the Commission's recommendation to close Army missions at SEDA has been implemented.

1.2 SCOPE

The 1990 Base Closure Act specifies that NEPA does not apply to actions of the President, the Commission, or DoD, except "(i) during the process of property disposal, and (ii) during the process of relocating functions from a military installation being closed or realigned to another military installation after the receiving installation has been selected but before the functions are relocated" (Public Law 101-510, Sec. 2905(c)(2)(A)).

The 1990 Base Closure Act further specifies that in applying the provisions of NEPA to the process, the Secretary of Defense and the secretaries of the military departments concerned do not have to consider "(i) the need for closing or realigning the military installation which has been recommended for closure or realignment by the Commission, (ii) the need for transferring functions to any military installation, or (iii) military installations alternative to those recommended or selected" (Public Law 101-510, Sec. 2905(c)(2)(B)).

The Commission's deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from NEPA (Public Law 101-510, Sec. 2905(c)(2)). Accordingly, this EIS does not address the need for closure or realignment. NEPA does, however, apply to disposal as an Army action and to reuse of property as an indirect effect of disposal; therefore, those actions are addressed in this document.

Council on Environmental Quality (CEQ) regulations (at Title 40 of the *Code of Federal Regulations* (CFR), Section 1506.2(a)) require that federal agencies cooperate with state and local agencies to the fullest extent possible to reduce duplication between NEPA and state and local requirements. New York State's Environmental Conservation Law (Sections 3-0301(1)(b), 3-0301(2)(m), and 8-0113) requires compliance by Seneca County and the state of New York with the State Environmental Quality Review (SEQR) regulations at 6 NYCRR (New York Codes, Rules and Regulations) Part 617. Section 617.15(a) of those regulations allows the state of New York and Seneca County to use a federal EIS to satisfy SEQR, as long as the federal EIS is sufficient to make findings under Section 617.11, including a finding that "from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable." At the request of the state of New York and Seneca County, on February 21, 1997, the Army executed a Memorandum of Agreement (MOA) to grant cooperating agency status to the New York State Department of Environmental Conservation (NYSDEC) and Seneca County, New York. The MOA provides for state and county assistance in preparation of the EIS so that, upon its completion, it may be used to support state and county decision making.

Two disposal alternatives (encumbered and unencumbered) are presented and evaluated in this EIS, as are three reuse scenarios (low, medium-low, and medium intensity), which are broad enough to encompass the community's reuse plan. The environmental effects of no action, with the property remaining in caretaker status, are also evaluated. These alternatives and scenarios are further described in Section 3.0. The Army will prepare other NEPA analysis for interim leasing, if required, before the completion of a Record of Decision (ROD) concerning the matters evaluated in this EIS.

1.3 PUBLIC INVOLVEMENT

1.3.1 NEPA Public Involvement Process

The Army invites full public participation in the NEPA process to promote open communication and better decision making. All persons and organizations that have a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the NEPA environmental analysis process.

Public comments are invited anytime throughout the process. Formal opportunities for public participation following the Army publication of a notice of intent to prepare an EIS include submission of comments on the scope of the environmental evaluation, review of the draft EIS, presentation of comments at the public meeting, and review of the final EIS before initiating the proposed action. Each of these steps in the process is briefly discussed below. An additional public involvement process, applicable to contaminated site remediation, is also discussed.

1.3.2 Notice of Intent

The Notice of Intent (NOI) is the first formal step in the NEPA public involvement process. It notifies the public that an environmental assessment (EA) or an EIS will be prepared. The notice is published in the *Federal Register* by the agency proposing the action, prior to the start of the scoping process. The NOI includes a description of the proposed action and gives the name and address of an agency contact person. An NOI announcing the Army's intent to prepare an EA for the disposal and reuse of SEDA was published in the *Federal Register* on September 22, 1995. Subsequent to a reassessment, an NOI for preparation of an EIS was published in the *Federal Register* on September 17, 1996.

1.3.3 Scoping Process

The purpose of scoping is to solicit public and agency comment on issues or concerns that should be addressed in the EIS. It is designed to involve the public early in the EIS process. Public comments are solicited through mailings, media advertisements, and both agency and public scoping meetings. Although informal comments are welcome at any time throughout the process, the scoping period and the scoping meeting provide formal opportunities for public participation in and comment on the environmental impact analysis process.

A public scoping meeting was held on September 9, 1996, at the Seneca County building in Waterloo, New York. Display advertisements for the meeting were published in the *Finger Lakes Times* on August 27 and September 3, 1996, and in the *Reveille Between the Lakes* on August 29 and September 5, 1996. Notices concerning the public meeting were also sent to a mailing list including public officials, agencies, organizations, and individuals. Names on the list were compiled from a variety of sources, including the installation. All persons and organizations thought to have a potential interest, including minority, disadvantaged, and Native American groups, were considered. The mailing identified a contact person at the installation for further information, as well as another contact person to whom comments could be sent by September 30, 1996.

Eight members of the community attended the public scoping meeting.

Those attending the scoping meeting were invited to sign an attendance sheet. Five people signed the attendance sheet. One person signed the speaker sheet. A second person spoke in response to an invitation made during the oral comment session. All attendees of the scoping meeting received an agenda and a summary of the procedure for the disposal and reuse EIS and the scope of the EIS. They also received a blank comment card and were invited to write their comments or suggestions concerning relevant environmental or socioeconomic issues. Attendees were given the option of returning the card to a box on the registration table at the conclusion of the meeting or mailing the card directly to Mr. Hugh McClellan by September 30, 1996. No written comments were received at the scoping meeting or subsequently delivered to Mr. McClellan.

Three issues were raised at the scoping meeting. A suggestion was made that the public's perception of the installation should be included in the report. In response, it was noted that perception can best be addressed by the presentation of the facts and that the EIS should contain factual material as outlined in the Army BRAC Manual.

The second concern was the recommendation that the EIS process remain fully open and that command personnel continue to use opportunities to provide information to the public during the disposal and reuse planning process.

The final issue was an inquiry about the relationship between the Army's and the state's environmental impact analysis processes. An official representative of the NYSDEC indicated that the Department intends to provide written comments on the scope of the EIS.

1.3.4 Public Review of Draft EIS

A draft EIS is available for public review and comment. A notice of availability of the draft EIS was published in the *Federal Register*, notices were sent to those on the mailing list, and press releases were provided to local news media announcing circulation of the draft EIS. In addition, copies were placed in the Edith B. Ford Memorial Library in Ovid, New York; the Geneva Free Library in Geneva, New York; and the Waterloo Library and Historical Society in Waterloo, New York for review. Agencies, organizations, and individuals were invited to review and comment on the document. A review period of not less than 45 days allowed reviewers the opportunity to comment on the analysis or on other aspects of the EIS process.

1.3.5 Public Meeting

The Army conducted a public meeting on January 6, 1998, to receive public input on the draft EIS. Display advertisements for the meeting were published in the *Finger Lakes Times* on December 23 and December 30, 1997, and in the *Reveille Between the Lakes* on December 25, 1997 and January 1, 1998. In addition to announcing the time and place of the public meeting, the advertisement identified Mr. Hugh McClellan, U.S. Army Corps of Engineers, Mobile District, as the person designated to receive written comments if the reader was unable to attend the meeting. The meeting was held at 7:00 pm at the Seneca County Office Building. Public comments received and the Army's responses, along with a transcript of the public meeting, are provided in Appendix A.

1.3.6 Final EIS

The Army considered all comments, both individually and collectively, provided by the public and agencies on the draft EIS. The final EIS incorporates changes suggested by comments on the draft EIS, as appropriate, and contains responses to all comments received during the review period (see Appendix A). A notice of availability of the final EIS was provided to all those who commented on the draft EIS. Copies of the final EIS were mailed to selected federal, state, and local agencies. Copies were placed in the Edith B. Ford Memorial Library in Ovid, New York; the Geneva Free Library in Geneva, New York; and the Waterloo Library and Historical Society in Waterloo, New York for review, and notice of the report's availability was published in the *Federal Register*. After a 30-day period following completion of the final EIS, during which further comments may be submitted for Army consideration, the Army will prepare a ROD, which will state how the disposal of SEDA will take place and include any required mitigation measures associated with disposal.

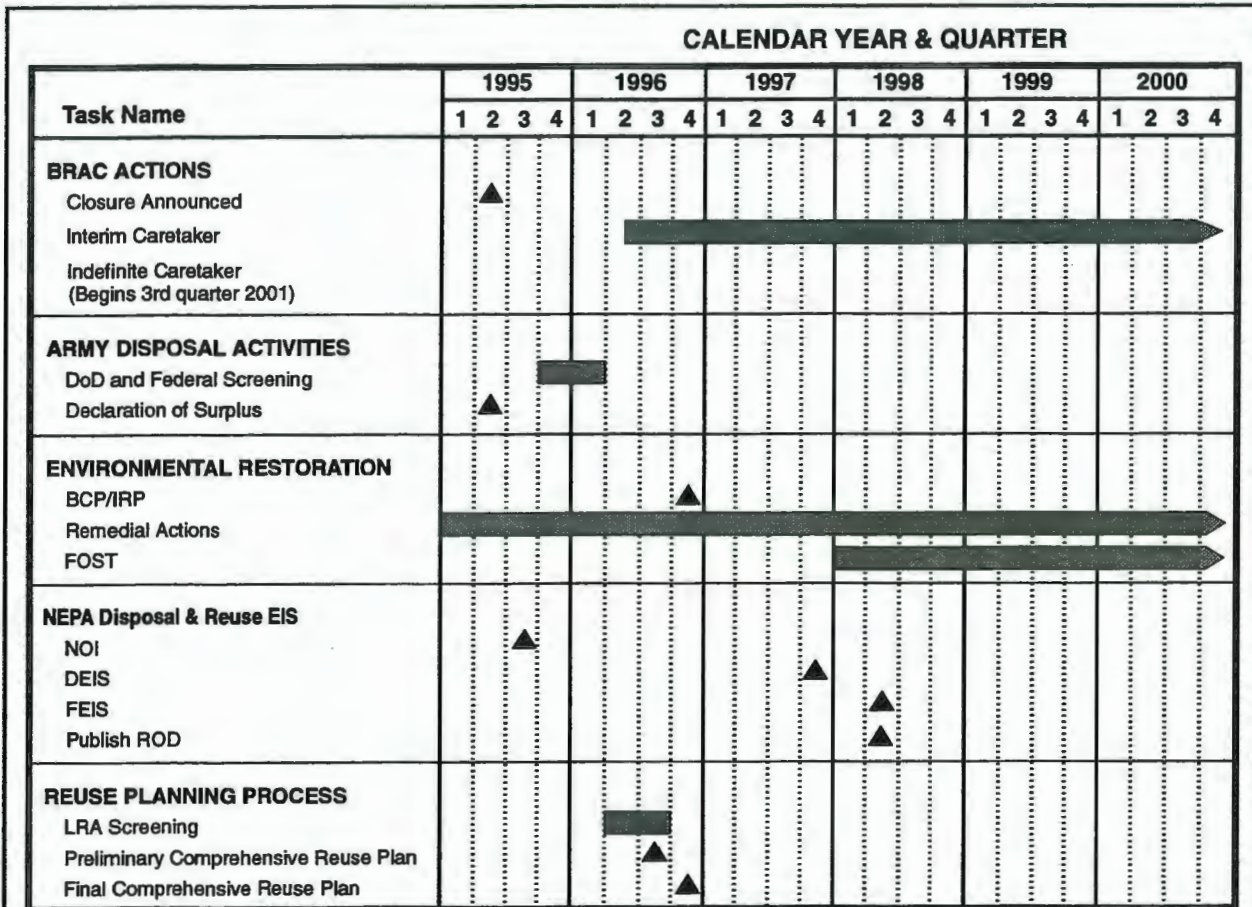
1.3.7 Contaminated Site Remediation Public Review Process

Remediation or cleanup of contaminated sites under the Army's BRAC Installation Restoration Program (IRP) also includes public involvement where closure and disposal are involved. This program is separate from the NEPA process, but both cleanup and NEPA activities usually occur simultaneously during disposal of installation property. Studies and reports for remediation actions are made available at the public information repositories located in surrounding communities. Remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) include formal opportunities for public participation in reviewing documents and attending public meetings. This EIS addresses the sites under remediation by describing the nature and extent of the contamination in an overall environmental context and identifying their remedial status. The public will be kept informed about site remediation studies and will be invited to participate in public meetings associated with them.

The Army's policy of full public involvement in base cleanup includes the local community in the installation cleanup program by making information available, providing opportunities for comment, and establishing and seeking active participation on a Restoration Advisory Board (RAB). The RAB is composed of an Army representative, U.S. Environmental Protection Agency (EPA) and state representatives, and members of the local community. The RAB is jointly chaired by the Base Environmental Coordinator at SEDA and a member of the Board. The responsibilities of the RAB are to conduct oversight of public outreach activities, to act as a vehicle for disseminating information, and to develop and implement community relations plans. The RAB conducts regular meetings that are open to the public and maintains mailing lists of stakeholders who wish to receive information on the cleanup program.

1.4 IMPACT ANALYSIS PERFORMED

This EIS identifies, evaluates, and documents the effects of disposal and reuse of the SEDA property. Several other related processes occur in conjunction with the Army's preparation of the property for closure and disposal. These associated processes and their time frames are shown in Figure 1-1.



LEGEND:

- Period Task
- ▲ Milestone Task
- BCP = BRAC Cleanup Plan
- DEIS = Draft Environmental Impact Statement
- EIS = Environmental Impact Statement
- FEIS = Final Environmental Impact Statement
- FOST = Finding of Suitability to Transfer
- IRP = Installation Restoration Program
- LRA = Local Redevelopment Authority
- NEPA = National Environmental Policy Act
- NOI = Notice of Intent
- ROD = Record of Decision

Developed by: Tetra Tech, 1996

Concurrent actions leading to property disposal and reuse include environmental restoration, reuse planning, and environmental documentation.

Schedule of BRAC Actions

Seneca Army Depot Activity
Romulus, New York

Figure 1-1

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archeologists, historians, and military technicians performed the impact analysis. The team identified the affected resources and topical areas, analyzed the proposed action against the existing conditions, and determined the relevant beneficial and adverse effects associated with the action. Section 4.0, Affected Environment, describes the conditions of the affected resources and other areas of special interest at SEDA as of July 1995 (prior to the BRAC Commission's recommendation). Along with information presented in the no action alternative, these conditions constitute the baseline for the analysis of effects of disposal and reuse. These effects are described in Section 5.0, Environmental and Socioeconomic Consequences.

The document analyzes direct impacts (those caused by the proposed action and occurring at the same time and place) and indirect impacts (those caused by the proposed action but occurring later in time or farther removed in distance but still reasonably foreseeable). Cumulative effects are also addressed. Mitigation measures are identified where appropriate.

The socioeconomic effects of disposal and reuse are assessed by use of the Economic Impact Forecast System (EIFS), developed by the U.S. Army Construction Engineering Research Laboratory. The region of influence (ROI) consists of Seneca County, New York, and the city of Geneva, New York, which is located in Ontario County. The rationale for selection of this area as the ROI is provided in Section 4.14.

1.5 FRAMEWORK FOR DISPOSAL

Numerous factors contribute to Army decisions relating to disposal of installation property. The 1990 Base Closure Act triggers reference to several other statutes and directives. In addition to adhering to the 1990 Base Closure Act's requirements, the Army abides by rules pertaining to transfer of federal property, as well as executive branch policies. There are also practical concerns such as identifying base assets to allow for disposal in a manner most consistent with statutory and regulatory guidance. These matters are further discussed below.

1.5.1 BRAC Procedural Requirements

Statutory Provisions. The disposal process is governed by the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510, as amended) and the Federal Property and Administrative Services Act of 1949 (Title 40 of the *United States Code* (U.S.C.), Section 471 et seq., as amended). The latter is implemented by the Federal Property Management Regulations at 41 CFR, Subpart 101-47. The disposal process is also governed by 32 CFR Part 174 (*Revitalizing Base Closure Communities*), 32 CFR Part 175 (*Revitalizing Base Closure Communities - Base Closure Community Assistance*), and 32 CFR Part 176 (*Revitalizing Base Closure Communities and Community Assistance - Community Redevelopment and Homeless Assistance*), regulations issued by DoD to implement BRAC law, the Pryor Amendment, and the President's Program to Revitalize Base Closure Communities (see below).

Screening Process. Having been recommended for closure, the SEDA property has been determined to be excess to Army needs and, therefore, subject to specific procedures to identify potential subsequent public-sector users. That is, the property has been offered to a hierarchy of potential users through a procedure called the screening process. This process and its results to date are discussed in Section 2.3.4.

The President's Program to Revitalize Base Closure Communities. On July 2, 1993, the President announced a major new program to speed the economic recovery of communities near closing military installations. The President pledged to give top priority to early use of each closing installation's most valuable assets. A principal goal of the initiative is to provide for rapid redevelopment and creation of new jobs. In announcing the program, the President outlined the five parts of his community revitalization plan:

- Jobs-centered property disposal that puts local economic redevelopment first.
- Fast-track environmental cleanup that removes delays while protecting human health and the environment.
- Appointment of transition coordinators at installations slated for closure.
- Easy access to transition and redevelopment help for workers and communities.
- Larger economic development planning grants to base closure communities.

The Army is fully committed to the President's Program to Revitalize Base Closure Communities. A Base Transition Coordinator has been appointed for SEDA property, and the Army has taken an active role in providing assistance to the local community.

The Pryor Amendment. Congress endorsed the President's plan by enacting Title XXIX of Public Law 103-160, Base Closure Communities Assistance Act, popularly known as the "Pryor Amendment" in recognition of its principal legislative sponsor. Title XXIX, as amended, provides legal authority to carry out the President's plan by granting conveyances of real and personal property at or below fair market value to local redevelopment authorities (LRAs). Title XXIX creates a new method of federal property conveyance, the Economic Development Conveyance (EDC). An EDC can help induce a market for the property and thereby enhance economic recovery and generate jobs. Flexibility is given to the military departments and the communities to negotiate the terms and conditions of the EDC. A detailed application, including the approved community redevelopment plan, serves as the basis for a determination of whether an LRA will be eligible for an EDC. DoD's final rule implementing the Pryor Amendment appears at 32 CFR Parts 174 and 175. The EDC is further described in Section 2.3.4.

1.5.2 Relevant Statutes and Executive Orders

Several statutes and Executive orders (EOs) bear specifically on the disposal and reuse of the SEDA property. The following discussions note their relevance to the disposal and reuse process.

Comprehensive Environmental Response, Compensation, and Liability Act. CERCLA, better known as Superfund, addresses cleanup of past hazardous waste sites that pose threats to human health or the environment. The Superfund Amendments and Reauthorization Act of 1986 (SARA) expanded applicability of this law to federal facilities. SARA provides procedures to clean up toxic or hazardous substances at closed or abandoned hazardous waste sites.

Procedures for conducting cleanup are governed by the National Oil and Hazardous Substances Pollution Contingency Plan. Major steps in the cleanup process include preliminary assessment and site investigations of hazardous substance releases, remedial investigation and preparation of feasibility studies for cleanup, a ROD for selecting among cleanup alternatives, and design of remedial measures and implementation of remedial action. The process includes creation and maintenance of an administrative record for public review and notices to the public for review and comment at major junctures.

Army compliance with the National Oil and Hazardous Substances Pollution Contingency Plan occurs through the IRP. The IRP is conducted at locations having past hazardous contamination sites requiring remediation.

Past practices at SEDA with respect to hazardous waste have resulted in spills and releases requiring action pursuant to CERCLA. SEDA was placed on the National Priorities List in March 1989. Requirements and procedures established in CERCLA and the January 1992 Federal Facility Agreement for SEDA apply in full to restoration activities at the installation.

Community Environmental Response Facilitation Act. In October 1992, Congress amended Section 120(h) of CERCLA with the Community Environmental Response Facilitation Act (CERFA), Public Law 102-426. CERFA establishes new requirements for contamination assessment, cleanup, and regulatory agency notification and concurrence for identification of uncontaminated parcels.

CERFA requires federal agencies to identify uncontaminated parcels with regulatory concurrence. Contaminated parcels are evaluated and "qualified" with respect to their suitability for transfer. CERFA allows transfer by deed of remediated parcels at the point when successful operation of an approved remedy has been demonstrated to EPA.

CERFA requires that the identification consider petroleum products as well as CERCLA hazardous substances. For property that is part of a facility listed on the National Priorities List, the identification cannot be considered complete until the EPA Administrator concurs. For real property not on the National Priorities List, the identification cannot be considered complete until the state concurs.

The law requires a transferring agency to provide a covenant, when transferring parcels identified as uncontaminated, that any response action or corrective action found necessary will be undertaken by the United States. The deed for such parcels is also to provide for a right of access to perform any additional response action, including appropriate investigations. Although CERFA does not mandate that the Army transfer real property identified as immediately available, it is the first step in satisfying the objective of identifying real property where no CERCLA-regulated hazardous substances or petroleum products were known to have been released or disposed of. The procedures mandated by CERFA will be observed in property disposal actions at SEDA.

Resource Conservation and Recovery Act. Under the Resource Conservation and Recovery Act (RCRA), EPA defines those wastes which are hazardous and regulates their generation, treatment, storage, transportation, and disposal. EPA also establishes technical and performance requirements for hazardous waste management units and exercises responsibility over a permit system for hazardous waste management facilities. Solid and hazardous waste activities and underground storage tank management at SEDA are subject to the provisions of RCRA.

Clean Air Act. The Clean Air Act (CAA) controls the emission of pollutants into the atmosphere. Under the CAA, EPA has established national air standards. These standards, which express concentrations of designated pollutants, are called the National Ambient Air Quality Standards (NAAQS). The NAAQS, uniformly applied throughout the Nation, are time-averaged concentrations of the specified pollutants that cannot be exceeded in the ambient air more than a specified number of times. Standards have been established for the pollutants sulfur dioxide, carbon monoxide, ozone, nitrogen oxides, lead, and inhalable particulate matter. The NAAQS are to be achieved by the states through State Implementation Plans, which provide limitations, schedules, and timetables for compliance with NAAQS for stationary sources and transportation control plans for mobile sources.

Amendments to the CAA in 1990 introduced, at Section 176(c) of the act, a requirement that "No department, agency, or instrumentality of the Federal Government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity which does not conform to an implementation plan ... approved or promulgated. The assurance of conformity ... shall be an affirmative responsibility of the head of such department, agency, or instrumentality." Conformity to an implementation plan means conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. It further refers to conducting activities so that they will not cause or contribute to any new violation of any standard in any area, increase the frequency or severity of any existing violation of any standards in any area, or delay timely attainment of any standard of any required interim emission reductions or other milestone in any area. Regulations regarding determining conformity of general federal actions to implementation plans appear at 40 CFR Parts 51 and 93. Activities at SEDA are subject to the provisions of the CAA.

Clean Water Act. Since major amendments in 1977, the Federal Water Pollution Control Act has been known as the Clean Water Act (CWA). This statute, which seeks to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, identifies certain pollutants and sets required treatment levels for those pollutants. The CWA addresses both point source and nonpoint source discharges. Point sources are distinct entities that discharge into rivers, lakes, estuaries, or others waters of the United States through discrete conveyances such as pipes, ditches, or canals. Nonpoint sources are those which do not discharge wastewater from a discrete conveyance (e.g., most agricultural lands, certain construction sites, parking lots, and streets).

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) program. NPDES permits are required for all point source discharges to waters of the United States, including discharges of stormwater associated with industrial activities.

Section 404 of the CWA contains provisions for protection of wetlands and establishes a permitting process for activities having potential effects in wetlands areas. Wetlands, riverine, and open water systems are considered waters of the United States and, as such, fall under the regulatory jurisdiction of the United States Army Corps of Engineers (USACE). USACE's definition of waters of the United States includes all interstate waters and lakes, as well as rivers, streams, mudflats, sandflats, sloughs, prairie potholes, wet meadows, and other wetland communities. Section 404 regulates the discharge of dredge or fill into wetlands, or other waters of the United States, and requires "sequencing" for proposed impacts. Sequencing requires the avoidance of wetland losses, minimization of impacts, and replacement of unavoidable losses. All development activities that might involve impacts on wetlands, through dredging and filling, require consultation with USACE. If a given wetland is

determined to meet the regulatory definition of waters of the United States, either a nationwide permit is determined to be applicable and is issued or an individual permit is required, depending on the development proposal for fill or land disturbance activities.

Section 401 of the CWA addresses water quality certification and authorizes the review and conditioning, approval, or denial of federal permits or licenses that might result in discharges to waters of the United States.

CWA provisions apply to SEDA with respect to operations at the installation's wastewater treatment facilities, which are subject to the NPDES permitting provisions, and to the installation's jurisdictional wetlands.

National Historic Preservation Act. The National Historic Preservation Act of 1966 (NHPA) protects buildings, sites, districts, structures, and objects that have significant scientific, historic, or cultural value. The act establishes affirmative responsibilities of federal agencies to preserve historic and prehistoric resources. Effects on properties that are on, or eligible for, the National Register of Historic Places (NRHP) need to be taken into account in planning and operations. Any property that might qualify for inclusion on the NRHP is not to be inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate.

NRHP criteria are those qualities of significance in American history, architecture, engineering, archaeology, and culture present in districts, sites, buildings, structures, and objects of state, local, regional, or national importance. These properties possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Fulfillment of the purposes of the NHPA is assisted through consultation with the Advisory Council on Historic Preservation (ACHP) and with each State Historic Preservation Officer (SHPO). Prior to final disposal action, the Army is to ensure that appropriate section 106 consultations have been completed for excess parcels at SEDA.

Farmland Protection Policy Act. Prime farmland soils are protected under the Farmland Protection Policy Act (FPPA) of 1981. The intent of the act is to minimize the extent to which federal programs contribute to the unnecessary or irreversible conversion of farmland soils to nonagricultural uses. The act also ensures that federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland. The Natural Resources Conservation Service (NRCS) is responsible for overseeing compliance with the FPPA and has developed the rules and regulations for implementation of the act (see 7 CFR Part 658, U.S. Department of Agriculture (USDA) Final Rule, Farmland Protection Policy, July 5, 1984).

Prime farmland soils are defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for those uses. The soil qualities, growing season, and moisture supply are those needed for a well-managed soil to produce a sustained high yield of crops in an economic manner, (the land could be cropland, pasture, rangeland, or other land, but not urban built-up land or water). Farmland soil of statewide importance includes land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, and oilseed crops. Criteria for defining and delineating this land are determined by the appropriate state agency or agencies.

The FPPA's and USDA's implementing procedures require federal agencies to evaluate the adverse effects (direct and indirect) of their activities on prime and unique farmland, as well as farmland of statewide and local importance, and to consider alternative actions that could avoid adverse effects. Several of the soils series at SEDA are considered prime farmland soils and are protected by the FPPA.

Archeological Resources Protection Act. The Archeological Resources Protection Act (ARPA) prohibits the removal, sale, receipt, and interstate transportation of archeological resources obtained illegally (without permits) from public or Indian lands and authorizes agency permit procedures for investigations of archeological resources on public lands under the agency's control. Installation officials believe that archeological resources potentially subject to the protections afforded by the ARPA might exist at SEDA.

The law requires that the Secretaries of the Interior, Agriculture, and Defense and their respective employees and agents develop plans for surveying the lands under their control. Their task is to determine the nature and extent of archeological resources, prepare a schedule for surveying those lands which are likely to contain the most scientifically valuable archeological resources, and develop documents for reporting suspected violations of the ARPA. The ARPA requires the issuance of permits for authorized professional excavation or removal of archeological resources. The ARPA imposes civil and criminal penalties for unauthorized excavation, removal, damage, alteration, or defacement of archeological resources or attempt to perform such unauthorized acts. Implementing regulations of the ARPA are contained in 18 CFR Part 1312, 32 CFR Part 229, 36 CFR Part 296, and 43 CFR Part 7.

American Indian Religious Freedom Act. The American Indian Religious Freedom Act of 1978 (AIRFA) states the U.S. policy to protect and preserve the inherent rights of American Indians, Eskimos, Aleuts, and native Hawaiians to believe, express, and exercise their traditional religions. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and freedom to worship through ceremony and traditional rites. They also include the right of tribal leadership to be consulted by federal agencies before burial sites that appear to relate to tribal ancestors are disturbed by agency projects. The potential for sites that could be subject to American Indian requests founded on AIRFA exists at SEDA. Regulations implementing AIRFA are located at 43 CFR Part 7.

Endangered Species Act. Under the Endangered Species Act (ESA), federal agencies are required to conserve plant or animal species that have been federally listed as endangered or threatened. All federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any actions authorized, funded, or carried out by the agencies are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction of or substantial damage to critical habitat. This consultation, deriving from Section 7 of the act, is often referred to as the Section 7 consultation process. While this consultation is in progress, an agency is not to make an irretrievable commitment of resources to its project. A consultation typically leads to the USFWS's suggestion of alternatives or mitigating measures that can be incorporated into the project, thereby allowing its completion. In connection with disposal of SEDA, consultation with the USFWS is being undertaken to ensure consideration of potential effects on endangered and threatened species present on the installation.

The ESA prohibits the taking of endangered fish and wildlife species. Taking includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to do any of these things. With respect to the taking of endangered plants, it is prohibited to remove them or reduce them to one's possession. Under the ESA, the Secretary of the Interior issues regulations to conserve threatened species.

Amendments to the ESA in 1982 allow the Secretary of the Interior to approve "incidental" taking of listed species if, after notice and comment, the Secretary finds that the taking will be incidental, the applicant will exert maximum effort to minimize and mitigate the effects of the taking, the applicant will ensure adequate funding for planned mitigation, and the taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA), Title 16 of the U.S. Code, Sections 703-712, and its implementing regulations (1988) make it unlawful for any persons to take (i.e., pursue, hunt, shoot, wound, trap, capture, or collect) any migratory bird without first receiving a permit to do so. "Take," under the MBTA, does not include "harass" or "harm" as in the Endangered Species Act and pertains predominantly to actions involving the deliberate killing or collecting of species (i.e., not destruction of habitat). The USFWS is responsible for issuing take permits and for enforcing the MBTA and its implementing regulations. Although the MBTA does not provide for incidental take of migratory birds, it does authorize the USFWS to issue "special purpose" permits. These permits are required before any person can lawfully take or otherwise possess migratory birds, their parts, nests, or eggs for any purpose not otherwise covered by the general permit regulations. The USFWS does not have an official policy governing issuance of such permits to federal agencies.

Executive Orders. Several Executive Orders address topics particularly relevant to the Army's disposal of SEDA.

- *Executive Order 11988, Floodplain Management (May 24, 1977)*, requires federal agencies to take action to reduce the risk of flood loss; to minimize the impacts of floods on human safety, health, and welfare; and to restore and preserve the national and beneficial values served by floodplains in carrying out their responsibilities for managing and disposing of federal lands. Before taking an action, an agency determines whether the proposed action will occur in a floodplain; if so, alternatives to avoid adverse effects and incompatible development in floodplains are to be considered. Areas that would meet the definition of floodplain are minimal at SEDA.
- *Executive Order 11990, Protection of Wetlands (May 24, 1977)*, requires federal agencies to take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities for managing and disposing of federal lands and facilities. For any proposal for lease, easement, right-of-way, or disposal to nonfederal public or private parties, the federal agency is to reference in the conveyance document those uses which are restricted under federal, state, or local wetland regulations and to attach other appropriate restrictions to the uses of properties by the grantee or purchaser and any successor, except where prohibited by law, or withhold such properties from disposal. The presence of wetlands at SEDA makes this EO relevant to resource protection and land use planning at the installation.

- *Executive Order 12088, Federal Compliance with Pollution Control Standards* (October 13, 1978), provides that federal agencies are to comply with all federal, state, and local environmental requirements. In the context of property to be disposed of at SEDA, these requirements will continue as long as the Army retains ownership of the property, including the period during which any portion of the property would be held in caretaker status prior to disposal.
- *Executive Order 12580, Superfund Implementation* (January 23, 1987), delegates to agency heads several decision-making authorities under CERCLA. In the context of SEDA, certain responsibilities (e.g., selection of remedial actions) related to environmental restoration may not be transferred to other parties.
- *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (February 11, 1994), requires that federal agencies conduct their programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin. On February 11, 1994, the President also issued a memorandum for heads of all departments and agencies, directing that EPA, whenever reviewing environmental effects of proposed actions pursuant to its authority under Section 309 of the CAA, ensure that the involved agency has fully analyzed environmental effects on minority communities and low-income communities, including human health, social, and economic effects. The essential purpose of the EO is to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. Evaluation of the Army's proposed action includes consideration of this EO.
- *Executive Order 13007, Indian Sacred Sites* (May 24, 1996), requires that, to the extent practicable, federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. This EO pertains to SEDA disposal and reuse planning in light of the potential for Native American sacred sites at the installation.
- *Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks* (April 21, 1997), recognizes a growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because children's bodily systems are not fully developed; because children eat, drink, and breathe more in proportion to their body weight; because their size and weight may diminish protection from standard safety features; and because their behavior patterns may make them more susceptible to accidents. Based on these factors, the President directed each federal agency to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The President also directed each federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that

result from environmental health risks or safety risks. Evaluation of the Army's proposed action includes consideration of this EO.

1.5.3 Other Reuse Regulations and Guidance

DoD's Office of Economic Adjustment published its *Community Guide to Base Reuse* in May 1995. The guide describes the base closure and reuse processes that have been designed to help with local economic recovery and summarizes the many assistance programs administered by DoD and other agencies. DoD's Office of the Assistant Secretary of Defense published the *DoD Base Reuse Implementation Manual* in July 1995. This volume serves as a handbook for the successful execution of reuse plans. DoD and the Department of Housing and Urban Development have published at 32 CFR Part 175 guidance required by Title XXIX of the National Defense Authorization Act for Fiscal Year 1994. The guidance establishes policy and procedures, assigns responsibilities, and delegates authority to implement the President's Program to Revitalize Base Closure Communities (July 2, 1993).

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SECTION 2.0: DESCRIPTION OF THE PROPOSED ACTION

2.1 INTRODUCTION

The proposed action (Army primary action) is to dispose of property made available by closure mandated by the 1995 BRAC Commission's recommendation for SEDA. Redevelopment planning by others is a secondary action resulting from disposal.

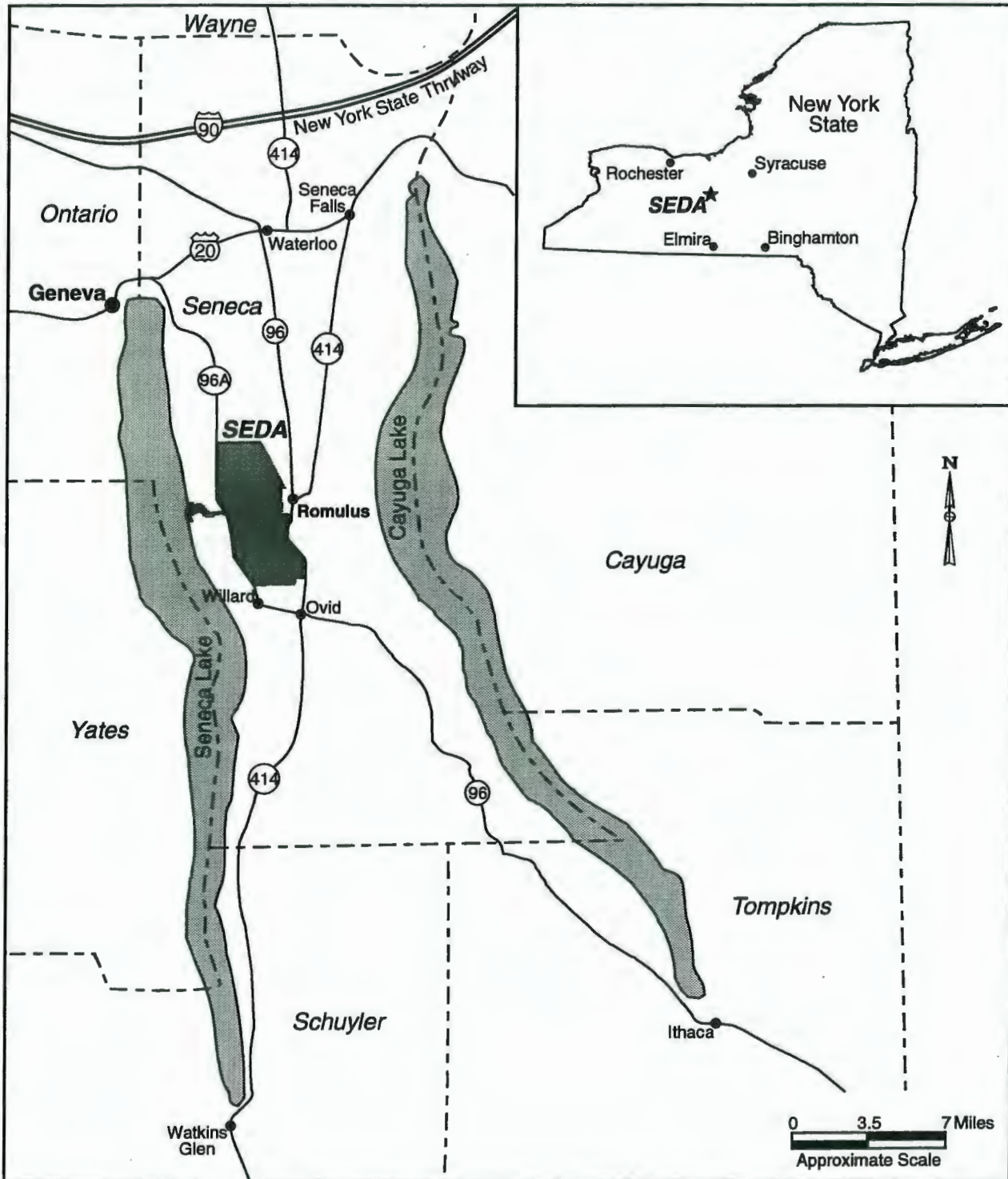
SEDA is located in central upstate New York approximately equidistant from the cities of Rochester and Syracuse (Figure 2-1). The depot consists of three contiguous parcels designated as Lake Housing, Airfield, and Main Post (Figure 2-2). It occupies 10,594 acres, on which there are 927 buildings. The installation is served by 139 miles of roadway and 42 miles of railroad. The Lake Housing area consists of an Army travel camp, an officers' club, and 56 single-family housing units. The Airfield parcel contains a 7,000-foot runway and seven airfield operations buildings. The Main Post contains administration buildings, general-purpose warehouses, ammunition storage facilities, equipment maintenance facilities, troops barracks and support facilities, and family quarters. Conventional ammunition storage involves 519 igloos, 8 standard magazines, 2 inert materials warehouses, and 2 small arms warehouses having a total of 1,332,796 gross square feet. General supply and industrial plant equipment storage involves 19 general-purpose warehouses, 6 outside sites, 2 sheds, and 6 humidity-controlled warehouses having a total of 3,048,855 square feet.

At the end of September 1996, SEDA closed out its two missions related to special weapons demilitarization and general supply. SEDA will continue two other missions until closure—the shipping, maintenance, storage, and demilitarization of conventional ammunition and the storage of industrial plant equipment. SEDA will also provide facilities for tenant commands, such as the Coast Guard, which operates a LORAN-C station and the Defense Logistics Agency (DLA), which stores strategic ores for the National Strategic Stockpile Program.

The proposed action analyzed in this EIS is disposal of the entire installation (land, facilities, and utilities) except for the property required to create and maintain an enclave for storage of hazardous materials and ores as directed by the BRAC Commission. The enclave will be about 30 acres in size and will consist of ore piles and warehouses for storing Decontamination Solution-2 (DS-2), a highly corrosive liquid used for chemical agent decontamination.¹

The BRAC process of property disposal includes predisposal activities and real estate disposal, which in turn will allow for subsequent reuse development. Predisposal activities include contaminated site cleanup, interim uses, and the caretaking of vacated facilities. Disposal activities include a real estate screening process that identifies potential reuse entities, including federal, state, and local organizations. Reuse development, a secondary effect of disposal, requires extensive community involvement. The local community, represented by Seneca County, established the Seneca Army

¹If the Army decides that there is no longer a military need to retain the enclave area, the enclave would be subject to disposal in accordance with federal property management regulations at 41 CFR Subpart 101-47.



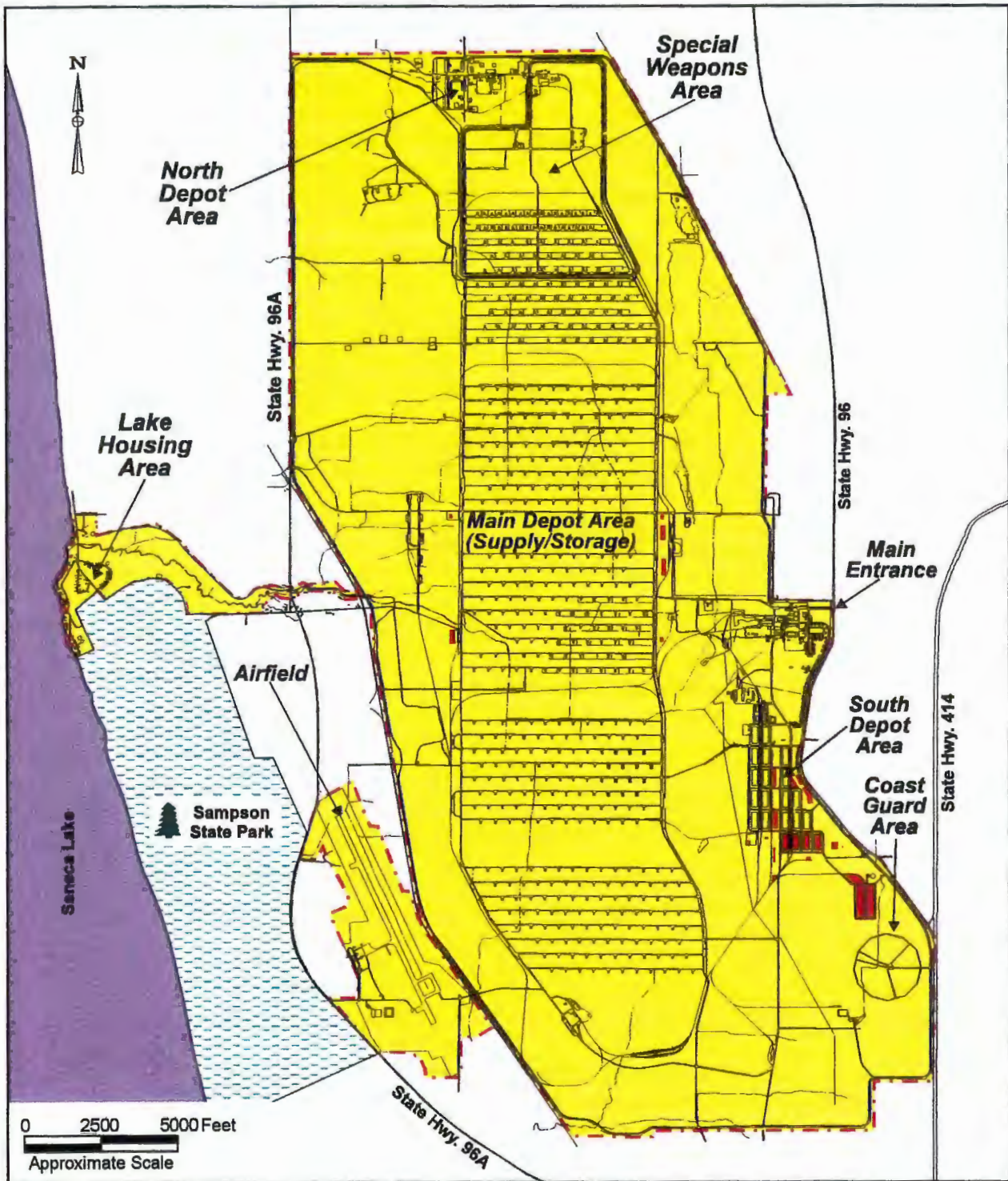
LEGEND

- - - County Boundary (County name in italics)
- SEDA Installation Boundary



Note: The region of influence consists of Seneca County and the city of Geneva in Ontario County.

Source: STV/Lyon Assoc., 1990.

Location Map
Seneca Army Depot Activity
Romulus, New York
Figure 2-1



LEGEND

-  SEDA Property
-  Enclave Sites

Source: RKG Associates, 1996; Woodward-Clyde, 1996.

Site Map
Seneca Army Depot Activity
Romulus, New York
Figure 2-2

Depot Local Redevelopment Authority (SEDLRA) to produce a reuse development plan for the surplus property to be made available to the community. Property disposal can be either encumbered or unencumbered. Encumbered disposal involves conveying the property with conditions imposed by the Army. The Army's identification of valuable resources at SEDA helped the SEDLRA develop a reuse plan in a manner that will sustain environmental values, if implemented. Encumbrances on property to be disposed of reflect a means by which the Army can help to positively influence future uses for the benefit of the community. Encumbered disposal might be required to protect Army interests, such as easements to ensure access to a retained piece of property in order to address on-site contamination problems or to limit certain types of future activities based on the past uses of that particular parcel. Encumbrances may also be appropriate to preserve or protect federally protected resources such as historic properties, wetlands, or species listed as endangered or threatened. Unencumbered disposal would result in conveying the property with no Army-imposed conditions. The Army favors encumbered disposal at SEDA, as described in Section 2.2. Encumbered and unencumbered disposal alternatives are further described in Section 3.0.

At SEDA, redevelopment planning is expected to occur under the guidance and management of the Seneca County Industrial Development Agency (SCIDA). In May 1997, the Seneca County Board of Supervisors approved the SCIDA to serve as the Implementing Local Redevelopment Authority for execution of the reuse plan. The Army fully supports community-planned reuse of the facilities and recognizes that determining specific reuses is beyond its direct responsibility or control. Among the goals established by the SEDLRA are:

- To serve as a community point of contact for input and information relating to installation reuse.
- To develop a reuse plan.
- To provide for marketing of depot properties based on long-term reuse potential.
- To promote creation of new, permanent jobs in Seneca County and the surrounding area.

Consistent with these goals, the SEDLRA has prepared a comprehensive reuse plan, an economic development strategy, and a job-generating market analysis for SEDA. The comprehensive reuse plan envisions mixed use of the lands and facilities that have been declared surplus.

The Army has considered the SEDLRA reuse plan as the primary factor in defining a range of reuse scenarios. Alternative disposal actions and reuse scenarios are described in Section 3.0. A further description of the SEDLRA reuse plan is provided in Section 2.2, and a summary of the plan is provided in Appendix B.

2.2 PROPOSAL IMPLEMENTATION

Identification of recipients of the property being disposed of at SEDA is governed by expression of interest submitted by those recipients in response to the Army's Declaration of Excess Property and Determination of Surplus Property. A complete discussion of the screening process is provided in Section 2.3.4. As a result of the screening process, the Army proposes to transfer about 292 acres to the U.S. Coast Guard for continued use as a LORAN-C antenna station. The remainder of the installation, less those portions required for the enclave directed by the BRAC Commission, would be available to the SCIDA for redevelopment.

Implementation of the Army's proposed action at SEDA involves three major aspects—transfer of property to the U.S. Coast Guard, establishment of an enclave, and transfer or conveyance of property to the SCIDA or others for redevelopment (Figure 2-3). Details of these three aspects are provided below.

LORAN-C Antenna Station. The U.S. Coast Guard, presently a tenant activity at SEDA, operates a LORAN-C antenna station. Since 1978, the station has been used for the transmission of LORAN signals to the northeastern United States and the Great Lakes. The station is located on approximately 292 acres having direct access to Route 96, which defines the installation's eastern border in that vicinity. Transfer of the site to the Coast Guard would result in continued use of the property as in the past.

Enclave. The establishment of an enclave as directed by the BRAC Commission would require the Army's retention of about 30 acres to provide for facilities for outdoor storage of ores and materials, warehouse storage of hazardous material, and housing of fire-fighting and hazardous materials response capabilities and a headquarters element.

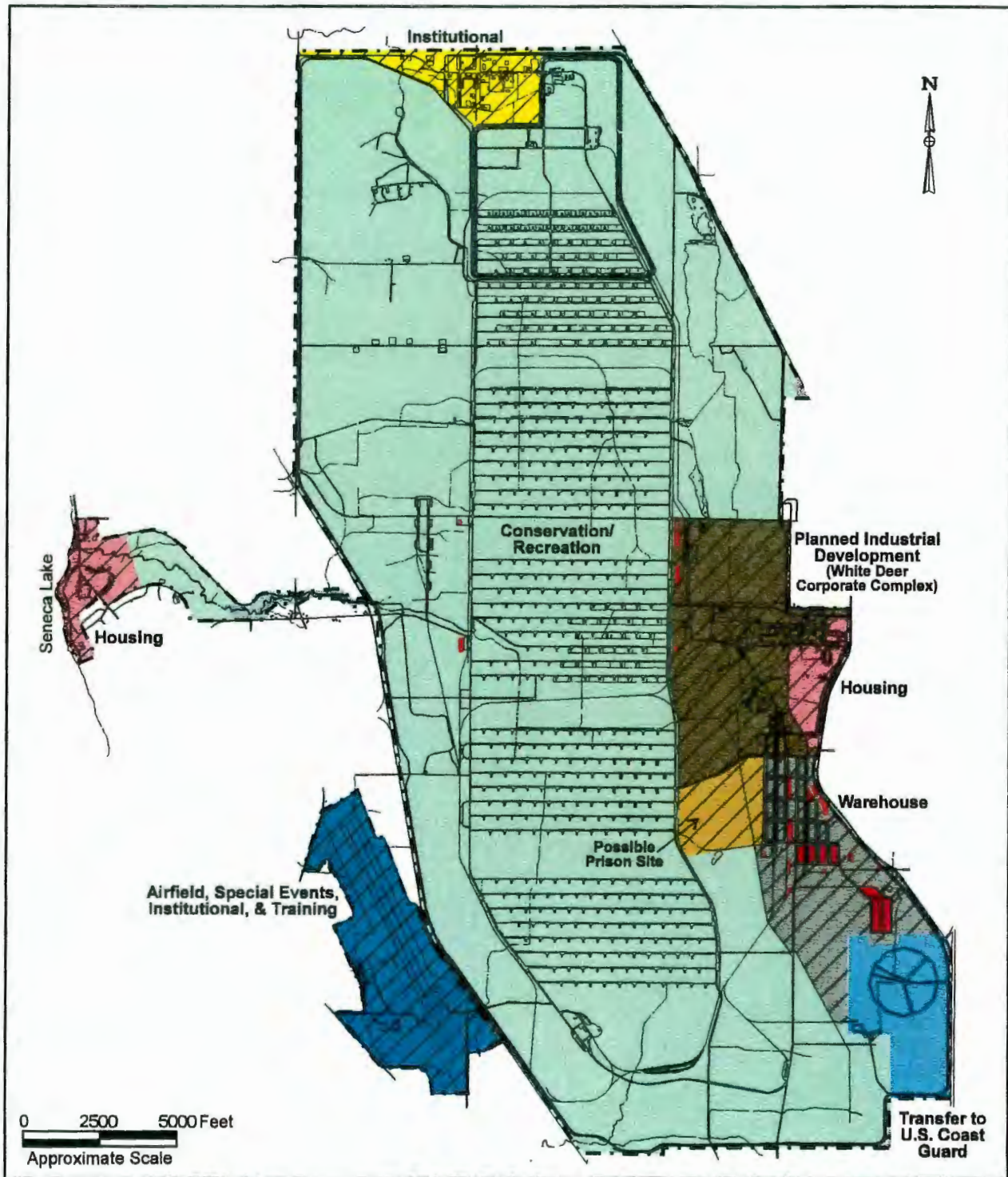
The DLA uses 17 locations at SEDA to store 20 piles of strategic ores and materials in its operation of the National Strategic Stockpile Program. Two of these piles are on the western flank of the igloo area (the ammunition storage area in the central portion of the installation), four are on the eastern flank of the igloo area, and the remainder are in the southern portion of South Post. The strategic ores and materials inventory at SEDA consists of chromite ore, ferromanganese, zinc (slab form), aluminum oxide, silicon carbide ore, rutile, asbestos, and antimony (SEDA, 1995a). Upon closure, DLA would retain the ores and materials in their present locations.²

The enclave would involve the retention and use of four buildings. Building 103, which houses the SEDA Fire Department and hazardous materials response team, would continue to be used in that capacity. It would also serve as the headquarters facility for enclave operations.

Building 350 is a 90,000-square-foot warehouse located on the periphery of the main warehouse area. Buildings 356 and 357 are large warehouses, each providing more than 200,000 square feet of space. Located adjacent to Highway 96 on the east side of the installation, they are amenable to being fenced off from the remainder of the installation property while still allowing access to State Route 96, the primary transportation route. Buildings 350, 356, and 357 would be used to store DS-2, a highly corrosive decontaminant used to clean equipment affected by chemical agents. The approximate chemical content of DS-2 is 70 percent diethylene triamine, 28 percent methoxyethanol, and 2 percent sodium hydroxide. DS-2, stored on pallets in 5-gallon steel pails and boxes of 1.3-quart steel containers, is classified as a hazardous material because of its corrosive properties. The Army would retain access to enclave facilities by use of reservations in transfer and conveyance documents. In the case of the facilities to be used for storage of hazardous materials, the Army would have access to State Highway 96 based on the proximity of Buildings 350, 356, and 357 to that highway.³

²Since the BRAC Commission announcement in July 1995, management of the National Strategic Stockpile Program by the DLA has resulted in relocation and sale of some of the ore piles. Creation of new ore piles at SEDA is not anticipated.

³Changes in mission requirements and management actions with respect to the ore piles and storage of DS-2 could, ultimately, lead to the Army's need for fewer than 30 acres for enclave purposes at SEDA. If portions of the enclave property become no longer needed due to changes in military requirements, the Army would terminate access easements supporting their use.



LEGEND

Conservation	Planned Industrial Development (PID)
Housing	Transfer to U.S. Coast Guard
Institutional	Airfield, Special Events, Institutional, & Training
Warehouse	SEDA Enclave Sites
	Transfer to the SCIDA

Source: RKG Associates, 1997.

Proposed Reuses
Seneca Army Depot Activity
Romulus, New York
Figure 2-3

SEDLRA Redevelopment Areas. Based on the foregoing transfer of property to the Coast Guard and establishment of an enclave for Army use, approximately 10,272 acres would be available for transfer or conveyance to the SCIDA. The SEDLRA reuse plan identifies the following principal planning areas at SEDA:

- *Conservation/Recreation Area.*⁴ About 8,100 acres of SEDA that were used primarily to support ammunition storage igloos are being planned for conservation/recreation. This area includes 21 buildings (with 119,600 square feet) in the former Q Area (storage area for special weapons) adjacent to the institutional area. These facilities are connected to the SEDA water supply system and the Building 715 sewage treatment plant.
- *Lake Housing Area.* A portion of SEDA fronting on Seneca Lake, consisting of about 120 acres, contains Flac Drive (30 single-family homes built in the 1980s and 1990s), Colonel Drive (5 older single-family homes relocated to the site), 21 lakefront cottages, a travel park that has 21 mobile homes, the Officers' Club, and boat docking facilities.
- *Planned Office/Industrial Development (PID) Area.* This 640-acre portion of SEDA is the present main administrative area of the installation. It contains over 30 buildings having a total of about 300,000 square feet of floor space. Within the PID Area are about 150 developable acres that could be used for construction of new facilities. Adjacent to this area is an undeveloped 110 acre parcel that has been identified for possible construction of a state prison.
- *Elliot Acres Housing Area.* This 80-acre parcel, adjacent to the administrative area in the PID, contains 45 buildings having 124 residential units ranging from 1,300 to 1,900 square feet (totaling about 184,000 square feet).
- *Warehouse and Distribution Area.* About 550 acres of SEDA support warehouse use. There are 29 warehouses with a total of 2,330,000 square feet, 6 shops and garages with 95,600 total square feet, and 6 other buildings having a total of 18,700 square feet.
- *Airfield/Special Events Site/Institutional & Training Area.*⁵ This 500-acre area is an airfield with a 7,000-foot runway and 10 buildings having a total of about 30,500 square feet of space. About 50 acres of this area serves as a firearms training area.
- *Institutional Area.* About 180 acres in the northern portion of SEDA support a comprehensive complex formerly used to house military personnel supporting the installation's special weapons mission. Buildings include facilities used for barracks, chapel, athletics and recreation, hobby shops, dining, warehouse, and miscellaneous other purposes. In total, this area has 42 buildings having an estimated total of 303,400 square feet. The buildings are connected to the SEDA water supply system and the Building 715 sewage treatment plant.

⁴The Conservation/Recreation Area might be managed to include hunting activities.

⁵Amendment #1 to the reuse plan in November 1997 changed the description of this parcel to permit its use for special events, institutional, and training uses.

Expressions of interest in areas available to the SCIDA have been received from the following: there have been discussions with the NYSDEC's Division of Fish and Wildlife about possible interest in using the Ammunition Storage Area as a managed conservation and recreational area—there is no commitment from them at this time; the New York Army National Guard, interested in acquiring three warehouses within the Warehouse and Distribution Area; a private rail corporation, interested in using the Warehouse and Distribution Area and distribution facilities in the administrative area; the Finger Lakes Law Enforcement Academy, interested in using the Airfield/Special Events Area for training of police and emergency personnel; the New York State Office of Parks, Recreation, and Historic Preservation (Finger Lakes Region) and the Finger Lakes Law Enforcement Academy, interested in using the Training Ranges for firearms training; and Youth Services, Inc., interested in using the Institutional Area for youth corrections purposes.

The original SEDLRA reuse plan envisioned acquisition of only the Lake Housing Area and the PID Area, with the SCIDA seeking conveyance of these two areas through a no-cost rural EDC. Following conveyance from the Army, the SCIDA intended to sell the Lake Housing Area and use proceeds of that transaction to fund operating and maintenance expenses for redevelopment of the PID Area. The original reuse plan recognized that other areas could be sought, through various types of public benefit conveyances, by entities expressing interest in them, or the Army could sell portions of the property or retain them in caretaker status.

Amendment 1 to the reuse plan expanded the SCIDA's vision for use of the BRAC property. Under the amendment, Seneca County would seek transfer or conveyance of the Lake Housing Area and PID Area as originally contemplated. Proceeds from sale of the Lake Housing Area would be used to develop the PID Area as the White Deer Corporate Complex. The amendment revises the reuse plan to include the Elliot Acres Housing Area, the Airfield/Special Events Area, the Warehouse and Distribution Area, and the Institutional Area. The SCIDA would take conveyance of the Airfield Area for law enforcement training use. The SCIDA would take conveyance of the Institutional Area to grant a lease supporting institutional purposes, most likely by Youth Services, Inc. Like the Lake Housing Area, the Elliot Acres Housing Area would be marketed for sale to a developer, with proceeds being used to support development of SCIDA-acquired depot property.

Under the amended reuse plan, the SCIDA will seek an EDC for six of seven areas at SEDA identified for redevelopment (i.e., all but the Conservation/Recreation Area). The amended reuse plan identifies a 110-acre parcel adjacent to the PID for possible construction of a State Prison. The amendment further notes that "Although there are no current plans for the construction of a prison at Seneca Army Depot, the SCIDA felt it was prudent to include a proposed prison site in the EIS process, thereby positioning this location for a possible prison designation in the 1998 New York State budget process." Amendment 1 of the reuse plan considers the prison part of the PID Area; however, for purposes of reuse analysis and intensity computations and to analyze the potential effects of all reasonable uses, the Army has considered the SEDLRA Warehouse and Distribution parcel plus the adjacent area identified as suitable for siting of a prison, as a mixed use area. The mixed use designation is appropriate to industrial, institutional, and other uses (e.g., administrative or commercial) that might occur on the parcel. Given the amount of warehouse space, as well as the areas of undeveloped property fronting State Highway 96, designation and analysis of a mixed use area for the property supports the goal of thorough analysis of potential environmental effects.

Lands adjacent to SEDA are used predominantly for agricultural purposes. Lands on the depot would characteristically be zoned as mixed, consisting chiefly of light industrial use, or as conservation use. Following disposal, the present main administrative area might be zoned for industrial or commercial uses, depending on land use patterns and reuse actions implemented in the PID Area by the SCIDA. Classifications for remaining portions of the installation could include institutional, residential, conservation, or recreation uses.

Under the Defense Base Closure and Realignment Act, closure is required by no later than the end of the 6-year period beginning on July 13, 1995, the date on which the President transmitted his report to Congress containing the recommendations of the BRAC Commission. The Army plans to cease operations at SEDA by September 30, 2000.

In transferring or conveying property at SEDA, the Army would recognize or impose encumbrances consistent with requirements of law, agency negotiation, and protection of environmental values. These encumbrances include access easements, asbestos-containing material (ACM), easements and rights-of-way, groundwater use prohibition, historical resources, lead-based paint (LBP), remedial activities, unexploded ordnance, and wetlands. The encumbrances, arising from Army imposition or legal restraint, can be expected to influence future uses of the property. Section 3.3.1 provides information on the Army's procedures for identifying encumbrances and describes encumbrances expected to exist at SEDA at the time of transfer or conveyance.

2.3 DISPOSAL PROCESS

The following subsections discuss predisposal actions that would occur before transfer or conveyance and the steps required to accomplish disposal.

2.3.1 Caretaking of Property Until Disposal

The Army recognizes that maintenance of an installation plays a key role in ensuring its redevelopment. The Army would employ two levels of maintenance.

From the time of operational closure until conveyance of the property to the SCIDA, the Army would provide for minimal maintenance procedures to preserve and protect those facilities and items of equipment needed for reuse in an economical manner that facilitates base redevelopment. In consultation with the SCIDA, the Army would determine required levels of maintenance of facilities and equipment for an initial period following closure. While the Army would work closely with the SCIDA to ensure that facilities are maintained for rapid reuse, the levels of maintenance during this initial period would not exceed maintenance standards in effect prior to approval of the closure decision (September 28, 1995). During this initial period, maintenance would not include any property improvements such as construction, alteration, or demolition. In an appropriate case, however, demolition could occur if required for health, safety, or environmental reasons or if it were economically justified in lieu of continued maintenance.

In the event the Army completes its NEPA analysis of disposal and reuse before the planned closure date, the time period for the initial levels of maintenance and repair would normally be no longer than 1 year after operational closure of the base. In the event the Army does not complete its NEPA analysis of disposal and reuse before the planned closure date, the time period for the initial levels of

minimal maintenance and repair would normally be 180 days after the Secretary of the Army approves the NEPA analysis. The Army may extend the time period for the initial levels of maintenance and repair for property still under its control for an additional period if it determines that the SCIDA is actively implementing its redevelopment plan and that such levels of maintenance are justified.

The initial period of maintenance possibly would be for a specific user (e.g., commercial enterprise) identified by the SCIDA. Consultation by the Army with the SCIDA to establish specific caretaking plans for each structure and facility has not yet occurred. The Army and SCIDA have agreed to discuss maintenance levels for facilities on a case-by-case basis as reuse opportunities are identified. When those discussions do occur, the Army and the SCIDA will be guided by the provisions of Chapter 6 of the *Base Reuse Implementation Manual* and its delineation of actions during the initial maintenance period.

Generally, maintenance during this initial period would involve the maintenance of fenced areas to ensure adequate security, mowing and weed control on grounds within the South Depot area for aesthetics and fire protection, and trimming and maintenance of trees and brush to minimize interference with roadways, fences, or buildings. Diseased trees and vegetation would be identified and removed as appropriate. Irrigation and erosion control would be addressed as required. Natural resources management, hunting, and wildlife management would also be continued. Security at SEDA would be conducted as in the town and county jurisdictions within the ROI.

If property were not transferred within an agreed-to period of time, and if the SCIDA were not actively seeking reuse opportunities for the available facilities, the Army would reduce maintenance levels to the minimum level for surplus government property required by 41 CFR Subparts 101-47.402 and 101-47-4913 and Army Regulation 210-70 (*Inactivation of Installations*). Maintenance during the later period would not be focused on keeping the facilities in a state of repair to permit rapid reuse. Rather, maintenance during this period would consist of minimal activities intended primarily to ensure security and to prevent deterioration. This reduced level of maintenance would continue indefinitely until disposal. Specific activities that would occur during this later maintenance period are described in Section 3.2. Table 2-1 identifies the actions that would be taken during the first and second levels of maintenance during caretaker status.

2.3.2 *Cleanup of Contaminated Sites*

In March 1989, EPA placed SEDA on the National Priorities List based on scoring of hazardous waste sites under the Hazard Ranking System. As provided for by CERCLA, the Army subsequently entered into a Federal Facilities Agreement with EPA and NYSDEC to guide hazardous waste site assessment and remediation at SEDA. In preparing to dispose of the SEDA property, the Army is obligated to abide by CERCLA Section 120(h)(3), which requires that:

(A)(ii) A covenant warranting that all remedial action necessary to protect human health and the environment with respect to any such substances remaining on the property has been taken before the date of transfer.

**Table 2-1
Facilities Caretaker Maintenance Procedures**

Component	First Level of Maintenance¹	Second Level of Maintenance²
Security Inspections	Inspect exterior of structures approximately once a day only during normal work hours.	Inspect exterior as part of normal routine.
Interior Walk-Through	Walk-through weekly as part of normal duties.	Walk-through semiannually.
Building Shell	Inspect after severe weather; ensure shell is maintained weather-tight as part of security.	Inspect semiannually and after severe weather. Gutters, drains, and downspouts cleaned. Building shells will be kept weather-tight.
Exterior Windows, Doors, and Other Openings	Security inspections will ensure all doors and windows are operational. Close and lock all doors and windows. Repair broken doors and windows to ensure buildings are secured.	Inspect semiannually.
Building Interior	Maintain to ensure soundness of facility roof, structures, floor, office space, receiving and storage areas.	Maintain to ensure structural soundness of floors, roof framing, and other structural members.
Heating System	Maintain as required.	Turn off and drain system.
Air-Conditioning System	Maintain as required.	Turn off and drain system.
Electrical System	Maintain as required by interior walk-through.	Check after severe thunderstorms. Check operating equipment during walk-through inspections.
Water/Plumbing System	Repair as required.	Turn off water and drain system.
Fire Protection System	Maintain in accordance with National Fire Protection Association codes. Maintenance in accordance with schedules and all records maintained.	Deactivate fire protection system.
Pest Control Services	Inspect weekly.	Identify potential problems during walk-through inspections and initiate appropriate control procedures.
Grounds Maintenance	Maintain grass between 1 ½ inches and 6 inches. Snow removal where necessary.	Maintain grass between 3 ½ inches and 18 inches. Snow removal where necessary.
Installed Mechanical Equipment	Repair as required and periodic inspection and maintenance performed.	Maintain in inactive status.
Fire Hydrants	Perform annual inspections.	Perform annual inspections.

**Table 2-1
Facilities Caretaker Maintenance Procedures**

Component	First Level of Maintenance¹	Second Level of Maintenance²
Electrical Substation	Conduct quarterly visual inspection. Annual preventive maintenance by power company under contract.	Conduct quarterly visual inspection. Annual preventive maintenance.
Steam/Condensate Lines	Conduct monthly visual inspection. Implement corrective action.	None.
Water/Sewer Lines	Conduct monthly visual inspection. Implement corrective action.	None.
Impoundments	Conduct semi-annual inspections to ensure physical integrity of man-made impoundments and operation of control structures.	Conduct annual inspections to ensure physical integrity of man-made impoundments and operation of control structures.

¹ First Level of Maintenance—to occur on facilities identified for reuse under the LRA Reuse Plan and subsequent documents.

² Second Level of Maintenance—to occur in buildings or facilities which are not identified for reuse; are not covered by a caretaker agreement and have been put into an inactive status. Includes all structures not identified in the approved Reuse Plan and subsequent documents to be transferred to the SCIDA.

Source: Absolom, personal communication, 1997b

(iii) For purposes of subparagraph (A)(ii), all remedial action described in such subparagraph has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the [EPA] Administrator to be operating properly and successfully. The carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator to be operating properly and successfully, does not preclude transfer of the property.⁶

Under CERFA, federal agencies are required to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Although CERFA does not mandate that the Army transfer real property so identified, the first step in satisfying this objective is the requirement to identify real property where CERCLA-regulated hazardous substances or petroleum products were known to have been released or disposed of. To these ends, the Army is preparing an

⁶Section 334 of the National Defense Authorization Act for Fiscal Year 1997 enlarges authority for transfer of property prior to completion of all remedial action. To make such an earlier transfer, a federal agency must give public notice and provide the public the opportunity to submit written comments. Moreover, an agency must provide assurances that the deed or other agreement used to govern property transfer will provide that restrictions will be placed on use necessary to ensure required remedial investigations, actions, or oversight activities will not be disrupted; provide that all remedial action will be taken and will identify schedules for investigation and completion; and provide that the federal agency responsible for the property subject to transfer will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules, subject to congressional authorizations and appropriations. Procedures to carry out this amendment of CERCLA are being developed by DoD, EPA, and state officials.

Environmental Baseline Survey (EBS) to identify areas at SEDA where storage, release, or disposal of hazardous substances or petroleum products or their derivatives has occurred. The EBS also identifies non-CERCLA-related environmental or safety issues (i.e., asbestos, lead-based paint, radon, polychlorinated biphenyls (PCBs), radionuclides, and unexploded ordnance) that would limit or preclude the transfer of property for unrestricted use; completed or ongoing removal or remedial actions taken at the installation; and possible contamination on adjacent properties that could migrate to the SEDA real property.

Previous investigations at SEDA resulted in classification of 72 sites as solid waste management units (Woodward-Clyde, 1997). Of these, 24 were classified as No Action Required; 20 as requiring Removal Action or Completion Report and ROD; and 28 as requiring Remedial Action and Feasibility Study, Remedial Action, and Record of DOD. The EBS has identified an additional 26 sites potentially having areas of contamination. These sites are identified in Figure 4-4.

The EBS serves as a database describing all environmental conditions related to remediation issues. It also will be a contributing factor in formulation of the BRAC Cleanup Plan. Finally, the EBS is a major source of information in developing a Finding of Suitability to Lease (FOSL) for interim leases and a FOSL for leases in furtherance of conveyance following completion of NEPA analysis and Finding of Suitability for Transfer (FOST).

2.3.3 *Interim Uses*

Before disposal, the Army may execute interim leases to facilitate state and local economic adjustment efforts and to encourage economic redevelopment. Pending issuance of a ROD regarding the NEPA analysis for disposal and reuse of SEDA, the Army may not make commitments that would significantly affect the quality of the human environment or irreversibly alter the environment in a way that would preclude a reasonable alternative for disposal of the property. Hence, leases in furtherance of conveyance prior to completion of the NEPA analysis of disposal and reuse and issuance of a ROD will not be considered. The Army may, however, enter into an interim lease having a duration beyond the expected completion date of the NEPA analysis of disposal and reuse of the installation. In such a case, the Army would consult with the SCIDA before entering into the lease. Such interim leases could allow only limited use of the property and facilities such that no reasonable reuse options would be foreclosed before the publication of the base wide disposal NEPA analysis. Before granting any lease, the Army would comply with NEPA requirements relevant to the lease and would prepare a FOSL to document the environmental condition of the property.

2.3.4 *Real Estate Disposal Process*

2.3.4.1 *Disposal as a Package or in Parcels*

Army policy provides that, upon completion of required hazardous waste cleanup activities, property subject to disposal under BRAC may be disposed of as a single entity. Alternatively, the Army may dispose of property in parcels. Based on identified reuse proposals, potential for tax revenue generation, and potential for job creation, disposal of individual SEDA property parcels upon completion of site-specific hazardous waste cleanup activities could be found to be most appropriate.

The covenant ensuring completion of hazardous waste cleanup under CERCLA, discussed in Section 2.3.2, applies to conveyances of property from the Army to any nonfederal entity. To assist the SCIDA in achieving its reuse objective of job creation, the Army may identify substantial areas or discrete parcels at SEDA that require no further action under CERCLA. These parcels may appropriately be conveyed, following completion of the EIS process, rather than awaiting completion of all hazardous waste remedial actions applicable to the entire area.

2.3.4.2 Disposal Process

Methods available to the Army for property disposal include transfer to another federal agency, public benefit discount conveyance, economic development conveyance, negotiated sale, and competitive sale. The following is a description of each method.

- *Transfer to another federal agency.* The Army may transfer the real property to another federal agency.
- *Public benefit discount conveyance.* When sponsored by a federal agency, state or local government entities may obtain property at less than fair market value for uses that would benefit the public such as education, parks and recreation, wildlife conservation, or public health.
- *Economic development conveyance.* The 1994 Defense Authorization Act provides for conveyance of property to an LRA at or below fair market value using flexible payment terms. The EDC is designed to promote economic development and job creation in the local community. An EDC is not intended to supplant other federal property disposal authorities and cannot be used if the proposed reuse can be accomplished through another authority. If certain criteria are met for a rural installation, an EDC may be made at no cost. To qualify for an EDC, the LRA must submit a request to the Department of the Army describing its proposed economic development and job creation program.
- *Negotiated sale.* The Army may negotiate the sale of the property to state or local governmental entities including tribal governments or private parties at fair market value.
- *Competitive sale.* Sale to the public may occur through either an invitation for bids or an auction.

The method of disposal is determined, in part, by a two-step screening procedure that first assesses the demand for the facilities by DoD, other federal agencies, homeless assistance providers, and state and local governmental entities. If no interest is indicated through the screening process, the property is generally advertised for sale to the public by competitive bid.

- *DoD and federal agency screening.* The screening process first offers the property to other DoD agencies and federal agencies. A DoD or other federal agency indicating an initial interest must follow up with a firm proposal for the future use of the property. Under the 1994 Defense Authorization Act, DoD and other federal screening is to be completed within 6 months after September 28, 1995, the date of approval of the BRAC Commission's recommendations. Federal screening has been completed for SEDA, resulting in an expression of interest by the U.S. Coast Guard for about 292 acres for continued use as a LORAN-C antenna station.

- *LRA screening.* Pursuant to the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, which amended the Defense Base Closure and Realignment Act of 1990, property that is surplus to the federal government's needs is to be screened via an LRA's soliciting notices of interest from state and local governments, representatives of the homeless, and other interested parties. An LRA's outreach efforts to potential users or recipients of the property include working with the Department of Housing and Urban Development and other federal agencies that sponsor public benefit transfers under the Federal Property and Administrative Services Act. Incorporating the notices of interest submitted to it, the LRA then prepares a redevelopment plan identifying the overall reuse strategy for the installation. The Seneca Army Depot Reuse Plan and Implementation Strategy was adopted by the Seneca County Board of Supervisors on October 22, 1996. Amendment 1 to the reuse plan was adopted in October 1997.

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SECTION 3.0: ALTERNATIVES

This section addresses alternatives to the Army's primary action (property disposal) and to the secondary action (property reuse by other parties).

3.1 INTRODUCTION

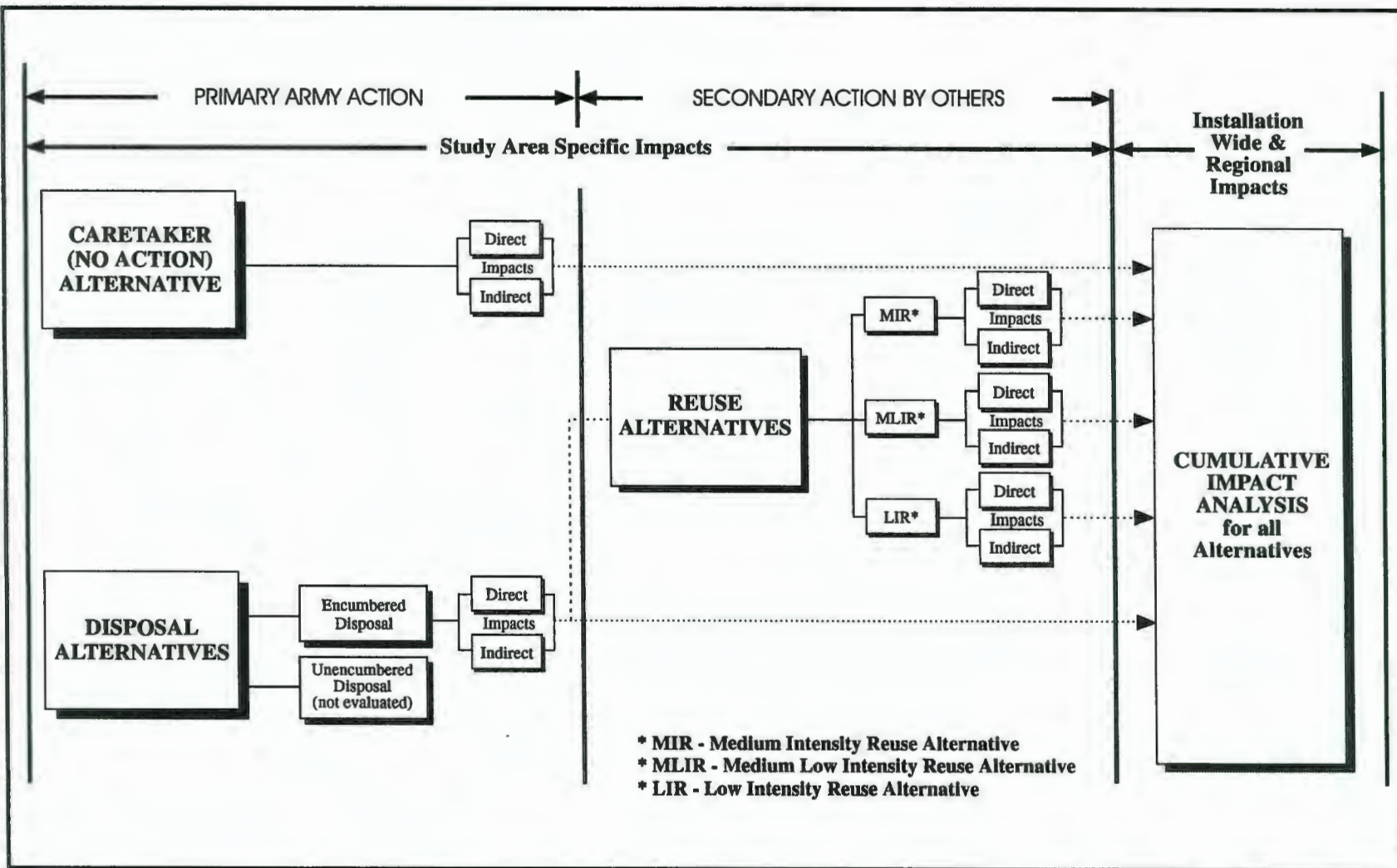
Disposal alternatives are developed to help the Army decide whether to dispose of the property with or without restrictions. Disposal alternatives, with and without restrictions (called encumbrances; see Sections 3.3.1 and 3.3.2), as well as a no action alternative, are evaluated. Future reuse of surplus SEDA property is analyzed in the context of land use intensity levels as described in Section 3.4.2. The land use-intensity-based scenarios are used to inform Army decision makers and the public of environmental impacts expected to occur given the reasonable range of reuses future property owners might implement. The Seneca Army Depot Reuse Plan and Implementation Strategy is the primary factor in development of the proposed action, alternatives, and effects analysis in the Army's NEPA process for the disposal action. Consideration of the reuse plan as part of the proposed federal action aids both the community and the Army in achieving informed decision making and consensus on redevelopment at SEDA. The alternatives evaluation process is shown in Figure 3-1.

The Army's preferred disposal alternative is encumbered disposal, as described in Section 2.0. The Army expresses no preference with respect to reuse scenarios since that decision will be made by others.

3.2 NO ACTION ALTERNATIVE

Inclusion of the no action alternative is prescribed by the CEQ regulations and serves as a benchmark against which federal actions can be evaluated. The no action alternative assumes that the Army would be unable to dispose of all, or portions of, the available BRAC property within the period of time defined for initial caretaking of the property (refer to Section 2.3.1). Once the time period for the initial level of maintenance elapses, the Army would reduce maintenance to levels consistent with federal government standards for excess and surplus properties (i.e., 41 CFR 101-47.402 and 101-47.4913) and with Army Regulation 210-17 (*Inactivation of Installations*). This second stage of caretaker status would not be focused on keeping the facilities in a state of repair to facilitate rapid reuse. Rather, maintenance during this period would consist of minimal activities intended primarily to ensure security, health, and safety and to minimize physical deterioration. Maintenance activities would occur on those portions of the BRAC property not yet transferred or conveyed, and would include the following:

- Inspection, maintenance, and use of utility systems, telecommunications, and roads to the extent necessary to avoid their irreparable deterioration.
- Periodic maintenance of landscaping around unoccupied structures, as necessary, to protect them from fires or nuisance conditions.



Alternatives Evaluation Process Disposal and Reuse EIS

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Figure 3-1

- Maintenance of access to permit servicing of publicly owned or privately owned utility or infrastructure systems.
- Maintenance of security patrols, security systems, fire prevention, and protection services.
- Reduction in level of natural resources management programs including land management, game management, pest control, forest management, and erosion control; however, the Army will be responsible for management of deer hunts and fence maintenance.

3.3 DISPOSAL ALTERNATIVES

Pursuant to the Defense Base Closure and Realignment Act of 1990 and the 1995 BRAC Commission recommendation pertaining to SEDA, continuation of operations at SEDA is not feasible. There is no alternative to closure without further legislative direction. As discussed in Section 2.0, the Army is acting to implement BRAC 95 by disposing of surplus property. Interim actions include cleaning up hazardous waste contamination, caring for vacated facilities, and, as circumstances arise, making interim leasing arrangements. Disposal alternatives analyzed in this EIS are encumbered disposal and unencumbered disposal.

This subsection describes the encumbered and unencumbered alternatives that will be evaluated for potential impacts in Section 5.0.

3.3.1 Encumbered Disposal

The Army methodology to ensure environmentally sustainable redevelopment of BRAC disposal property identifies natural and man-made resources that must be used wisely or protected after ownership transfers out of federal control. This information is developed by the Army from the environmental baseline information early in the NEPA process and provided to the LRA with the recommendation that the reuse plan consider protecting these resources. This methodology describes these valuable resources plus any other conditions that might influence reuse. Using this methodology, the LRA develops a reuse plan that satisfies community redevelopment goals and objectives while achieving a high environmental standard.

Consistent with this methodology and as part of the disposal process, the Army may find it necessary to impose legal constraints, as part of the encumbered disposal alternative, to protect environmental values, to meet requirements of federal law, to effect results from Army negotiations with regulatory agencies, or to address specific Army needs.

Typical encumbrances that the Army might place on disposal include the protection and preservation of threatened and endangered species, jurisdictional wetlands, critical habitat, historic properties and sites, archeological sites, and legacy resources; access to remediation sites; and retention of easements and utility/infrastructure rights-of-way.

Conditions of special hazardous materials, such as ACM, LBP, radon, PCBs, and radiological material, require specific handling and may result in encumbrances, but usually can be handled without limiting redevelopment.

Other types of conditions that may be identified to the LRA as potentially limiting use, but which are not identified as legal encumbrances for the purposes of the encumbered disposal alternative, are excessive slope areas, soil limitations affecting construction, a high water table, overflow easements, rock outcrops, zoning ordinances, and the need to consider homeless persons in the plan.

Major Categories of Encumbrances (General). Six major categories of encumbrances can be identified:

- *Easements and rights-of-way.* Real estate may be burdened with utility system, other infrastructure-related, roadway, or access easements and rights-of-way.
- *Use restrictions.* Activities on property may be limited by existing conditions or in recognition of adjacent land uses. For example, use of a former landfill site would preclude ground disturbance of a clay cap but could otherwise permit passive uses such as recreation. The presence of unexploded ordnance would preclude many uses of a parcel because of the potential safety hazards. In other instances, restrictive covenants could impose or maintain buffer zones between incompatible uses.
- *Habitat protection.* The presence of federally listed threatened or endangered species of wildlife or plants may limit use of property.
- *Historic building or archeological site protection.* Negotiated terms of transfer or conveyance may result in requirements for new owners to maintain the status quo of historic buildings or archeological sites or may impose a requirement for consultation with the State Historic Preservation Office prior to any actions affecting such resources.
- *Water rights.* Covenants may be required to protect existing well fields or aquifers.
- *Utility dependencies.* Utilities operated as a single system create dependencies with future owners unless the systems are individualized to separate parcels or facilities. Wastewater collection and treatment, potable water supply and distribution, telecommunications, gas, and electricity should be available to each property owner. An encumbrance may be needed wherever a parcel's or facility's future use depends on a common provider of these services or a common distribution system. As part of property disposal, the Army would cooperate with new owners and local utility companies to make arrangements for utility services, including creating or preserving appropriate easement across transferred land.

The Army's identification and imposition of encumbrances takes into consideration opportunities for the protection and preservation of environmental values, as well as the requirements of federal law and specific Army requirements. Consistent with the stewardship principles by which it operates its installations, the Army has a vital interest in perpetuating important resource protections, which in some cases the Army is able to do by use of encumbrances. Establishment of encumbrances reflects the Army's objective of returning property to public and private sector use as soon as possible in a manner that will result in continued environmental resources stewardship, protection of public health and safety, and promotion of Army and reuse interests.

Encumbrances Identified at SEDA. The following specific encumbrances, considered in relation to the encumbered disposal alternative for SEDA, would be expected to apply at the time of transfer or conveyance of the SEDA property:

- *Access easements.* Easements would be reserved by the Army to permit access to and use of property retained for use as an enclave. In particular, such access easements would be required with respect to ore piles located adjacent to the ammunition storage area and with respect to Building 103, the fire department (an area proposed for conveyance to the SCIDA). A perpetual easement granted in 1942 in favor of the Cemetery Association of the First Baptist Church would be continued for access to and from a private cemetery located in the ammunition storage area.
- *Asbestos-containing material.* Surveys at SEDA reveal the presence of ACM in approximately half of the buildings at the installation. Before transfer or conveyance, the Army would remove or encapsulate all friable asbestos that posed a risk to human health. Transfer or conveyance documents would notify new owners or lessees of the property that they would be responsible for any future remediation of asbestos found to be necessary. Appendix C shows the notification the Army would typically provide.
- *Easements and rights-of-way.* Existing easements and rights-of-way benefiting or burdening SEDA property would continue after transfer or conveyance. For instance, the Army has granted an easement to New York State Electric and Gas to furnish service (underground lines) to the LORAN-C site used by the Coast Guard. Other grants that would continue to affect BRAC property are discussed in Section 4.
- *Groundwater use prohibition.* Groundwater trichloroethylene (TCE) contamination is present on the southwestern side of the depot as a result of operation of a 4-acre ash landfill and municipal incinerator (Building 2207). Although there is presently no on-base use of groundwater in the vicinity, TCE studies are under way to determine the potential for migration of the contaminant. Any transfer or conveyance of property in the immediate vicinity of this release of TCE would include a prohibition on any consumptive use of groundwater. Ongoing and future investigations of groundwater may result in the identification of other contaminants which would cause similar groundwater use prohibitions. This encumbrance on the property would extend until such time as appropriate regulatory agencies certified the completion of remedial action pertaining to the groundwater.
- *Historical resources.* Building 2301, located in the southwest corner of the installation near the airfield, is eligible for the National Register of Historic Places as an example of early 20th century classical revival architecture. As identified in Section 4.12.2, ongoing studies may result in additional determinations of NRHP eligibility of other depot buildings and structures. For buildings and structures eligible for the NRHP, deed restrictions requiring protection of the historic properties would be passed on to the new owners as a condition of the sale or transfer of installation property. If the new owners desire to lessen or remove the deed restrictions requiring preservation, the deed will delineate a process for the new owners to consult with the SHPO to arrive at mutually agreeable and appropriate measures for mitigating the adverse effects of their proposed undertaking. Sample provisions that would typically be included in deeds to protect historic structures are shown in Appendices D and E.

- *Lead-based paint.* Surveys at SEDA reveal the presence of LBP in a wide range of structures, including family housing units. Consistent with the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Public Law 102-550), the Army would provide notice in transfer and conveyance documents that buildings containing LBP would be restricted from residential use unless the recipient of the property abated any LBP hazards. (See Appendix C for typical LBP Provisions for BRAC Leases and Deeds.) It is known that there are residential structure within SEDA that were constructed prior to 1960.
- *Remedial activities.* Operations at SEDA over several decades have resulted in localized hazardous waste contamination. The contaminants and substances of concern include volatile organic compounds, semivolatile organic compounds, and metals. For the most part, details of specific remedial actions remain to be determined. As indicated in Section 4.9, several buildings and areas at SEDA would be subject to some level of cleanup activity. In conjunction with remedial activities that might be required during an interim lease or upon conveyance, the Army would retain a right to conduct investigations and surveys; to have government personnel and contractors conduct field activities; and to construct, operate, maintain, or undertake any other response or remedial action as required.
- *Unexploded ordnance.* Eleven discrete sites at SEDA are known or suspected to have unexploded ordnance (UXO). The presence of UXO could present a hazard to numerous types of activities such as construction and most types of agricultural or silvicultural operations. Prior to transfer or conveyance, the Army would decontaminate the sites with the most appropriate technology to ensure protection of the public consistent with the proposed end use of the property. Restrictive covenants would be placed in transfer or conveyance documents to prohibit future owners from terrain-disruptive activities exceeding the depths of decontamination efforts and to impose other requirements to ensure safety and protection of human health and the environment.
- *Wetlands.* An estimated 496 acres of wetlands occur at 87 distinct locations at SEDA. These areas are described in detail in Section 4.11.4. To assist future transferees in understanding their obligations under Section 404 of the Clean Water Act with respect to activities that might affect wetlands, the Army would notify prospective transferees, during the disposal process, of those areas which have been identified as wetlands. Section 4 of EO 11990 authorizes the Army to impose other appropriate restrictions on the uses of property to protect wetland areas.

Section 4.6.5 identifies the presence of several soil series occurring at SEDA that are designated as prime farmland soils or farmland soils of statewide importance. The Army's transfer or conveyance of SEDA could result in conversion of farmland soils to nonagricultural uses at some locations. Alternatives available to the Army include not disposing of SEDA, disposing of the property with an encumbrance prohibiting conversion of use, or disposal with no encumbrance limiting future use. The first two of the foregoing alternatives are not practicable and, in the circumstances at SEDA, conflict with the President's Program to Revitalize Base Closure Communities and its emphasis on redevelopment and job creation. The majority of the property (more than 8,000 acres) would be used for a conservation/recreation area, a use that would not involve development or conversion. In light of the proposed land uses in the reuse plan, the majority of which involve redevelopment in areas already highly disturbed and developed, an encumbrance restricting nonagricultural uses is viewed as unnecessary.

3.3.2 *Unencumbered Disposal*

Unencumbered disposal would involve transfer or conveyance of the property with the Army's not having created any encumbrances or with the Army's having removed encumbrances that could be removed. Removal of certain encumbrances is either infeasible or impracticable. For instance, elimination of easements providing for electric power line service could result in loss of that service.

Removal of encumbrances (or creation or retention of them) should be considered in light of land use planning flexibility, market value, environmental concerns, potential increased management burdens on subsequent owners, and the potential for future property owners to be liable for failure to comply with encumbrance-related requirements. The Army examines the potential for removal of encumbrances to determine feasibility, costs, and other issues (e.g., timing) that could be involved in transfer or conveyance of property in an unencumbered status.

3.4 *REUSE ALTERNATIVES*

Consistent with Congress's mandate, the Army will cease performance of active missions at SEDA no later than July 13, 2001. Depending on numerous factors, including information presented in this EIS, disposal might occur as a single event involving disposal of the entire facility to one or more subsequent owners, or it might occur over time with multiple transactions involving the same or several new owners. Regardless of the method of disposal, timing, or identity of new owners, reuse of SEDA is reasonably foreseeable. Consistent with statutory requirements, this EIS treats the SEDLRA reuse plan as the primary factor in developing the proposed action and alternatives.

CEQ regulations require evaluation of reasonably foreseeable actions, without limitation on the party conducting them, and evaluation of consequent environmental impacts. Accordingly, reuse of the property is evaluated as an action secondary in time, following the Army's primary action of disposal. The following subsections discuss the methodology used to define the reuse scenarios to be considered. This EIS analyzes reuse of SEDA, which is expected to occur. Because of the speculative and changeable nature of reuse planning, specific activities cannot be precisely identified at this time.

3.4.1 *Development of Reuse Alternatives*

Reuse planning for SEDA consists of establishing reuse objectives, planning for compatible land uses that support environmentally sustainable reuse and the community's needs, and marketing among potential public and private-sector entities to obtain interest in use of the property. The reuse planning process is dynamic and often dependent on market and general economic conditions beyond the control of the reuse planning authority.

In recognition of the dynamics attending reuse planning, the Army uses intensity-based probable reuse scenarios to identify the range of reasonable reuse alternatives required by NEPA and by DoD implementing directives. That is, instead of speculatively predicting exactly what will occur at a site, the Army establishes ranges or levels of activity that reasonably *might* occur. These levels of activity, referred to as intensities, provide a flexible framework capable of reflecting the different kinds of uses that could result at a location. Reuse intensity levels also take into account the effects that encumbrances exert on reuse.

3.4.2 Land Use Intensity Categories Described

Five intensity-based levels of redevelopment of SEDA property lend themselves to evaluation of potential environmental and socioeconomic impacts. These are low intensity reuse (LIR), medium-low intensity reuse (MLIR), medium intensity reuse (MIR), medium-high intensity reuse (MHIR), and high intensity reuse (HIR). At any given installation, analysis of all five levels of intensity might not be appropriate due to historical usage, physical limitations, or other cogent reasons.

Levels of reuse intensity can be viewed as a continuum. At SEDA, LIR could represent a level of activity such as might be found in uses requiring only minimal numbers of buildings, with park, recreation, or wildlife conservation functions occurring over substantial portions of the installation. An MLIR in the context of SEDA would represent the next greater level of use intensity. For instance, increased use of existing facilities, the presence of a larger population, and more diverse activities could represent a medium-low intensity use. An MIR represents the approximate midpoint of reuse intensity that could occur at a site. In the context of SEDA, an MIR might be represented by intensive use of existing facilities as well as construction of additional facilities to house new and different activities. At a site such as SEDA, an MHIR and HIR might be achievable by great increases in facilities and population and reduction in the amount of lands used for passive purposes (e.g., park or conservation/recreation area). At SEDA, these levels of intensity might involve conversion or replacement of existing structures and construction of additional buildings for housing, commercial, institutional, or industrial uses on much greater amounts of acreage at the installation. However, MHIR and HIR would be impractical because such intensity of use could not be sustained over an area as large as SEDA and they would be essentially incompatible with the rural nature of the surrounding area.

Indicators of levels of intensity can be quantified by counting the number of people at a location (employees or residents), the potential number of vehicle trips generated as a result of the nature of the activity, or the number of dwelling units. Other indicators of the intensity of use are the rates of resource consumption (electricity, natural gas, water) and the amount of building floor space per acre (identified as the floor area ratio, or FAR, expressed as the amount of square feet per acre).

Development of intensity parameters is based on several sources, including existing land use plans for various types of projects and planning jurisdictions, land use planning reference materials, and prior Army BRAC land use planning experience. Private-sector redevelopment of property subject to BRAC action, on the other hand, seeks different objectives and uses somewhat different planning concepts in that it focuses on creation of jobs and capital investment costs and it typically uses traditional community zoning categories (e.g., residential, industrial).¹ Upon evaluation of various types of indicators in light of their applicability to Army lands subject to BRAC action, the Army has selected five representative, illustrative intensity parameters. These are residential density, square feet per employee (general spaces), square feet per employee (warehouse spaces), floor area ratio, and

¹Under AR 210-20 (*Master Planning for Army Installations*), land use planning for Army installations is based on development of facilities and physical plants that support an overall environment of quality for the force and that provide the basis for projecting power assets (trained personnel, equipment, and supplies) necessary for national security. In contrast to the wide variety of zoning classifications used by local jurisdictions, Army planning relies on 12 land use classifications—airfields, maintenance, industrial, supply/storage, administration, training/ranges, unaccompanied personnel housing, family housing, community facilities, medical, outdoor recreation, and open space.

development ratio. These intensity parameters aid in evaluation of environmental effects at various levels of redevelopment (Table 3-1). The parameters are discussed in the following paragraphs.

Residential Density. This parameter identifies the number of dwelling units per acre. It indicates the number of people who might reside in an area.

Square Feet Per Employee (General Space). This parameter indicates the number of square feet available per employee in all types of facilities at an installation except family housing and warehouses or storage structures.

Square Feet Per Employee (Warehouse and Storage Space). This parameter indicates the number of square feet available per employee engaged in warehouse or storage activities at an installation. Only built, fully enclosed, and covered storage space is calculated; shed or open storage areas are excluded from computation. In describing Army uses of facilities, estimates of the number of employees engaged in warehouse or storage operations are used to determine the portion of the installation workforce in this square feet per employee category.

Floor Area Ratio. This ratio reflects how much building development occurs at a site or across an area. For example, a 3-story building having a 7,500-square-foot footprint on a 4-acre site would represent an FAR of 0.13 (22,500 square feet of floor space over 4 acres [174,240 square feet]).

**Table 3-1
Land Use Intensity Parameters**

Intensity Level	Residential Density ¹	Square Feet Per Employee (General)	Square Feet Per Employee (Warehouse)	FAR	Development Ratio
Low	< 2	> 800	> 15,000	<0.05	<0.2
Medium-Low	2-6	601-800	8,001-15,000	0.05-0.10	0.2-0.4
Medium	6-12	401-600	4,001-8,000	0.10-0.30	0.4-0.6
Medium-High	12-20	200-400	1,000-4,000	0.30-0.70	0.6-0.8
High	> 20	< 200	< 1,000	>0.70	0.8-1.0
SEDA	1 ²	6,151 ³	31,372 ⁴	0.009	< 0.1

¹ Dwelling units per acre.

² The installation has 201 housing units in two areas totaling about 200 acres.

³ Based on 115 employees in 707,399 square feet of general space.

⁴ Based on 115 employees in 3,607,741 square feet of warehouse, storage, and igloo space.

Sources: Fairfax County, 1990; HQDA, 1993; Lynch and Hack, 1994; Tompkins and White, 1984; Urban Land Institute, 1987, 1988, 1994; USACE, 1993.

Development Ratio. This indicator of intensity is based on the amount of developed property in relation to the total amount of property subject to land use planning at a given location. Developed property includes the acreage of not only those specific sites on which structures have been erected, but also immediately adjacent areas capable of being easily served by existing infrastructure elements such as roadways, electrical service, water and sewer, natural gas, heating steam, and telecommunications systems. For purposes of this ratio, developed property includes buildings, roadways, parking lots, and other structures such as storm water retention basins. The developed property ratio is expressed as the ratio of acres of developed property to the whole acreage within the area under consideration (e.g., 0.1). This indicator is useful in providing a general estimate of the degree of build-out, or potentially full development, that has occurred at a location.

The square feet per employee, FAR, and development ratio considerations shown in Table 3-1 are appropriate to describe intensity levels for reuse planning at SEDA. The intensity parameters shown in Table 3-1 reflect generalized values or ranges appropriate to describe the variety of installations subject to Army management, as well as the variety of redevelopment situations. The intensity parameters should be considered together in evaluating the intensity of reuse of a site so as to provide full context. Use of any single parameter in isolation may unduly emphasize certain aspects of a site or preclude broader consideration. As applied to any particular parcel or area, or the whole of the installation, the values given may require some adjustment to account for the context in which an activity is located.

3.4.3 *Baseline Land Use Intensity*

At present, use of SEDA is characterized as low intensity. The total floor area of all facilities is 4,737,413 square feet spread over 10,594 acres, resulting in an FAR of 0.009. Approximately half of the installation's 231 employees occupy 707,400 square feet of general space, resulting in 6,150 square feet per employee. The employees in the remaining half of the workforce, associated with warehouse, storage, and igloo space, have more than 31,370 square feet per employee. The development ratio is below 0.1. The 77 housing units at the Lake Housing area (120 acres) and 124 housing units at the Elliot Acres Housing area (80 acres) represent an average residential density of 1.0. All these factors indicate a low intensity use of installation property.

Two important considerations affect the foregoing computations. First, there are 519 ammunition storage igloos (1,010,899 square feet) and 44 safety shelters (1,980 square feet) occupying about 8,100 acres in the central portion of the installation. Elimination of these structures from the FAR calculation results in an FAR of 0.037. Second, the foregoing square feet per employee calculation includes consideration of all ammunition storage igloos and warehouses. The igloos are not designed to be manned; few warehouses are heated or include office space for being regularly occupied. Elimination of igloos (1,010,899 square feet), safety shelters (1,980 square feet), and warehouse space (2,596,842 square feet) from the square feet per employee calculation results in 3,054 square feet of space per employee. The present staffing level reflects recent cessation of missions and is considerably reduced from that of 1992, when SEDA employed about 1,500 persons. At that time, there were about 470 square feet of space per employee for those in general spaces.

3.4.4 Local Reuse Plan

The SEDLRA reuse plan recognizes several constraints to redevelopment of the installation. The only feasible use identified for the more than 8,100 acres used by the Army primarily for storage of ammunition would be as a wildlife conservation or recreation area. The SEDLRA reuse plan identifies no potential for economic development of the ammunition storage area and notes that possible ownership by the state would preclude addition of the acreage to Seneca County's taxable property inventory. Future use of other portions of the installation would seek to capitalize on existing assets. Those assets, however, are limited by their physical condition or by traits that make them difficult to adapt to private-sector use. As a result, the areas of interest to the SCIDA are the Lake Housing and Elliot Acres Housing Areas to provide sale-proceeds capital for other development, the Administrative Area for redevelopment as a PID site, the Airfield/Special Events Site for law enforcement training, the Institutional Area for a residential youth correctional program, and the Warehouse and Distribution Area for light industrial, commercial, or institutional use.

Intensity-based reuse scenarios for SEDA are based on those portions of the installation which are likely to sustain economic redevelopment. In the absence of the SCIDA's desire for transfer or conveyance of all available surplus property, for formulating reuse intensities it is assumed that:

- The present ammunition storage area (and the surrounding safety zone) would be conveyed as a wildlife conservation/recreation area.
- The Lake Housing and Elliot Acres Housing Areas and the current Administrative Area would be conveyed to the SCIDA for sale of the former and redevelopment of the latter as a PID site.
- A Mixed Use Area, designated in the SEDLRA reuse plan as the Warehouse and Distribution Area, could be conveyed to various entities for light industrial, commercial, or institutional use, such as a prison.²
- The Airfield/Special Events Site/Institutional & Training Area would be conveyed to the Finger Lakes Law Enforcement Academy for training purposes.
- The Institutional Area would be conveyed to SCIDA for sale or lease to Youth Services, Inc., or another entity for use as a youth correctional facility or for other institutional uses.

The nature of the activities proposed to occur at the ammunition storage area, airfield, or training range areas would entail only minimal redevelopment activity and, hence, no appreciable increases in intensity levels. The housing areas would continue to be used for residential purposes. Two factors make it unlikely that greater levels of intensity would be achieved by construction of additional dwelling units. First, no interest has been shown to date by private-sector entities having the capital to increase the number of units, especially in the Elliot Acres Housing area. Second, the rural location of the housing might reduce demand because of the distance from the more populous areas having more numerous jobs opportunities. If the Institutional Area were used for a youth correctional facility

²The amended reuse plan considers the prison part of the PID; however, the reuse attributes associated with a prison were more appropriately analyzed as part of a "mixed use" area.

or if construction of a prison occurs, it is probable that the housing areas would be fully used by staff employees.

Redevelopment having economic and job-creation effects could occur in the PID Area and the Institutional Area, both of which are sought by the SCIDA. Redevelopment could also occur in the area south of the PID Area, which the SEDLRA reuse plan designated for warehouse and distribution use. To account for potential environmental effects resulting from use of this area, this EIS treats it as a Mixed Use Area due to its existing warehouse assets, available developable property, State Route 96 frontage, and potential as a site for a state prison. Together, these three areas encompass some 1,480 acres for redevelopment.

Reuse intensity-level attributes based on consideration of the reuse plan and the foregoing are shown in Table 3-2. Calculation of the number of employees is based on the intensity factors shown in Table 3-1. It is assumed that 50 percent of the land in the 640 acre PID Area would be used for general space purposes and that 50 percent would be used for warehouse purposes.³ For the 660 acre

Table 3-2
Reuse Attributes

Intensity	FAR	Square Feet in Use	General Space Employees	Warehouse Employees	Total Employees
<i>Planned Office/Industrial Development (640 acres - 50% general space, 50% warehouse space)</i>					
LIR	0.025	696,960	436	23	459
MLIR	0.05	1,393,920	996	61	1,057
MIR	0.10	2,787,840	2788	232	3,020
<i>Mixed Use Area (660 acres - 30% general space, 70% warehouse space)</i>					
LIR	0.025	718,740	270	34	304
MLIR	0.05	1,437,480	616	87	703
MIR	0.10	2,874,960	1,725	335	2,060
<i>Institutional Area (180 acres - 50% general space)</i>					
LIR	0.025	98,010	123	0	123
MLIR	0.05	196,020	280	0	280
MIR	0.10	392,040	784	0	784
Total, Three Economic Redevelopment Areas (1,480 acres)					
LIR					886
MLIR					2,040
MIR					5,864

Note:

LIR = Low intensity reuse

MLIR = Medium-low intensity reuse

MIR = Medium intensity reuse

³Amendment 1 to the SEDLRA reuse plan expanded the original 620-acre PID Area by adding two warehouses adjacent to the PID Area's southern edge (Buildings 323 and 332) and the property between those two warehouses and Gate 14 on State Route 96.

Mixed Use Area, it is assumed that 70 percent of the land would be used for warehouse purposes and that 30 percent would be used for general space purposes. These assumptions, recognizing the existing 2.3 million square feet of space in the Mixed Use Area, accommodate new construction, whether for commercial purposes or for a state prison. For the 180-acre Institutional Area, it is assumed that 50 percent of the land would support buildings used for general space purposes. Remaining land in the Institutional Area is unlikely to be developed by construction due to present land uses of the parcel (e.g., the "pan handle" that supports the road between the principal facilities and State Route 96A to the west).

Reuse intensity factors are applied to those portions of the installation addressed by the SEDLRA reuse plan for economic redevelopment and to the Mixed Use Area identified by the Army as having economic development potential. Totalling 1,480 acres, these areas constitute considerably less than the 10,272 acres the Army has declared surplus. Reuse of the Conservation/Recreation Area is assumed to be at a low intensity level only. The residential areas are assumed to continue at their low intensity levels primarily because of present building dispersion patterns, which would impede new construction and greater densities. Reuse of the airfield could entail law enforcement academy uses, special events, or other uses. Attempts to determine potential numbers of employees, daily vehicle trips, resource demands, amount of demolition or construction, or other indicators of intensity of reuse associated with any of the potential types of uses would be speculative. Compared to the factors applicable to the PID, Mixed Use, and Institutional Areas, the airfield site would support relatively minor amounts of redevelopment. In like manner, predictions of intensity of reuse of the Training Area would be speculative due to the nature of the proposed reuse. Accordingly, predictions of the numbers of employees that could be located in these areas are not included.

3.5 **ALTERNATIVES NOT TO BE ADDRESSED IN DETAIL**

Two levels of reuse are not considered in this document.

- *Medium-High Intensity Reuse.* MHIR of the surplus property available for and suitable for economic redevelopment would involve an FAR of at least 0.30 applied to the 1,480 economically redevelopable acres. This would result in about 19.3 million square feet of built space, or about five times the amount of nonresidential space at the installation today. Assuming that half of the space would be used for warehousing activities and that each warehouse employee would have an average of 2,500 square feet of space, and assuming that half the employees would occupy general space and have an average of 300 square feet per employee, there would be a projected 32,200 employees.

This number of employees exceeds the 1990 population of Seneca County. This magnitude of redevelopment represents an unrealistic outcome of reuse. Accordingly, an MHIR is not reasonable and is not further evaluated.

- *High Intensity Reuse.* The HIR scenario would result in greater numbers of employees than would occur in the MHIR scenario. Based on the same reasoning as is applicable to the MHIR scenario, the HIR scenario is not reasonable and is not further evaluated.

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SECTION 4.0: AFFECTED ENVIRONMENT

4.1 INTRODUCTION

Section 4.0 describes the environmental and socioeconomic conditions at SEDA as they were in July 1995. It provides information to serve as a baseline from which to identify and evaluate environmental and socioeconomic changes resulting from implementation of the proposed action. The effects of the proposed action and alternatives are discussed in Section 5.0.

4.2 LAND USE

4.2.1 Regional Geographic Setting and Location

SEDA is a 10,594-acre installation located in Seneca County, New York, in the towns of Romulus and Varick. Seneca County is near the geographic center of New York State and the Finger Lakes region. The county is bordered by Seneca Lake on the west and Cayuga Lake on the east. Part of the installation fronts on Seneca Lake. Seneca County is composed of 10 incorporated towns and 5 incorporated villages. There are several unincorporated hamlets in the county, including the hamlets of Romulus and Willard. The town line that divides Varick and Romulus bisects SEDA and the hamlet of Romulus, which is located adjacent to the installation's main entrance. The hamlet of Romulus, therefore, consists of land area of the town of Varick and of the town of Romulus.

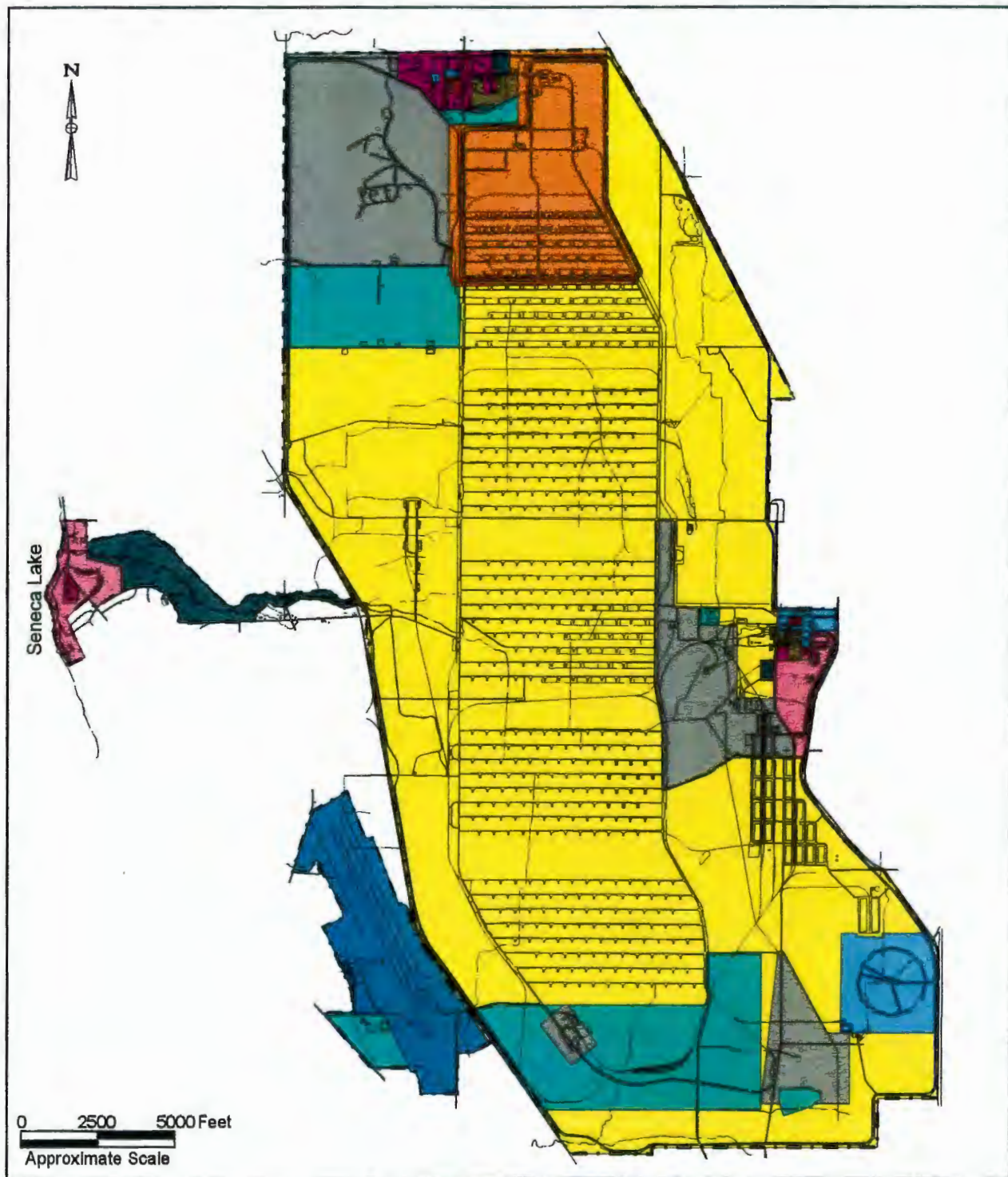
SEDA is 12 miles south of the villages of Waterloo and Seneca Falls and 2.5 miles north of the town of Ovid (which includes the hamlet of Willard). The city of Geneva, New York, is about 20 miles to the northwest of the installation. SEDA is located approximately equidistant from the cities of Rochester and Syracuse, with both being about 60 miles from the depot. The development of the installation has centered around the depot's primary mission of providing for the receipt, storage, maintenance, and disposal of ammunition.

4.2.2 Installation Land and Airspace Use

The existing land use patterns at SEDA are long-established, dating back to World War II (see Figure 4-1). The physical plant includes 927 structures, 139 miles of roadways, 42 miles of railroads, and an airfield with a 7,000-foot runway.

The installation can be divided into three major land use areas: the Main Post, the Airfield, and Lake Housing. The Main Post covers 9,832 acres. There are 42 administrative buildings ranging in size from 100 square feet to 27,000 square feet; 41 general purpose warehouses; 531 ammunition storage facilities with more than 1.3 million square feet of storage capacity; 32 ammunition and equipment maintenance facilities; 124 sets of 2- or 3-bedroom family housing units; and barracks for 450 personnel.¹ Areas for ammunition storage and "exclusion storage" occupy the central portion of the

¹Other specific area place names are identified in the BRAC Cleanup Plan documents. Some of these place names are used in this document. They include the washout plant area, the ammunition workshop area, the insect and rodent control area, the E-800 (pitchblende storage) area, the tank farm area, the warehouse storage area, the property disposal area, the old sewage disposal plant, the powder burning pit, the old salvage yard, several burning pits, old landfills, and demolition areas.



LEGEND

- | | | |
|--------------------|--------------------|----------------------|
| Administration | Industrial | Supply/Storage |
| Airfield | Maintenance | Training Range |
| Community Facility | Medical | Troop Housing |
| Family Housing | Outdoor Recreation | Special Weapons Area |

Source: STV/Lyon Associates, 1989.

Land Use
Seneca Army Depot Activity
Romulus, New York
Figure 4-1

Main Post, accounting for 4,008 acres. The ammunition storage area consists of 455 reinforced concrete igloos and eight permanent general storage magazines spread over 3,609 acres. The exclusion storage area contains 64 reinforced concrete igloos and one warehouse formerly used by the Special Weapons Directorate. Operational Facilities designed for the maintenance and demilitarization of ammunition are located around the periphery of the ammunition storage area.

The cantonment areas of the Main Post are designated as the North Depot and the South Depot. The South Depot is located in the southeast portion of the depot adjacent to State Route 96. Facilities at the South Depot include administration, family housing, community services, and warehouse storage. Most warehousing occurs in 27 standard warehouses located within the South Depot. There is more than 2.3 million square feet of warehouse storage space on South Post. The North Depot is situated on the northern end of the Main Depot. Its facilities include troop housing, troop support, and community services. Most of the new facilities constructed at SEDA during the past 10 years are in the North Depot (Absolom, personal communication, 1996a).

Twenty individual piles of strategic minerals at 17 separate ore pile sites covering a total area of about 5 acres are located throughout the Main Post area and on the periphery of the ammunition storage area. These areas will become part of the enclave upon closure of the installation.

The 120-acre Lake Housing area provides 56 family housing units (i.e., 3-bedroom units) near Seneca Lake. The area also has a 21-unit Army Travel Camp and an Officers' Club (SEDA, 1995b).

The depot airfield occupies approximately 500 acres in the southwestern portion of the installation. The airfield's single 7,000-foot runway, used primarily for logistics shipments, was in operation from 1960 until its closure in January 1996. The Army retains control of airspace to 2,000 feet above a 90-acre portion near the southwest corner of the installation for operation of its open burning/open detonation (OB/OD) site used for ammunition treatment and destruction (Absolom, personal communication, 1997b). Collocated with the airfield are a consolidated outdoor training area and a small arms range.

4.2.3 *Surrounding Land and Airspace Use*

SEDA lies entirely within Seneca County, the approximately 200,000-acre "county between the lakes." The predominant land use in the county is agriculture. Principal crop production includes silage, soybeans, wheat, and grapes. Open space dominates throughout Seneca County, and the northern part of the County contains the majority of the commercial, industrial, and residential development. Waterloo and Seneca Falls are the major neighboring locations of industry.

Land uses in the county have remained fairly stable for the last 25 years. Seneca County has a written comprehensive plan that has never been adopted. The county has, however, adopted certain regulations from New York State laws regarding agricultural districts, coastal (lake shore) management areas, sewage disposal, and building construction.

The Cayuga-Seneca Canal, part of the Seneca River, connects the two lakes, passing through the towns and villages of Seneca Falls and Waterloo. This waterway is connected to the Erie Canal system, part of the 524-mile New York State Canal System. A Special Resource study is being

conducted by the National Park Service to evaluate the feasibility of pursuing designation of New York State's canal system as a National Heritage Corridor.

The town of Romulus does not have defined zoning districts or land use regulations but does have a planning board and a Land Use Ordinance that was adopted in December 1993. The town of Varick has a zoning ordinance consisting of a single main zone and an agriculture/residential zone. The ordinance was adopted in August 1975 and amended in 1988.

Adjacent to SEDA is New York State Route 96 to the east and New York State Route 96A to the west. The entire installation is surrounded by agricultural lands and open space. Sampson State Park borders part of the western boundary. Some single-family detached housing, a school, and a church in the hamlet of Romulus are adjacent to the installation's eastern border.

There are three public-use airports in Seneca County. The largest of these is the public Finger Lakes Regional Airport, located between Seneca Falls and Cayuga Lake. There are some 25 private aircraft located at the airport, which has a 3,200-foot paved runway (RKG Associates, 1996). The two privately owned public-use airports are AirTrek Airport, which has a 2,300-foot turf runway, and Ovid Airport, which has a 2,800-foot paved runway.

Seneca County is among the smallest counties in upstate New York in terms of size and population, and it has one of the least diversified economies. Approximately 65 percent of the county's land is devoted to agricultural uses; the dairy sector is the highest valued agricultural commodity. About one-fourth of the county's nonagricultural workers are employed in manufacturing of durable and nondurable goods. Major employers include Gould Pumps, Inc., Seneca Knitting Mills, Borden Inc., Evans Chemetics/Hampshire Chemical Corp., and Frazier Industrial Co. Some 15 estate wineries and numerous vineyards are located on slopes overlooking Seneca and Cayuga Lakes. The county also has a substantial number of properties that are considered prime vacation and recreational areas.

4.2.4 Future Land Use

Consistent with reuse planning, SEDA property would be used for residential, conservation/recreation, institutional, administrative, light industrial, and warehousing and distribution purposes.

With the exception of the LORAN-C site operated by the Coast Guard and any Mixed Use Area parcels not transferred or conveyed, SEDA property would become subject to the local zoning authorities of the towns of Romulus and Varick. The towns' present zoning regulations generally would not prevent incompatible adjacent uses. Hence, redevelopment of SEDA property could lead to a wide variety of uses at the former installation.

Two principal factors drive future land uses throughout Seneca County. First, some 65 percent of the county's land is in agricultural use, the majority of which occurs in the southern portion of the county. Second, commercial and industrial activity occurs predominantly in the northern part of the county, in the Waterloo-Seneca Falls corridor. Recent additions to the Finger Lakes Outlet Center (more than 100 shops) and development of the Seneca Falls Industrial Park, both of which are north of the Waterloo-Seneca Falls corridor, reinforce the perception that the northern portion of the county leads development.

The mission of the SCIDA is to promote, attract, and encourage economic development throughout the county. The agency undertakes both public and private sector projects to meet the needs of the business community. As the county's implementing agency for the reuse plan, the SCIDA would be the lead proponent of future land uses at SEDA specifically and throughout the county generally.

Prominent factors affecting land use within the county include an ongoing 10-year expansion program at the Finger Lakes Regional Airport. Also, the Cayuga Indian Nation of New York has instigated litigation which, if successful for the plaintiffs, could result in several thousand acres of land in Seneca and Cayuga Counties being placed in trust. Areas most likely to be affected by such an outcome in Seneca County occur in the northeast portions of the county adjacent to Cayuga Lake. Changes in characterization of land uses following placement of such land in trust for the Cayuga Indian Nation are not known.

The agencies contacted in the affected area (i.e., the ROI, which consists of Seneca County and the city of Geneva in Ontario County) to establish future development activities for purposes of determining cumulative effects were the Seneca County Department of Economic Development and Planning; the city of Geneva, Chamber of Commerce; and NYSDEC, Division of Air Quality (Region 8).

4.3 CLIMATE

The area in which SEDA is located has a humid, continental climate marked by warm summers and long, cold winters. Weather is influenced primarily by continental air mass movements from Canada, modified by the effects of Lake Ontario. Lake Ontario serves as a buffer that moderates the extremes of weather patterns (especially extremes of temperature) at this latitude, though snowfall in the region is heavy. Atlantic Ocean air masses have little effect on local weather, and neither Seneca and Cayuga Lakes nor the local topography and elevation affect patterns significantly.

The mean monthly temperature is 48 degrees Fahrenheit (°F) with a maximum of 98 °F and a minimum of -27 °F, though prolonged periods of extreme temperatures are rare. The frost-free season averages 160 days (May to October). Prevailing winds are northwesterly, averaging 10 mph and seldom exceeding 30 mph. The prevalent northwesterlies over Lake Ontario determine snowstorms during the winter. Snowfall averages 53 inches per year. Annual rainfall averages 31 inches. Precipitation is evenly distributed throughout the year.

4.4 AIR QUALITY

4.4.1 Ambient Air Quality Conditions

National Ambient Air Quality Standards (NAAQS) have been set for six "criteria" pollutants (sulfur dioxide, carbon monoxide, ozone, nitrogen oxides, lead, and inhalable particulate matter). The problems associated with the pollutants carbon monoxide and inhalable particulate matter are usually related to localized conditions, such as congested traffic intersections or construction activities. The other criteria pollutants are associated with more regionalized problems that result from the interactions of pollutants from a great number of widely dispersed sources (e.g., a large city containing many stationary and mobile sources). NYSDEC's Division of Air Resources, monitors the concentrations of the criteria pollutants and has developed implementation plans to ensure that the

national standards are achieved and maintained. Areas within the state that fail to meet the NAAQS are designated as "nonattainment areas" and are potentially subject to regulatory enforcement.

SEDA is located in the Genesee-Finger Lakes Air Quality Control Region, which is classified as being in attainment for sulfur dioxide, carbon monoxide, ozone, nitrogen oxides, and lead standards. The region is currently an unclassified area for particulate matter.² The entire state of New York is also categorized as an ozone transport region under the Clean Air Act (CAA) Amendments of 1990. The significance of being an ozone transport region is that new sources of volatile organic compounds (which are ozone precursors) are required to implement more stringent air pollution controls than they would otherwise need.

Air quality in the SEDA region is affected by emissions from a variety of sources, including motor vehicles; small industries in Geneva, Waterloo, and Seneca Falls; farming activities; windblown soils; and fuel-dispensing and painting activities. A glass plant that is scheduled to open during 1998 in Geneva is expected to increase volatile organic compound emissions in the region (Wheeler, personal communication, 1996; Rising, personal communication, 1998).

4.4.2 Air Pollutant Emissions at SEDA

SEDA has 22 air emission point sources registered with NYSDEC, only 13 of which are active (NYSDEC Air Permit 453089-0046). Only five of the active sources are significant enough to require the full permitting and registration procedures specified in the New York State environmental code; the remaining sources are classified as being exempt or trivial but are still tracked by the depot. The emission sources at SEDA include seven fuel oil-burning units, seven paint spray booths, two incinerator units used for the burning of classified documents, a battery storage/charging area, a woodworking shop, three abrasive blasting booths, and a vapor degreaser (Woodward-Clyde, 1996a). These stationary sources produce a combined total of less than 25 tons per year of NAAQS pollutants. Estimated emissions of criteria pollutants at SEDA for 1995 were 4.11 tons of nitrogen oxides, 0.88 ton of particulate matter, 16.4 tons of sulfur dioxide, and 0.11 ton of volatile organic materials. In addition, open burning/detonation of subspecification propellants created less than 6 additional tons of emissions (Brooks, 1996). All of the permitted sources at SEDA are in compliance with their operating permits.

Another potential source of air pollution is the destruction of ammunition by open burning, which must comply with both the NYSDEC emission requirements for clean air quality and the hazardous waste treatment, storage, and disposal facility requirements set forth by EPA (STV/LYON Associates, 1990). There are no large-scale construction activities that might create dusty conditions and affect air quality. The 20 strategic materials stockpiles (at 17 separate locations) are composed of large-diameter (2 to 12 inches) ores or have developed a vegetative covering that minimizes particulate migration from wind.

In addition to the stationary sources of air pollutants at SEDA, vehicle traffic associated with the installation also contributes to emissions. Installation traffic consists of employees, contractors, and vendors driving to and from the depot and vehicles (e.g., forklifts and light-duty trucks) used on base

²The region is unclassified for particulate matter solely because the required 3 years of monitoring data are not yet available (Ralston, personal communication, 1996).

to move equipment and supplies. The 1995 emissions associated with these activities have been estimated based on vehicle emission factors published by EPA and general assumptions for the distance and type of vehicles driven.

With a 1995 commuting workforce of approximately 505 persons and assuming that 50 on-base vehicle trips and 75 contractor/vendor trips are made per working day,³ the following emissions can be approximated: 12.7 tons of reactive organic compounds, 18.0 tons of nitrogen oxides, 17.5 tons of inhalable particulate matter, 115.6 tons of carbon monoxide, and 1.5 tons of sulfur oxides.

Table 4-1 presents total air pollutants from SEDA, from both stationary and mobile sources.

4.5 NOISE

An Installation Compatible Use Zone (ICUZ) analysis was performed for SEDA to identify noise levels (SEDA, No date b), and subsequent evaluation/monitoring has been performed to track noise generated at SEDA (Brooks, 1996). An ICUZ analysis evaluates noise conditions produced by activities at a military installation and identifies incompatible land uses on or adjacent to the installation. These analyses provide noise contours that are spatial graphic representations of noise levels around a noise-emitting source. The contours are defined by noise zones, which correspond to exposure guidelines. The following description of noise sources and events at SEDA is drawn from the ICUZ analysis and subsequent studies.

Potential noise sources at SEDA include aircraft (fixed-wing aircraft and low-flying helicopters), portable equipment/generators, and the explosives-detonation areas. Of these sources, only noise from the explosives-detonation areas occurs with some consistency; the airfield is closed except for emergency operations. Information that indicates the historical noise impact of a fully active SEDA

**Table 4-1
Summary of Quantifiable Stationary and Mobile 1995 Air Emissions**

	Emissions (tons/year)				
	ROG	NO _x	PM ₁₀	CO	SO _x
Stationary Sources	0.1	4.1	0.9	N/A	16.4
Mobile Sources	12.7	18.0	17.5	115.6	1.5
Total	12.8	22.1	18.4	115.6	17.9

Note:

ROG = reactive organic compounds.
NO_x = oxides of nitrogen.

CO = carbon monoxide.
SO_x = sulfur oxides.

PM₁₀ = inhalable particulate matter.

³The number of commuters has been approximated based on the 1995 workforce of 417, taking into account that 2 SEDA employees lived on the installation and assuming that there were approximately 1.5 commuters per household in the 60 residential units at the Lake Housing area. The 50 on-base vehicle trips were assumed to involve a fleet of 10 percent automobiles, 70 percent light trucks, 5 percent medium trucks, and 15 percent heavy trucks. The 75 contractor/vendor trips were assumed to involve primarily heavy diesel trucks.

airfield is available. Based on noise monitoring data taken at the airstrip in 1984, an average busy day of aircraft operation would produce unacceptable noise impacts (Zone II noise exposure) for a distance 1,000 feet into private land north of the runway (SEDA, No date b). This relatively small, private land area is currently used for agricultural activities. During the same 1984 monitoring period, portable equipment/generators were determined to contribute to ambient noise levels, augmenting aircraft noise. However, aircraft and portable equipment/generators would become noteworthy noise sources only if the SEDA airfield were reopened and regularly used.

At one time helicopters routinely patrolled the SEDA fence line to maintain security. This intermittent and short-term noise source was evaluated in 1984 and did not increase ambient noise to unacceptable levels on the surrounding civilian property (SEDA, No date b). These patrols have been discontinued completely.

Explosive detonations appear to generate the most noise. In 1995, approximately 4 tons of explosives were detonated as part of conventional ammunition disposal (Brooks, 1996), an amount that can be detonated in less than 8 typical workdays (SEDA, No date b). To minimize blast noise from the demolition area, the ammunition is detonated a minimum of 4 feet below ground and covered with 8 to 12 feet of cover. Because the detonation area is only 3,000 feet from the base boundary, SEDA personnel refrain from performing demolition activities during unfavorable meteorologic conditions (such as when the skies are overcast and a steady wind is blowing toward residential areas) and during nighttime hours or on weekends. In 1995, two complaints were lodged with SEDA for detonation-related noise, both of which resulted in requests for monetary payment for damages (totaling less than \$5,000). These requests are being evaluated.

There are few other on-base noise sources of potential concern. On-base and off-base noise-sensitive land uses are generally far enough removed from typical on-base noise sources to prevent unacceptable noise exposure. Recent noise complaints from surrounding communities have been infrequent and related only to detonations of subspecification propellants/explosives (Ogden, personal communication, 1996).

4.6 GEOLOGY

4.6.1 Physiography

SEDA falls within a glacial till plain of the Central Lowlands Physiographic Province between a glacial lake plain, which lies to the north, and the Appalachian Plateau, which lies to the south. A series of rock terraces, approximately 10 miles wide and ranging in elevation from 492 feet above mean sea level at the northern end of Seneca County to 1,600 feet above mean sea level to the south, form a divide that separates Cayuga Lake to the east and Seneca Lake to the west (Battaglia, 1980).

4.6.2 Structure and Stratigraphy

The structure and stratigraphy at SEDA is characterized as part of the Hamilton Group of the Middle Devonian period (Battaglia, 1980). The Hamilton group consists of a 600- to 1,500-foot thick sequence of limestones, calcareous shales, siltstones, and sandstones that are monoclinaly folded (i.e., a single fold) and dip gently to the south. There is no evidence of faulting within SEDA (Woodward-

Clyde, 1996b). The Hamilton Group overlies the Middle to Lower Devonian Onondaga Limestone (Battaglia, 1980).

Proceeding from oldest to youngest, the Hamilton group consists of four formations:

- *Marcellus Shale*. The oldest formation of the Hamilton group, this is a black, slate-like, bituminous shale containing layers rich in iron sulfide and calcareous concretions. This formation is about 50 feet thick and is very fissile.
- *Skaneateles Shale*. A younger formation than the Marcellus Shale, the Skaneateles is about 185 feet thick. The upper beds are calcareous and grayish-blue in color; the lower beds are less calcareous, dark, and fissile.
- *Ludlowville Shale*. About 140 feet thick, this formation consists of three distinct segments. The upper segment is calcareous and coarse. The middle beds are soft, sandy shale with calcareous lenses and an occasional layer of sandstone. The lower beds are hard calcareous layers that are resistant to erosion.
- *Moscow Shale*. This is the youngest formation in the Hamilton Group. The lower two-thirds of this formation consist of a soft, gray, calcareous shale containing an abundance of fossils. The surface segment is highly friable and less calcareous and fossiliferous. This formation is about 140 feet thick and is broken by many joint openings (Engineering-Science, 1994, Exhibit A-13).

The Moscow Formation dominates the eastern end of the depot, while the western end is located in the older, Ludlowville Formation (Woodward-Clyde, 1996b). The shales are relatively impermeable, and they absorb, transmit, and yield water slowly. This low permeability tends to inhibit downward seepage of water. Springs or seeps generally occur where these beds outcrop, resulting from the lateral movement of water along bedding planes (Engineering-Science, 1994, Exhibit A-13).

Wisconsin glacial till deposits overlie the Hamilton shales. These deposits consist of horizons of unsorted silt, clay, sand, and minor gravel, which range from 1 to 15 feet thick (Woodward-Clyde, 1996b). Typically, till deposits on SEDA range from 8 to 15 feet in thickness (Absolom, personal communication, 1996d).

Most of SEDA lies on the southern fringe of the Fayette-Waterloo natural gas field, which occurs in a south-dipping homoclinal trap, within the upper Ordovician Queenstown formation. The northern two-fifths of the depot is surrounded by producing gas wells that have been drilled since 1984. The northern section of the depot is expected to have a high potential for economic gas reserves, while the lower three-fifths of the installation is considered to have a moderate potential. All of the wells in the area require the use of artificial fracture induction for economic well production. After artificial fracture, the gas wells located to the north of the installation typically test 1 to 2 million cubic feet of gas per day.

4.6.3 Topography

The topography of Seneca County is dominated by the series of rock terraces described in Section 4.6.1 (Physiography). This landscape is broken only by the presence of numerous small streams that drain into Cayuga Lake to the east and Seneca Lake to the west, and small, teardrop-shaped hills referred to as drumlins, which were deposited by retreating glaciers (Battaglia, 1980).

The landscape of the SEDA Main Post Area gently slopes from a high point of 765 feet above sea level at the southeast corner to an elevation of 585 feet at the northwest corner, about 7 miles away. Kendaia Creek, which is deeply incised, flows to the west down a narrow strip of SEDA property (300 acres) to Seneca Lake (STV/LYON Associates, 1990).

4.6.4 Soils

Five dominant soil series occur on SEDA:

- *Darien silt loam, 0 to 3 percent slopes (DaA)*. The Darien silt loam occurs in areas across most of the installation and is the most prevalent soil occurring on the depot. The Darien series occurs on nearly level to gently sloping uplands and consists of somewhat poorly drained soils that formed in glacial till derived mainly from alkaline and calcareous shale and small quantities of limestone. Inclusions of the Iliion silty clay loam, which occurs in slight depressions and along narrow, shallow drainageways, are designated as hydric and may occur within the Darien series. Soils designated as hydric are saturated, flooded, or ponded for long enough during the growing season to develop anaerobic (oxygen-deficient) conditions in their upper part. The presence of hydric soils is one of the three criteria (hydric soils, hydrophytic vegetation, wetland hydrology) used to determine the presence of United States Army Corps of Engineers (USACE) jurisdictional wetlands. The Darien series (where it has been drained) is also considered to be a prime farmland soil in Seneca County (Hutton, Jr., 1972).
- *Angola silt loam, 0 to 3 percent slopes (AnA)*. The Angola silt loam, 0 to 3 percent slopes, occurs on broad, nearly level uplands and in very gently sloping areas where runoff is slow. The series consists of somewhat poorly drained, moderately deep soils derived from shale or semi-residual material derived from underlying shale. Inclusions of the poorly drained Varick soil, which occurs in shallow depressions and drainageways, are designated as hydric and may occur within the Angola silt loam. The Angola silt loam (where it has been drained) is considered to be a prime farmland soil in Seneca County. Angola silt loam occurs primarily in upland areas in the southern section of the depot (Hutton, Jr., 1972).
- *Romulus silty clay loam (Ro)*. The Romulus silty clay loam occurs on level or gently sloping areas and consists of deep, poorly drained, moderately fine textured soils that formed in reddish calcareous glacial till containing lacustrine clay. The Romulus silty clay loam is designated as a hydric soil in Seneca County. Many of the wetlands that have been identified on SEDA are associated with the Romulus silty clay loam. The Romulus series is considered to be a farmland soil of statewide importance in New York. This series occurs in localized areas associated with low areas and drainageways over most of the depot (Hutton, Jr., 1972).

- *Ilion silty clay loam (Is)*. The Ilion silty clay loam occurs in broad, level, or slightly depressional areas and consists of poorly drained, moderately fine textured soils that formed in glacial till consisting mainly of shale containing small amounts of limestone. The Ilion silty clay loam is designated as a hydric soil in Seneca County. The soil series is associated with wetlands located in the eastern and southern sections of the depot. The series is considered to be a farmland soil of statewide importance in New York (Hutton, Jr., 1972).
- *Darien-Danley-Cazenovia silt loam, 3 to 8 percent slopes (DdB)*. The soils of the Darien-Danley-Cazenovia complex occur on gently undulating uplands. The complex is located in areas where the soils of the Darien, Danley, and Cazenovia series are closely intermingled. The Darien silt loam consists of somewhat poorly drained soils; the Danley series consists of moderately well drained and well-drained silt loams; and the Cazenovia series consists of moderately well drained and well-drained, medium -,and moderately fine textured silt loams. The Ilion silty clay loam, which is considered hydric, makes up as much as 10 percent of the complex, and occurs as inclusions in narrow, shallow drainageways,. The complex is considered to be a farmland soil of statewide importance in New York (Hutton, Jr., 1972).

In addition to the soil series described above, eight other less prevalent soil series have been identified on SEDA. These soils, along with the series discussed above, are summarized in Table 4-2.

4.6.5 Prime Farmland Soils

Several of the soil series that occur on SEDA are designated as prime farmland soils or farmland soils of statewide importance (see Table 4-2). Prime farmland soils are defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. The soil qualities, growing season, and moisture supply are those needed for a well-managed soil to produce a sustained high yield of crops in an economic manner. (The land could be cropland, pasture, rangeland, or other land, but not urban built-up land or water.) Farmland soils of statewide importance include lands, in addition to prime farmland, that are of statewide importance for the production of food, feed, fiber, forage, and oil seed crops.

Prime farmland soils are protected under the Farmland Protection Policy Act (FPPA) of 1981 (7 CFR Part 658; The Natural Resources Conservation Service [NRCS] Final Rule, Farmland Policy, July 5, 1984; proposed revisions published on January 8, 1987). The intent of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary or irreversible conversion of farmland soils to nonagricultural uses. The act also ensures that federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies and the rules and regulations for implementation of the Act (see 7 CFR Part 658, July 5, 1984). EPA has also established policy to protect environmentally significant agricultural lands through its Office of Federal Activities.

The implementing procedures of the FPPA and NRCS require federal agencies to evaluate the adverse effects (direct and indirect) of their activities on prime and unique farmland (by preparing the Farmland Conversion Impact Rating Form AD 1006), as well as farmland of statewide and local importance, and to consider alternative actions that could avoid adverse effects. Potential impacts on

**Table 4-2
Soils Occurring at SEDA**

Soil Series	Map Unit	Drainage Class	Hydric	Prime Farmland	Limitations	Occurrence at SEDA
Angola silt loam, 0%-3% slopes	AnA	Somewhat poorly drained	No, but hydric inclusions may be present	Yes	Seasonal wetness; slow permeability	Primarily in upland areas in the southern section of the depot
Angola silt loam, 3%-8% slopes	AnB	Somewhat poorly drained	No, but hydric inclusions may be present	No, but it is a farmland soil of statewide importance	Seasonal wetness; slow permeability	Adjacent to Reeder Creek in the northern depot and in small upland areas across the depot
Aurora silt loam, 3%-8% slopes	AwB	Moderately well drained and well-drained	No	No, but it is a farmland soil of statewide importance	Seepage along soil/bedrock contact; possible erosion problems	Small area adjacent to Seneca Lake
Aurora silt loam, 8%-15% slopes	AwC	Moderately well drained and well-drained	No	No, but it is a farmland soil of statewide importance	Seepage along soil/bedrock contact; possible moderate to severe erosion problems in cleared areas	Adjacent to Reeder Creek in the northern depot and in a small area in the central section of the depot
Aurora and Farmington soils, 25%-75% slopes	AzF	Moderately well drained and well drained	No	No	Severe slopes; potential shallow bedrock	Along Kendaia Creek
Darien silt loam, 0%-3% slopes	DaA	Somewhat poorly drained	No, but hydric inclusions may be present	Yes	Seasonal wetness; slow permeability	Nearly level to gently sloping uplands across the depot; dominant soil mapped on SEDA
Darien-Danley-Cazenovia silt loams, 3%-8% slopes	DdB	Somewhat poorly drained (Darien); Moderately well drained (Cazenovia)	No, but hydric inclusions may be present	No, but it is a farmland soil of statewide importance	Seasonal wetness; slow permeability (Darien); slow permeability; possible seepage; susceptible to erosion (Cazenovia)	Gently undulating and undulating uplands across the installation

Table 4-2
Soils Occurring on SEDA (continued)

Soil Series	Map Unit	Drainage Class	Hydric	Prime Farmland	Limitations	Occurrence at SEDA
Ilion silty clay loam	Is	Poorly drained	Yes	No, but it is a farmland soil of statewide importance	Prolonged high water table; slow permeability	Associated with wetlands that are located in the eastern and southern sections of the depot
Lima silt loam, 3%-8% slopes	LtB	Moderately well drained	No	Yes	Seasonal wetness, moderately slow and slow permeability, possible erosion problems on steep slopes	Small area on the southwestern boundary of the installation
Made land, tillable	Md	-	-	-	Onsite investigation necessary to determine use and management	Small areas in the southern section of the depot
Ovid silt loam, 3%-8% slopes	OvB	Somewhat poorly drained	No, but hydric inclusions may be present	No, but it is a farmland soil of statewide importance	Seasonal wetness, moderately slow and slow permeability, possible erosion problems	Small area adjacent to the lake housing area
Romulus silty clay loam	Ro	Poorly drained	Yes	No, but it is a farmland soil of statewide importance	Prolonged high water table; slow permeability; clay material subject to shrink-swell problems	Occurs on level or gently sloping areas associated with many of the wetlands on SEDA
Sloan silt loam	Sn	Poorly drained and very poorly drained	Yes	No	Flooding, prolonged wetness	Associated with wetlands along Indian Creek on the southwestern border of the depot

Note: For the maps showing the locations of soils occurring on SEDA, see the USDA Soil Survey for Seneca County, New York.

Sources: Hutton, Jr., 1972; USDA, 1989, 1994.

prime and unique farmlands are determined by preparing the farmland conversion impact rating Form AD 1006, and applying criteria established at section 658.5 of the Farmland Policy Protection Act (7 CFR 658). Criteria established by the NRCS should be used to select among alternative farmland sites.

As part of the disposal process, the Army has evaluated the potential for the presence of prime farmlands on SEDA by completing Form AD 1006. The evaluative tool, in part prepared by the NRCS, takes into account a score for relative value of the property and a score for a site assessment. The combined scores for SEDA did not indicate further action under the Act was required to preserve prime farmlands.

4.7 WATER RESOURCES

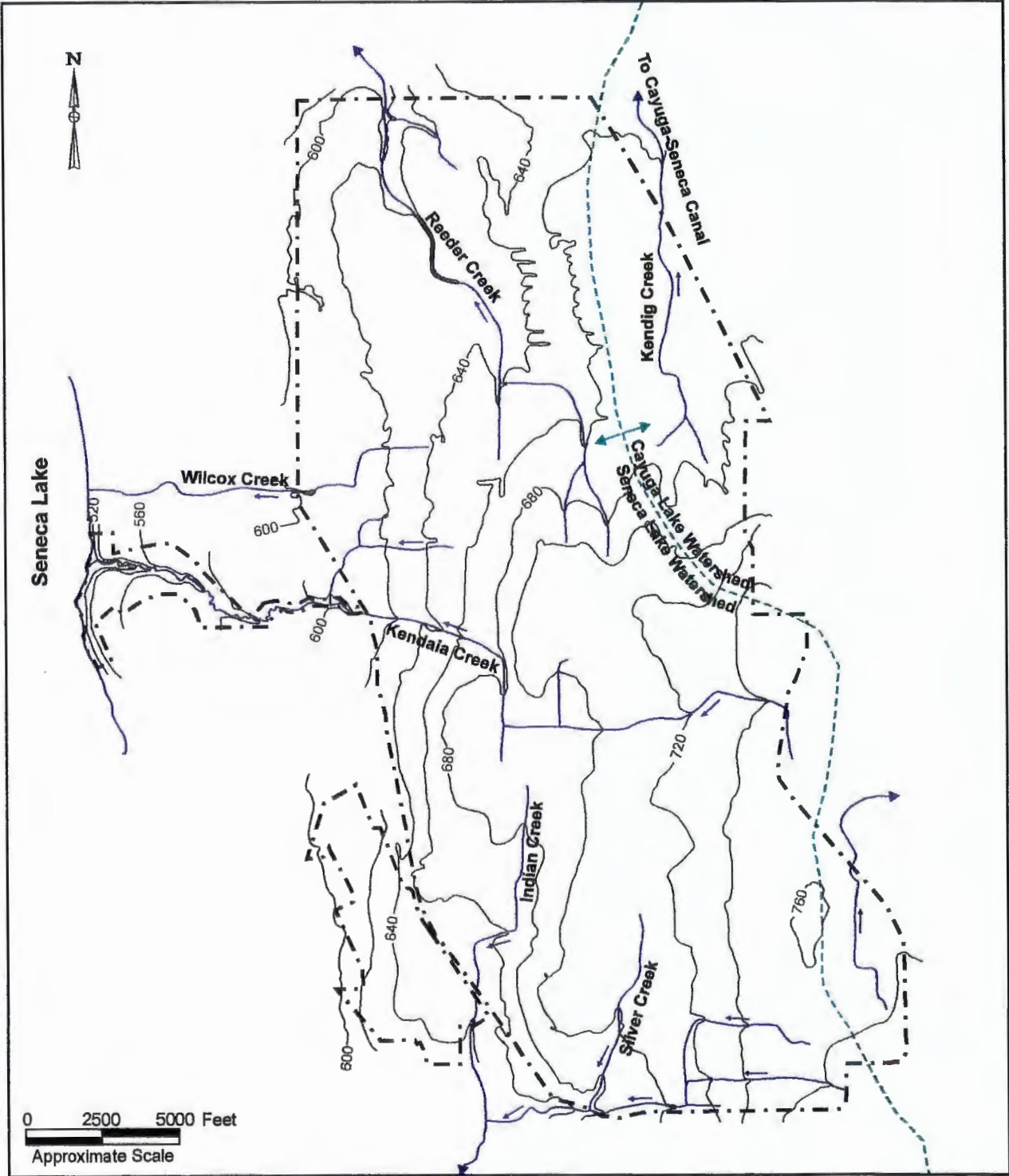
4.7.1 Surface Water

The surface hydrology of SEDA is characterized by streams, ponds, and wetland areas. The rock terrace divide, previously mentioned in Section 4.6.1 (Physiography), splits drainage from the depot into an east-west pattern draining runoff to two freshwater lakes of Pleistocene glacial origin, Cayuga Lake to the east and Seneca Lake to the west (Envirosphere, 1986). Figure 4-2 illustrates the surface drainage on SEDA. Both intermittent and perennial streams traverse the depot (STV/LYON Associates, 1990). Four main tributaries collect surface water on the depot; primary among them are Indian Creek and Silver Creek, which collect surface water runoff from the southern part of SEDA through a series of ditches and streams and carry it west into Seneca Lake. Indian Creek collects runoff from the washout plant area, the ammunition workshop area, a section of the insect and rodent control area, the E-800 area (once used as a pitchblende storage site), and southeast of the depot airfield (Battaglia, 1980).

The east-west flowing Kendaia Creek traverses the central part of the depot and drains into Seneca Lake. To the east, the creek drains runoff from the tank farm area, the Main Depot (headquarters area), the warehouse storage area, the property disposal area, and the old sewage disposal plant. To the west, it drains runoff from a Government Services Administration storage area, the powder burning pit, and an old salvage yard. In addition, drainage from the Administration Area discharges into Kendaia Creek via a storm sewer system (Battaglia, 1980). Reeder Creek collects runoff from the northwest and north-central sections of the depot and carries it to Seneca Lake. Areas drained by Reeder Creek include an old fill area, a burning pit, an old landfill, much of the restricted area, the demolition area, the Building 715 sewage treatment plant (STP), a shale pit, the building complex south of North Patrol Road, and some areas north of the STP. Storm sewers also discharge directly into Reeder Creek (Battaglia, 1980).

The remaining area of the depot, the northeastern section, drains through ponds, wetlands, and culverts north into Kendig Creek, which continues north into the Cayuga-Seneca Canal. Kendig Creek collects runoff north of the STP. This drainage area includes an old landfill (Battaglia, 1980).

The depot draws its drinking water from Seneca Lake (Envirosphere, 1986). The depot's water system also supplies drinking water to parts of the neighboring towns of Romulus and Varick (STV/LYON Associates, 1990). Seneca Falls and Waterloo rely on Cayuga Lake and the Seneca River, respectively, for their water supplies (Woodward-Clyde, 1996b). Despite the fact that several



LEGEND

- Streams
 - Contour Line (20 foot interval)
 - Direction of Flow
 - Drainage Divide
 - - - Installation Boundary
- Source: BLM, 1992.

Drainage Network
 Seneca Army Depot Activity
 Romulus, New York
 Figure 4-2

areas of the depot are subject to periodic or seasonal flooding, such as the shoreline of Seneca Lake and the mouth of lake tributaries (BLM, 1992), there have not been any recent, significant instances of flooding (Battaglia, 1980). This is mainly the result of the area's sloping topography and the enhancement of the natural drainage. Storm sewer lines have been needed only in the Administrative, Warehouse, and Airfield Areas (STV/LYON Associates, 1990).

Federal Emergency Management Agency (FEMA) maps have been prepared on Seneca for both Romulus and Varick. The 100 year floodplain has been determined for Romulus, but the 100 year floodplain elevation has not. Both boundaries and elevations have been determined for Varick. There is an area mapped as 100 year floodplain (Zone A) in the lake shore housing area adjacent to Seneca Lake (Romulus). All other areas in the Romulus township are mapped as Zone C. Zone C includes areas that are outside of the 500 year floodplain. Varick (within the boundaries of Seneca) is mapped entirely as Zone X. Zone X in Varick includes areas that are outside of the 500 year floodplain (note: Zone C and Zone X are synonymous between Varick and Romulus). Based on a review of the FEMA maps for the two towns, there are no 100 year floodplains on Seneca outside of the area adjacent to the lake housing area. If new construction is proposed within the 100 year floodplain in the lake housing area, a building permit from Romulus would be required. The building permit considers encroachment into the 100 year floodplain and, if construction were approved, would require base floor levels to be above the 100 year flood level.

4.7.2 Hydrogeology/Groundwater

Permeable glacial till, alluvial sands and gravels, and jointed bedrock dominate the subsurface of the depot. Depth to groundwater is shallow, ranging from 0.1 to 23 feet, and recharge for these zones is provided by infiltration of rainfall, flowing streams, wetlands, and/or ponds across the installation. These factors leave this unconfined aquifer susceptible to contamination. To the west and north, flat-lying shale planes result in lateral flows that produce seeps and springs. Generally this flow dips to the south, following bedding planes. However, there is evidence that an existing groundwater divide halfway between Lake Cayuga and Seneca Lake results in groundwater flow beneath the depot traveling west toward Seneca Lake (Woodward-Clyde, 1996b).

There are no public groundwater supplies on SEDA (BLM, 1992). Although the hydrogeologic region is favorable for developing groundwater supplies, Seneca Falls and Waterloo opted for surface water supplies due to the hardness of the groundwater. Approximately 95 percent of the groundwater used in the county is for domestic or agricultural purposes. The remaining 5 percent is allotted to commercial, industrial, or municipal uses (Engineering-Science, 1994).

Three primary aquifer systems occur beneath SEDA:

- *Shale aquifer.* The upper portions of the shale formation, which lie within the Middle Devonian Hamilton Group, yield small, yet adequate supplies of water for domestic use (Engineering-Science, 1994). The majority of groundwater wells fall within this aquifer. They are about 100 feet deep and typically yield between 1 and 10 gallons per minute (gpm). The shale aquifer is the most common source of groundwater supplies (Woodward-Clyde, 1996b).
- *Glacial till aquifer.* The glacial till aquifer is the second most common source of groundwater after the shale aquifer (Woodward-Clyde, 1996). Development of the glacial till aquifer is limited

by very low permeability rates that yield less than 1 gpm (BLM, 1992). Data from the 1950s indicate that the average yield from this aquifer was greater, around 7.5 gpm, while the average well depth was 36 feet (Engineering-Science, 1994).

- *Limestone aquifers.* The limestone aquifers occur within the Middle to Lower Devonian Onondaga Limestone and the underlying limestones of the Upper Silurian age. Portions of this aquifer (235 feet below ground surface [bgs]) have yielded up to 150 gpm (Engineering-Science, 1994). However, because of its depth—between 100 and 700 feet bgs at SEDA (Engineering-Science, 1994)—the limestone aquifer is the least commonly used groundwater source (Woodward-Clyde, 1996b).

Two villages, Ovid and Interlaken, rely on groundwater for their drinking water supplies. Ovid takes its supply from two shallow gravel-packed wells; Interlaken relies on a developed seepage-spring area (Engineering-Science, 1994).

Groundwater contamination is known at one site on the southwestern side of the depot. Groundwater at the ash landfill and municipal incinerator is contaminated by TCE and its decay products, dichloroethylene and vinyl ethylene. As detailed in the Environmental Baseline Survey (EBS), TCE leaks are sufficient to *potentially* affect use of groundwater downgradient of the contamination source. Off-base contamination is probable, but TCE is not affecting adjacent wells. There is no current on-base use of groundwater in the vicinity of TCE contamination. Seeps that occur to the west and hydrologically downgradient of the site may represent surfacing of groundwater associated with the ash landfill. The facility is on the CERCLA National Priorities List (STV/LYON Associates, 1990).

4.8 INFRASTRUCTURE

4.8.1 Potable Water Supply

The potable water supply system at SEDA currently consists of a treatment and distribution system that receives its source water from Seneca Lake. The town of Varick is undertaking a major water project and installing new water pipes. Following completion of the project, the town will receive filtered water from the village of Waterloo after which SEDA will become a water customer of the town of Varick.

Because this EIS addresses baseline conditions at SEDA, the following discussion includes a description of Seneca Lake as the source of all potable water. It should be noted that once SEDA converts to the town of Varick's water supply, the depot's existing water distribution system will continue to be used but the SEDA raw water intake in Seneca Lake will no longer be the source of water.

System Components. SEDA owns and operates its own potable water systems and sells potable water to customers with approximately 125 water hookups in the hamlet of Romulus, located in the towns of Romulus and Varick. The original water distribution system, located on the south end of the depot, was built in the 1940s. The north end system was built in the 1950s. Locations of the potable water supply intake/pump house and water tanks are shown in Figure 4-3. SEDA currently uses 100,000 gallons per day (gpd) (Absolom, personal communication, 1996c). An additional 70,000 gpd are pumped, treated, and distributed through SEDA to the hamlet of Romulus.

Supply pipes consist of three 12-inch-diameter intake lines extending 1,100 feet into Seneca Lake at a depth of 90 feet (RKG Associates, 1996). Supply lines are connected to the intake/pump house along East Lake Road. As of May 1996, the SEDA distribution system was not in compliance with the Surface Water Treatment Rule of the Safe Drinking Water Act (SDWA), as administered by the New York State Department of Health (NYSDOH). The SDWA requires filtration of all lake water, as opposed to the treatment (chlorination and fluoridation) of lake water currently done by SEDA's water treatment facility. Rather than construct a new filtration/coagulation facility, SEDA will become a water customer of the town of Varick⁴.

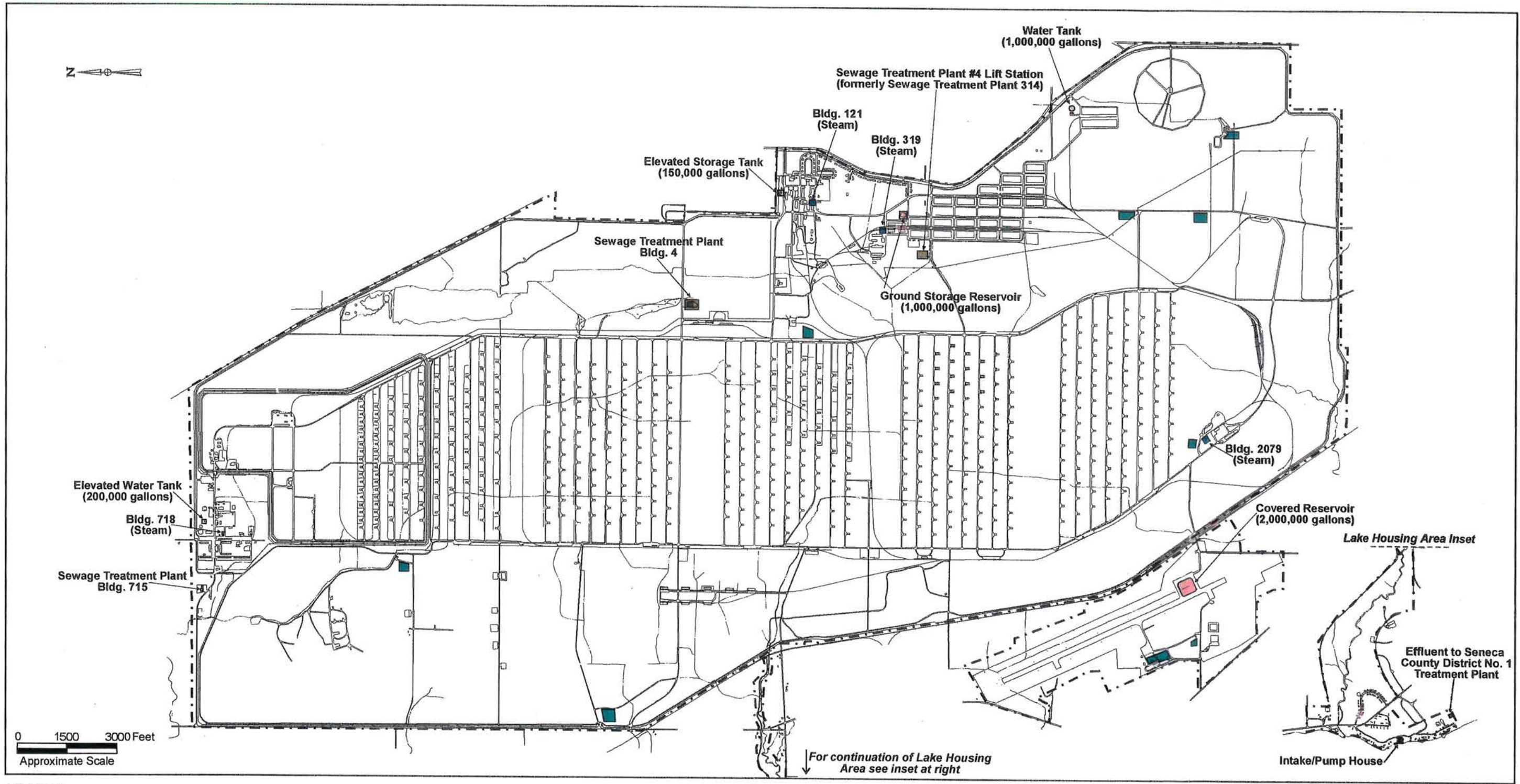
Under an SDWA compliance schedule with EPA Region 2, SEDA has entered into an agreement and utility sales contract for up to 40,000 gpd with Sampson State Park (because the park is also not in compliance with the SDWA). The park began purchasing potable water from SEDA during the fall of 1997. Once SEDA begins receiving potable water from the town of Varick, it will continue to provide potable water to Sampson State Park so that the park can meet the requirements of the SDWA. Under the terms of the above-referenced compliance schedule with EPA Region 2 and because SEDA is part of the Varick Water Project, the depot was exempt from SDWA requirements until October 31, 1997, because monthly *Cryptosporidium* and *Giardia* testing was negative (Absolom, personal communication, 1996a).

There are four pumps in the water system—three main pumps and one emergency backup pump (Absolom, personal communication, 1996c). Each of the main pumps has a pumping capacity of 936,000 gpd. The emergency pump has a capacity of 288,000 gpd (RKG Associates, 1996). Pumps on the supply system maintain a pressure of 80 pounds per square inch. State and federal regulations require that water in the pump house be chlorinated and fluoridated before distribution (Absolom, personal communication, 1996c; Woodward-Clyde, 1996b). Pipes in the distribution system are constructed of steel, ductile iron, cast iron, transite, and polyvinyl chloride (PVC). Distribution pipes range in size from 6 to 12 inches (RKG Associates, 1996).

Potable water at SEDA is stored in a 1-million-gallon covered reservoir (Reservoir 334) located in the industrial area of the Main Post (see Figure 4-3). The reservoir acts as the depot's basic reserve supply (STV/LYON Associates, 1990). Water from the reservoir is rechlorinated and pumped to an elevated storage tank and then is distributed through the lines in the system to the second elevated storage tank, which serves the North Depot. Another 1-million-gallon storage tank is located in the industrial area, north of the U.S. Coast Guard LORAN station, with a hydraulic elevation of 762.5 feet.

Elevated storage tanks provide pressure for the water supply system and also serve as reserves for fire protection. The primary elevated storage tank, Water Tower 109, is located near the main entrance to SEDA along Route 96 and receives its water from Reservoir 334. The storage capacity of this tank is 150,000 gallons, with a hydraulic elevation of 899 feet (National Geodetic Vertical Datum 1929, cited in RKG Associates, 1996). Water Tower 109 provides pressure for the South Depot and Main Post distribution systems. The tower also supplies the off-post Romulus-Varick water district, the on-post emergency fire protection reservoir, and the North Depot elevated Water Tower 730 (STV/LYON Associates, 1990). Water Tower 730 is a 200,000-gallon elevated storage tank at an elevation of 801

⁴SEDA had a planned raw water pressure filtration/coagulation facility approved by NYSDOH in 1995 to meet the regulations. The proposed facility would have been located at the existing intake/pump house adjacent to Seneca Lake and would have reduced the pumping capacity of the system from 1,296,000 gpd to 432,000 gpd (RKG Associates, 1996).



LEGEND
 Potable Water
 Wastewater
 Areas with Septic Systems
 Central Steam Systems

Source: RKG Associates, 1996; STV/ Lyon Associates, 1990.

Utilities
 Seneca Army Depot Activity
 Romulus, New York
 Figure 4-3

feet (RKG Associates, 1996) located in the northern part of the depot. This water tower supplies pressure for the North Depot distribution system (STV/LYON Associates, 1990). Water in the tower is supplied by Water Tower 109 and is rechlorinated on its way to Water Tower 730 to ensure the water remains potable (STV/LYON Associates, 1990).

System Structure. The water distribution system is considered to be in fair to good condition although there are periodic leaks at joints. An annual valve maintenance program is in place at SEDA, and valves are checked to ensure proper orientation. Water services to several family housing units in the Main Post area have required water service replacement to the copper service lines connected to PVC mains. The 150,000-gallon south end Water Tower 109 is in working condition but is at the end of its useful life. This tank was installed in the 1940s and is in fair condition, (in terms of inside condition and wall thickness) (Absolom, personal communication, 1996c). In 1995, a replacement tank was designed and approved for installation, however, since SEDA's closure was announced, no further action has been taken. Water Tower 730 is in good condition (Absolom, personal communication, 1996a).

Past problems in the water distribution system have been broken mains, leaking pipes, and tuberculation (the growth of bacteria inside the pipes). In the 1980s, much of the piping in the supply system was replaced with plastic or cement-lined ductile iron pipe, and the system is operationally in good condition. SEDA's pipes on Route 96 are constructed with transite.

Fire Protection. Water for fire protection and drinking at the airfield is supplied from an independent ground storage tank supplied by Reservoir 334 (STV/LYON Associates, 1990; Woodward-Clyde, 1996b) and from a well near Building 2301 (Woodward-Clyde, 1996b). The airfield reservoir is not permanently connected and is filled periodically.

Reservoir 352 is an emergency fire protection reservoir connected to Water Tower 109. The reservoir has a capacity of 1-million gallons of nonpotable water, used as an emergency supply to supplement the 300 area warehouse fire protection system (STV/LYON Associates, 1990).

Service to Off-site Users. The potable water supply system at SEDA also supplies water to the hamlet of Romulus. A meter and valve pit with an 8-inch-diameter main runs north from the base of the SEDA primary elevated storage tank. The town of Varick owns and maintains all water mains downstream of the meter and valve pit. Current average demand for water for all off-site users is 50,000 to 75,000 gpd.

4.8.2 Wastewater Treatment

Sanitary Wastewater. All wastewater at SEDA, except from the Lake Housing Area, is treated by SEDA's systems. The depot's sewage treatment systems consist of two on-site sanitary collection and treatment systems, STP 4 and STP 715. Sanitary wastewater on the depot is collected through a system of clay tile pipes built in 1941 and 1942. Any sanitary facilities not connected to any of the three wastewater treatment systems have individual septic tanks (Woodward-Clyde, 1996b). Locations of the STPs and areas served by septic are shown in Figure 4-3. Sewage from the Lake Housing Area is transported off depot to the Seneca County District 1 STP located in Willard.

- **STP 4.** The east-central area of SEDA, consisting of the Main Post's industrial and administrative areas, and the southern part of the Main Post, consisting of administrative buildings and family housing, are served by 8-inch, 10-inch, and 12-inch sanitary sewers and 6-inch force mains. All lines in this area drain northerly and westerly to SEDA STP 4 on West Romulus Road. STP 4 has a State Pollutant Discharge Elimination System (SPDES) permit for discharge into the headwaters of two different watersheds (Reeder Creek and Kendig Creek). As a result of the STP's discharge to a headwaters area, a wetland has developed.

STP #4 is a tertiary treatment system consisting of grit removal/comminution, an Imhoff tank, a trickling filter, secondary settling, and a wetland for final polishing (tertiary treatment) (Absolom, personal communication, 1996a). This system was constructed in 1942 and upgraded in the 1980s to bring the STP to secondary treatment standards. Specifically, the trickling filter was renovated, the wetland discharge was improved, and water elevation controls and sample stations were constructed. Additional improvements and upgrades were subsequently made to this system, resulting in the plant's achieving tertiary treatment. STP 4 is in good condition except for the trickling filter, which is deteriorating and is in need of minor repair (Absolom, personal communication, 1996a).

The system has a design capacity of 252,000 gpd, although its current average demand is 150,000 gpd (Absolom, personal communication, 1996a). Approximately 50,000 gpd of the current flow is from 100 connections in the hamlet of Romulus. Sludge from STP 4 is held at the onsite holding facility until disposal off site. Discharges from STP 4 are regulated under an SPDES permit that will expire in 1999. Effluent from STP 4 is monitored daily (Absolom, personal communication, 1996c). Very small amounts of industrial wastewater enter this system from boiler plant blowdown (Engineering-Science, 1994). An unknown volume of infiltration and inflow (I/I) also enters the STP 4 collection system (Absolom, personal communication, 1997a).

- **STP 715.** The northern portion of SEDA, including the barracks and a recreational area, is served by 8-inch and 10-inch sanitary sewer lines. These lines drain to a separate treatment plant located in Building 715, the North Depot STP. Originally constructed in 1956 to support the Q Area and the north barracks activities, the plant was upgraded in 1981 to tertiary treatment and consists of a rotating biological contactor (RBC) unit followed by a sand filter. STP 715 has a design capacity of 375,000 gpd (Absolom, personal communication, 1996a).

The plant is still permitted by an SPDES permit to discharge to Reeder Creek, but the northern portion of SEDA is currently vacant and the STP is inactive. In 1986, the treatment system violated its permit for biochemical oxygen demand and suspended solids from high flow rates that caused sloughing of microbial solids from the RBCs. No other known violations have occurred (Engineering-Science, 1994). I/I into the collection system is the source of the present flow. Because the STP is not in use, SEDA is required to monitor and report once a year rather than monthly (Absolom, personal communication, 1996a).

- **STP 314.** An abandoned sewage treatment plant consisting of a bar screen, Imhoff tank, trickling filter, secondary clarifier, chlorination chamber, and sludge-drying bed was located near the intersection of 3rd Street and Avenue A. The treatment plant was used from 1941 until 1978, at which time it was converted into the lift station for STP 4 (Engineering-Science, 1994). While in use, this treatment plant was used for domestic wastewater from the warehouse area. No

industrial discharges entered the system (Engineering-Science, 1994). Components of the original operation system have been removed or filled and covered with shale and soil.

- **Lake Housing Area.** The Lake Housing Area consists of residential buildings, an officers' club, and the water treatment plant. This area is served by 6-inch to 21-inch sanitary sewers and two small lift stations. The collection system for Colonel's Row was installed in 1985-1986, prior to which the houses were served by septic systems. The collection system on Flac Drive was completed in 1988-1989 (Absolom, personal communication, 1996a).

Wastewater from the Lake Housing Area flows south by gravity to a lift station south of Building 2434. From the lift station, wastewater flows through the Seneca County Sewer District 1 collection system, which traverses Sampson State Park (Absolom, personal communication, 1996a). The wastewater is treated at an STP in the hamlet of Willard. This tertiary treatment plant discharges to Seneca Lake. In addition to the estimated present wastewater flow of 22,500 gpd to the Willard STP, SEDA has an additional reserve capacity of 35,000 gpd at the Willard STP (Absolom, personal communication, 1996a).

Condition of Systems. The wastewater treatment systems were built in the 1940s and 1950s with upgrades in the 1980s. Problems exist with the collection system due to I/I, but the systems have been compliant with their permits (Absolom, personal communication, 1996a; RKG Associates, 1996). Maintenance and inspections are conducted daily, and all lines that have been videotaped appear to be in good condition except that some of the manholes are leaking (Absolom, personal communication, 1996a).

Industrial Wastewater. SEDA's industrial activities do not generate any industrial wastewater. Very small amounts of boiler plant blowdown enter the sanitary system and are treated at STP 4.

4.8.3 *Solid Waste Disposal*

Solid waste disposal at SEDA consists of off-site landfilling (see Section 4.8.4). Metals and materials with resale value are collected at the depot and are accumulated at the disposal yard until there are enough of the materials to solicit a bid for resale (Woodward-Clyde, 1996b).

4.8.4 *Landfills*

Off-site disposal. Solid waste is collected and transported for disposal to an off-site, private landfill. Waste Management of Syracuse, the current contractor, hauls solid waste to the Seneca Meadows Landfill, located approximately 15 miles from SEDA on Balsey Road in Waterloo. SEDA generates approximately 255 tons of waste annually (Absolom, personal communication, 1996c). The landfill has virtually unlimited capacity planned for the next 50 years.

Old construction debris landfill. A landfill located near the intersection of East Patrol Road and East Kendaia Road was used from 1977 to 1984 for construction debris and from 1984 to 1986 for scrap wood landfilling. This 1-acre site was used for storing firewood until the wood was sold (Engineering-Science, 1994).

Present scrap wood site. A scrapwood pile adjacent to Building 309 has been in use since 1986. Scrap wood is collected from the depot and stored in piles until sold. The fire department periodically held training exercises using the woodpile for fuel but no longer uses the site (Engineering-Science, 1994).

Abandoned ash landfill. A 4-acre ash landfill located east of Building 2207 was used from 1941 until the 1950s and from 1974 to 1979. Ash from refuse burning pits (1940s and 1950s) and from the incinerator (1970s) was disposed of at this site. The landfill was abandoned in 1979 after the incinerator was no longer used (Engineering-Science, 1994).

Noncombustible fill area. Items that were too bulky for the incinerator or were noncombustible were buried in a 3-acre landfill located on the south side of West Smith Farm Road. This landfill was used from 1974 until 1979 when it was closed (Engineering-Science, 1994).

Old scrap wood site. A 4-acre landfill near Indian Creek Road and West Patrol Road was used from 1946 until 1949 to hold construction debris. It was abandoned in 1949.

Garbage disposal areas. Four areas have been identified as having possibly been used for garbage disposal (household garbage and metal drums) during the time the depot's incinerator was inoperable. One location is a debris landfill south of the storage pads at 7th Street. No garbage or debris has been found, but the area seems to have been disturbed (Engineering-Science, 1994). Another location is the disposal area south of classified yards and north of Ovid Road. Piles of fill have been found on site (Engineering-Science, 1994). A third location is a proposed landfill site north of South Patrol Road. A SEDA employee reported debris's having been dumped at the site (Engineering-Science, 1994). A fourth location is west of Building 2203 and east of West Patrol Road; no debris area has been found at this site (Engineering-Science, 1994).

Explosive ordnance disposal area. This area has been in use since 1941, initially for open detonation and possibly for the disposal of explosives (Engineering-Science, 1994). Until recently, the site was used for bomb squad training.

Debris area near Booster Station 2131. A potential landfill area east of Booster Station 2131 was observed by helicopter in 1990. When a ground visual inspection was conducted, the site could not be confirmed.

Fill area west of Building 135. A fill area approximately 150 feet in diameter is located west of Building 135. The area was potentially used for the disposal of construction debris (Engineering-Science, 1994).

Disposal area. A waste pile disposal area is located at Building 606. It is unknown when the area was used for disposal, but SEDA personnel have reported dumping of debris such as fence posts, concrete posts, and pesticide cans including 2,4-D (Engineering-Science, 1994). Additional information about this issue is included in Section 4.9.4.

Fill area. Adjacent to Building 2110 is a fill area that was used for construction debris disposal. It is unknown what other materials might have been buried there.

Alleged paint disposal area. The area west of Building 127 between a chain-link fence and a dirt road near the railroad tracks is suspected to have been used for paint disposal. The area encompasses approximately 450 square feet. It is unknown when or if disposal occurred at this site (Engineering-Science, 1994).

4.8.5 Incinerators

Existing deactivation furnace. Building 367, located south of the intersection of Administration Avenue and Ordnance Road, is the existing ammunition deactivation furnace. The furnace has been used to deactivate unserviceable and obsolete small arms munitions, bullets, fuzes, boosters, and firing devices since 1962. The ammunition is burned and exploded by heat in the furnace. Ash is removed from the furnace and is transported to a hazardous waste container, where it cools. Scrap metal is removed from the cooled ash and is loaded into barrels and transferred to the Defense Reutilization and Marking Office (Engineering-Science, 1994).

Classified document incinerator. Building 801 is an operating classified document incinerator. It is a single-chamber, propane-fired incinerator rated at 96 pounds per hour (lb/hr) and normally burns 30 to 40 pounds per day (lb/day) (Engineering-Science, 1994). The current incinerator has been operable since 1983, when it replaced the previous incinerator that had been there since 1956. The only items incinerated in Building 801 are classified paper documents and some plastic. The ash is disposed of off post in the sanitary landfill. Previously, the ash was disposed of in the ash landfill (Engineering-Science, 1994).

Classified document incinerator. The original Building 709, located south of the North Patrol Road emergency gate, was a classified document incinerator that was used between 1956 and 1983. The incinerator normally burned 30 to 40 lb/day of classified documents and had a design capacity of 96 lb/hr (Engineering-Science, 1994). The building was torn down in 1983 and a new Building 709 was constructed. This building is a state-of-the-art incinerator used to burn classified paper documents (Engineering-Science, 1994).

Abandoned Solid Waste Incinerator. Building 2207 is an abandoned solid waste incinerator. The facility is located on the north side of West Smith Farm Road (Engineering-Science, 1994). The incinerator was used from 1974 to 1979 to burn municipal solid waste at 2,000 lb/hr (Engineering-Science, 1994). When the incinerator was in use, it was run once a week. During this 5-year period, approximately 18 tons of solid waste was generated at SEDA, although not all of it was incinerated because some items were not burnable. The incinerator was abandoned in May 1979 after being destroyed by a fire (Engineering-Science, 1994).

Abandoned deactivation furnace. Building S-311, located near the intersection of Administration Avenue and South Street, is an abandoned munitions deactivation furnace (Engineering-Science, 1994). This furnace was used from 1945 until the mid-1960s, when the furnace was flooded with rainwater. Materials burned in the furnace were obsolete and unserviceable small arms munitions consisting of explosive compounds and heavy metals, including lead and barium (Engineering-Science, 1994).

4.8.6 *Traffic and Transportation*

Roadways. Surface roads are the main mode of transportation on and to the depot. The major highway access to the depot is from New York State Routes 96 and 96A. The depot is bounded on the east by Route 96 and the west by Route 96A. The main entrance to the depot is from Route 96. The North Depot entrance is located on Route 96A (SEDA, No date c.). The surrounding local roadways are in good condition and are operating at acceptable levels of service (RKG Associates, 1996). The depot's transportation system evolved as various operational, storage, and administrative areas were constructed. The on-site roadway network is in fair condition, although some structural and capacity improvements are needed. The regional roadway network serving the ROI is in good condition and operating at a low level of service, although it is not located adjacent to any interstate highways.

There are 139 miles of on-site roadways at the depot (SEDA, 1996). The roads serving the housing, industrial, and administrative areas of the facility are mostly paved. Access to rows of igloos and other remote areas of the depot is provided with either paved and shale or gravel roads (RKG Associates, 1996). Macadam paving provides a complete roadway system for the restricted storage area, exclusion storage area, and North Post. Fourteen miles of concrete roads with asphalt overlay are located in the administration and general warehouse area (SEDA, No date c).

Portions of the administration area recently received asphalt overlay. Frost heaving is evident in some areas. There is limited truck and vehicle traffic on the roadway network, and the existing roads have withstood the traffic load (RKG Associates, 1996). There has been a program to rehabilitate the macadam roads in the Igloo Storage areas.

Existing Traffic Conditions. Regional roadways serving the depot are two-laned. The Average Annual Daily Traffic (AADT) ranges from 1,300 vehicles to 3,150 vehicles. Due to the low traffic volumes, the volume-to-capacity ratios are small in magnitude with good operating levels of service (RKG Associates, 1996). Due to the low traffic volumes on installation roadways, signals have not been necessary. Traffic is controlled by stop, yield, and speed limit signs (SEDA, No date c).

Public Transportation. There is no public transportation serving the facility. A Greyhound bus station is located in Geneva.

Runways and Helipads. Air traffic to and from SEDA used the depot airfield, which was formerly Sampson Air Force Base. The airfield, with a 7,000-foot runway, was designed for both fixed-wing and rotary-wing aircraft. It has air traffic advisory facilities and operated on a limited instrument flight rules system. The existing runway accommodated C-141 cargo aircraft arrival and departure operations. However, C-130 cargo planes, DC-9 aircraft, and occasionally C5A aircraft also used the facility. Until the airfield was closed in 1996, takeoff and landing operations averaged one fixed-wing and two rotary-wing aircraft per week (Absolom, personal communication, 1996c).

There are three public-use airports in Seneca County and three limited-facility airstrips within a 12-mile radius of the depot. The region is also served by the three commercial airports associated with nearby municipalities—Hancock Field in Syracuse, Rochester International Airport, and Ithaca Airport.

Railways. Railways serving the area are for freight transfer. The depot owns and maintains 42 miles of railroad lines on site (SEDA, 1996). The system was originally built in the 1940s and is a spur that connects to the main Finger Lakes Short Line System. The entire depot system is built out of used trolley car rails and tracks once used in large cities across the country. As the tracks and switching equipment were either removed or replaced during World War II, the Army obtained the old tracks and built the SEDA system gradually as used equipment and materials became available. As a result, the tracks have 80-pound open hearth steel rail that can handle only lighter (class C) loads. Today's standards for industrial and commercial development require heavier gauge track. Because of the age of the system, replacement parts are no longer made and therefore are difficult to obtain. Track maintenance takes place every 2 years on the average. However, this maintenance includes replacement with the outdated 80-pound gauge rail (RKG Associates, 1996).

The entire rail system at the depot does not meet current load rating standards recommended by the American Railway Engineering Association for industrial/commercial use and current Federal Railway Association Class I track safety standards. There is a 10 mph speed limit within the depot to minimize the potential for derailment and to ensure ammunition and ore are transported safely. The Finger Lakes Short System feeding to the depot system meets current standards (RKG Associates, 1996).

Water Transportation. There is no water transportation facility on the depot. In the vicinity of the Depot, Seneca Lake connects to the New York State Barge System (Geneva Growth, Inc., No date). The Cayuga-Seneca Canal, to the north of the depot, connects Cayuga and Seneca Lakes (Seneca County Tourism, No date b).

4.8.7 Energy

Electricity. Electricity is supplied to SEDA by New York State Electric and Gas (NYSEG) through two substations. Power supplied to the grid that provides service to SEDA is generated at two power plants, one in the town of Dresden and the other on the eastern shore of Cayuga Lake. Fuel at these plants consists of coal, tires, and wood (Absolom, personal communication, 1996a). SEDA is also linked with a power grid that includes a nuclear power plant near Lake Ontario and a small hydroelectric generating station in Waterloo. Annual electricity consumption at the depot is 8,002,000 kilowatt-hours (Absolom, personal communication, 1996c).

All of SEDA's electrical power, except for that used by the airfield, Gate 33 (troop entrance), and Post 2 (truck gate), is obtained from a single 34.5-kilovolt (kV) overhead transmission line on Route 96A that is linked to a substation. The substation serves SEDA, is owned by NYSEG, and is jointly operated by NYSEG and the Army. The substation consists of three transformers wired in a 3-phase, 3-wire delta configuration (RKG Associates, 1996). Approximately 75 percent of the electricity supplied by the substation is delivered to the depot; 25 percent is supplied by NYSEG to areas surrounding the depot (STV/LYON Associates, 1990).

The electrical system at SEDA has a peak design capacity of 4,313 kilovolt amperes (kVA). Each single-phase transformer on the substation has the capacity to be increased from 1,667 kVA to 1,917 kVA if forced-air cooling is added to the substation. The total firm capacity at the substation, with these additions, is 5,751 kVA (STV/LYON Associates, 1990). The depot has never experienced problems with peak electrical demand (Absolom, personal communication, 1996a) and historically has had a maximum use of 4,040 kVA (STV/LYON Associates, 1990).

From the substation, electricity is distributed on the depot by 4.8-kV overhead and underground lines. Three 4.8-kV feeders stem from the substation (STV/LYON Associates, 1990). Feeder A serves some of the administration and warehouse areas of the South Depot and the machine shop (RKG Associates, 1996). The remaining areas of the South Depot are served by Feeder B, which also serves the family housing. Feeder C supplies the North Depot troop area, the Main Depot conventional ammunition storage area, and the Lake Housing Area (STV/LYON Associates, 1990).

The Airfield Area obtains 4,800 volts of power from a main line on Route 96A. The two entrances are able to use voltage directly from nearby overhead lines. Post #2 and Gate #33 are metered individually and are provided electrical service directly from NYSEG (Absolom, personal communication, 1996a).

In addition to the primary system, SEDA has emergency (auxiliary) standby electrical generation capability that is fueled by #2 fuel oil.

The entire distribution system is in excellent condition (RKG Associates, 1996). Since the 1980s, approximately 85 percent of the overhead lines have been upgraded with new poles, conductors, and insulation, allowing the system a rated capacity of 1,500-kVA.

Natural Gas. Natural gas is not used on SEDA.

Heating. Heating systems at SEDA consist of three central steam systems, individual and shared fuel oil tanks, and propane tanks. Most of the buildings, however, including all the storage igloos and some warehouses, are unheated (STV/LYON Associates, 1990; Woodward-Clyde, 1996b).

Approximately 60 percent of the heated buildings at SEDA are heated by forced steam through radiators connected to the three central steam heating systems located in Buildings 121, 319, and 718. These plants provide high- and low-pressure steam to buildings for space and water heating (see Figure 4-3) (Absolom, personal communication, 1996c; Woodward-Clyde, 1996b). The east-central area of the Main Post (administration/industrial) has two low-pressure boilers in Building 121 and two high-pressure boilers in Building 319. The boilers have a total rated capacity of 1,161 horsepower (HP). The north end (barracks and recreation) area has three high-pressure boilers in Building 718 with a total rated capacity of 930 HP. Building 2079 in the southwest portion of SEDA is an abandoned heating plant.

The three central steam systems collectively use five fuel oil storage tanks (Absolom, personal communication, 1996c). Individual steam boilers are fueled by #2 fuel oil, and the boilers at the south depot area system are fueled by #6 fuel oil (bunker oil). Total capacity for storage of #6 fuel oil is 170,000 gallons (STV/LYON Associates, 1990). Historically, the heaviest consumption of #6 oil was 96,100 gallons in January 1985, allowing for a fuel oil supply of a minimum of 1-month (STV/LYON Associates, 1990). SEDA has implemented energy conservation and preventive maintenance programs that have reduced fuel oil consumption patterns on the depot (STV/LYON Associates, 1990).

There are 37,250 linear feet of steam lines connected to the three central systems (Absolom, personal communication, 1996c). Steam lines at the North Depot are insulated with calcium silicate, although steam has not been run through the North Depot system for several years. The South Depot uses elevated and buried steam lines.

The steam systems are over 20 years old but are in good condition. The entire system in Building 319 was replaced at the beginning of 1996 (RKG Associates, 1996). The boiler plant for providing steam for heating buildings at the south end of the depot is in good condition.

Sixty-six buildings and 279 residential units are heated with individual heating systems. Trailers near the lake and the office modules located in some of the warehouses are heated by propane. Several other areas throughout the depot have individual oil-fired boilers or oil furnaces. These systems use #2 fuel oil and consist of an oil-burning unit with an individual storage tank located at or near the building it serves (STV/LYON Associates, 1990). Fuel oil tanks serving residential units at Elliot Acres and most of the units in the Lake Housing Area are shared by more than one unit.

The total storage capacity for #2 fuel oil tanks is 227,000 gallons (STV/LYON Associates, 1990). The highest recorded consumption for #2 fuel oil was in January 1985, when 67,652 gallons were consumed. The depot has an ongoing program to replace underground fuel oil storage tanks with aboveground double-walled "pod tanks." This program has continued despite the BRAC closure announcement. The fuel oil tanks at the Lake Housing Area are empty and monitored monthly for the presence of water.

4.8.8 Communications Systems

Fiber optic capabilities and state-of-the-art digital switching capacity are available in the SEDA service area. Service area communications systems on SEDA consist of telephone, facsimile, and computer networks. Fiber optic service is not installed at SEDA.

Telephone service to South Depot is provided by the Trumansburg Home Telephone Company through a main feed to an electronic switch in Building 101. SEDA owns and operates this electronic switch and a second electronic switch in Building 701. North Depot and Lake Housing obtain telephone service from NYNEX (SEDA, 1995a). The telephone distribution system is owned and operated by SEDA and consists of aerial pole lines and direct-burial cables. Approximately 500 lines serve telephone and facsimile numbers. The system was upgraded in the 1980s (RKG Associates, 1996).

Approximately 10.5 miles of local area network computer link system lines, consisting of aerial and underground lines, are owned by SEDA (RKG Associates, 1996).

4.9 HAZARDOUS AND TOXIC SUBSTANCES

The characterization of present hazardous and toxic substances conditions at SEDA under baseline conditions is currently under way. The bulk of the effort is to collect information that identifies conditions related to improperly disposed-of materials such as spilled or buried hazardous waste. As discussed below, significant progress has been made with site inspection/investigation involving approximately 15 percent of the land area of SEDA (Woodward-Clyde, 1996a). For the remaining

85 percent of the land area, conditions have been fully characterized. In addition, sources of hazardous and toxic materials generated by normal operations at SEDA are well understood and are also described in the following subsections.

4.9.1 Storage and Handling Areas

SEDA has interim RCRA status for its Treatment, Storage, or Disposal Facility (TSDF) and is considered a large-quantity generator based on the volume of waste generated. The installation has interim RCRA status for six TSDF units. SEDA has designated satellite accumulation areas, which are operated as specified by State regulations. At this time, hazardous wastes are accumulated at various sites around the depot, where they reside for a period of less than 90 days. As permitted by the operating schedule, wastes are accumulated at one of SEDA's three storage areas until disposal. In 1995, the total amount of hazardous waste stored on SEDA was approximately 0.1 ton. Building 301 is used for the storage of PCB-contaminated electrical equipment. Building 307 is used to store all other RCRA-listed wastes except for mixed wastes (hazardous substances and radioactive wastes together), which are transported to Building 803. SEDA is inspected annually by NYSDEC for compliance with RCRA. The latest inspections (September 1995, October 1996, and October 1997) found no violations or any situations requiring corrective action.

4.9.2 Uses

Hazardous wastes generated at SEDA have included pesticides, acids, caustics, solvents, paint-related materials, oils, grease, fuels, antifreeze, waste batteries, adhesives, PCBs, and mixed wastes. These wastes originated from a range of activities, which included the maintenance of equipment and weapons systems, investigation/remediation of polluted media, and disposal of off-specification and out-of-date materials. Table 4-3 lists the reported hazardous wastes generated and disposed of off site for the period between 1992 and 1995.

In addition, herbicides are currently used to control grasses and weeds for railroad rights-of-way, fence lines, igloos, and loading docks. This work is conducted by off-site providers, who typically use commercially available herbicides. SEDA also retains an off-site provider for the management of pests, including mice and bats, bees, cockroaches, and other problem animals (Woodward-Clyde, 1996a).

4.9.3 Disposal

As of the baseline year, approximately 31 tons of hazardous substances were generated by SEDA, of which approximately 6 tons of subspecification munitions were destroyed on site (by open burning or detonation) (Brooks, 1996). On-site disposal units currently active within the boundaries of SEDA include the Deactivation Furnace (Building 367), the Burning Ground, and the Open Detonation Ground (all of which are interim RCRA status). All other wastes (i.e., those listed in Table 4-3) are transported and disposed of off site by contractors.

Table 4-3
Quantities of Hazardous Wastes Generated at SEDA and Disposed of Off Site 1992-1995

Waste Description	Pounds per Year			
	1992	1993	1994	1995
Waste Petroleum Naptha	64,072	44,867	18,216	13,599
PCB Waste	0	9,642	0	55
Gasoline- and Jet Fuel-Related Materials	0	2,876	2,792	2,219
Paint Related Material	4,740	1,409	6,520	940
Pesticides	NA	NA	306	4,948
Adhesives	NA	NA	0	847
Metal Cleaners	NA	NA	74	140
Ammonia Solutions	NA	NA	0	10
Sulfuric Acid	NA	NA	0	168
Used Motor Oil	0	950	6,422	2,334
Lindane Rinse Water	0	456	NA	NA
Trichlorotriflormethane	0	455	NA	NA
Calcium Hypochlorite	0	360	NA	NA
Used Batteries	0	189	52	8
Sodium Hydroxide (DS-2)	0	280	4,609	6,324
1,1,1 Trichloroethane	0	124	NA	NA
Mercury	0	14	NA	NA
Salicylic Acid	0	10	NA	NA
Decontamination Wastes from Monitoring Wells	NA	NA	26,122	10,472
Cresol	NA	NA	0	690
Hypochlorite	NA	NA	0	464
Solvents	NA	NA	985	5,973
Methanol	0	150	NA	NA
Radiator Cleaner Waste	0	1,411	NA	NA

Note: NA = not applicable.

4.9.4 Contaminated Sites, Soils, and Groundwater

Multiple programs are under way to define the condition of SEDA land areas, including those related to the BRAC Installation Restoration Program (IRP), RCRA, CERCLA, and non-CERCLA programs. The current status of these efforts is summarized using the CERFA categories, called DoD Environmental Categories, which indicate the potential for transfer of Army property. Property in CERFA categories 1 through 4 is suited for property transfer, whereas properties in categories 5 through 7 must be investigated and, where appropriate, remediated before transfer.

Table 4-4 lists SEDA land areas by DoD Environmental Categories and the type of qualifier applicable to the land areas. Figure 4-4 illustrates the plan view of SEDA and the location of DoD Environmental Categories qualified land areas. Detailed information regarding the nature of potential/existing contamination and ongoing investigation/remediation efforts can be obtained from the SEDA *Environmental Baseline Survey Report* (Woodward-Clyde, 1997). Seventy-two sites classified as solid waste management units (SWMUs) are being processed under the BRAC IRP (Engineering Science, 1994). Of these, 24 have been classified as No Action Required; 20 as requiring Removal Action or Completions Report/ROD; and 28 as requiring Remedial Investigation/Feasibility Study, Remedial Action, and ROD.

Table 4-4
SEDA Land by DoD Environmental Condition Category

Environmental Condition Category	Total Acreage
1 ¹	8,666.19
2 ²	18.76
3 ³	19.15
4 ⁴	0.00
5 ⁵	201.56
6 ⁶	1714.64
7 ⁷	13.7
Total	10,634.00

¹ Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). However, the area may have been [sic] used to store hazardous substances or petroleum products.

² Areas where only release or disposal of petroleum products has occurred (including migration of petroleum products from an adjacent property).

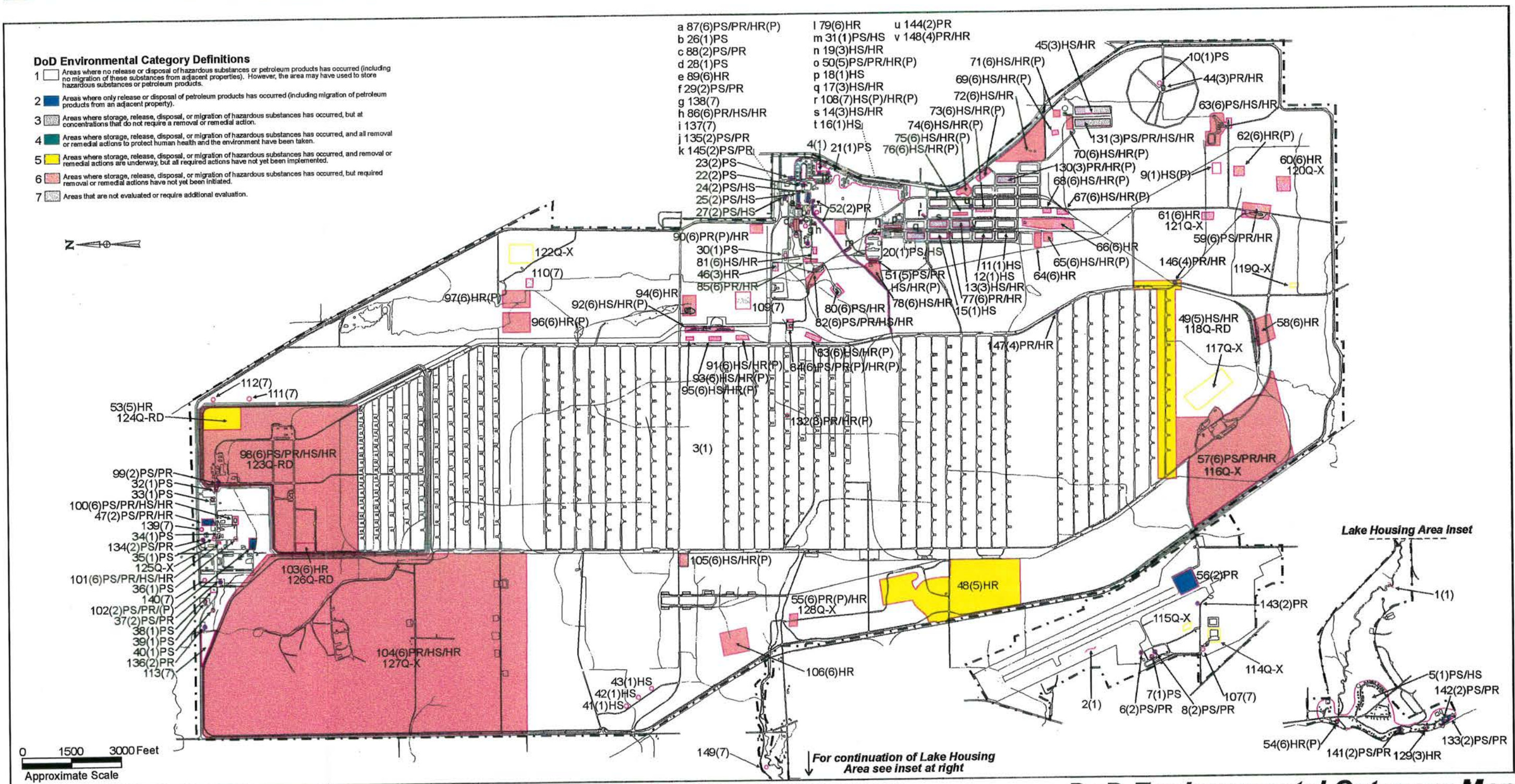
³ Areas where storage, release, disposal, or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.

⁴ Areas where storage, release, disposal, or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

⁵ Areas where storage, release, disposal, or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required actions have not yet been implemented.

⁶ Areas where storage, release, disposal, or migration of hazardous substances has occurred, but required removal or remedial actions have not yet been initiated.

⁷ Areas that are not evaluated or require additional evaluation.



LEGEND
 - - - Installation Boundary
 BRAC Parcel Boundary
 Non-CERCLA Issue (Facility Outline)

BRAC Parcel Label Definitions
 8(2)PS Contamination Description
 DoD Environmental Category Number
 Parcel Number

PS - Petroleum Storage
 PR - Petroleum Release or Disposal
 HS - Hazardous Substance Storage
 HR - Hazardous Substance Release or Disposal
 (P) - Possible (Unverified)

Non-CERCLA Issue (Qualified) Label Definitions
 8-19Q-A(P) Qualifiers
 Qualified Facility Number (if applicable)
 Parcel Number

A - Asbestos-Containing Material
 L - Lead-Based Paint
 P - PCB
 R - Radon
 X - UXO and/or Ordnance Fragments
 RD - Radionuclides
 (P) - Possible (Unverified)

DoD Environmental Category Map
 Seneca Army Depot Activity
 Romulus, New York
 Figure 4-4

Source: Woodward-Clyde, 1997.

A wide range of contaminant types are encountered at SEDA including radionuclides, solvents PCBs, and trace metals. These contaminants affect surface and subsurface soils and groundwater in local areas; however, there have not been any documented releases of contaminants off base in levels that present an unacceptable health risk (as defined by EPA criteria). To date, only 1,945 acres of the 10,594 acres at SEDA have been identified as areas impacted by releases/unacceptable disposal of hazardous wastes. (See Table 4-4 for more details.) Prior to transfer or release of property, the Army will seek the concurrence of regulatory authorities concerning the environmental condition categorizations of property parcels. For property at SEDA, that concurrence has not yet been obtained.

4.9.5 *Special Hazards*

Radon. Three hundred and eight buildings have been tested for radon at SEDA, including all housing, office, and warehouse structures. The average monitoring result for all tested buildings was 3.1 picoCuries per liter (pCi/L), which is below EPA's action level of 4.0 pCi/L. It was determined from monitoring that only two buildings, B2516 and B115, are currently over the 4.0 pCi/L threshold (Woodward-Clyde, 1996a). Figure 4-4 shows the location of buildings/areas with radon-related use qualifications.

Building B2516 is a priority one building, a residence occupied 24 hours per day. The testing to date indicates the radon value is 4.0 pCi/L based on two separate canisters in a single sampling event. Evaluation is ongoing to determine whether further action is required.

Building B115 is an office occupied 8 hours per day. The radon readings from the last sampling were 5.5 and 7.3 pCi/L, respectively, which average 6.4 pCi/L. To date, no corrective action has been taken in this structure (Shofka, personal communication, 1996).

Lead-Based Paint. LBP was historically used at SEDA in a wide range of structures. The number of buildings that contain LBP is not completely known. An inspection of all buildings, including family housing facilities, was started in 1996 by two trained LBP inspectors. Figure 4-4 indicates the location of known buildings/areas with LBP-related qualifications on use. It is projected that all unoccupied buildings will be inspected by October 1997 and all occupied buildings will be inspected by October 1998. As required, remediation will occur on those occupied structures which present an unacceptable risk.

DoD policy with regard to LBP is to manage LBP at SEDA in accordance with the provisions of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of Public Law 102-550), which requires that federal property transferred for residential use and constructed after 1960 and before 1978 be inspected for LBP and LBP hazards and the results of the inspection provided to prospective purchasers or transferees. Residential property constructed before 1960 must be inspected and all LBP hazards abated if future residential uses are to occur in the buildings.

Pesticides and Herbicides. Pesticides and herbicides have been used at SEDA. Building 606 has been identified in the EBS as a storage location for these materials. The waste pile disposal area, near Building 606, was reportedly a receptor of empty pesticide cans, including 2,4-D (Engineering Science, 1994). SWMUs 43, 56, and 69 are included as a low-priority area of concern for site investigation. A CERCLA site investigation is being performed for these SWMUs.

Polychlorinated Biphenyls (PCBs). As of the baseline year, approximately 425 transformers were located on SEDA. It is unknown how many of these contain PCBs, in part because there are seven different manufacturers of the existing equipment. An ongoing survey for PCB-containing equipment will be complete in 1997 (Absolom, personal communication, 1996c). As necessary, RCRA Part B permitted storage of PCB-contaminated electrical equipment will occur in Building 301. Figure 4-4 indicates the location of buildings/areas currently having PCB-related qualifications on use.

Residual Explosive Ordnance (RXO) and Unexploded Ordnance (UXO). Potential munition hazards at SEDA include RXO, which is ordnance that remains unaccounted for within storage structures, and UXO located in established firing ranges or in munition disposal areas. Planned management activities for RXO and UXO differ. Management actions to account for RXO include visual inspections of igloos, review of records and documentation of inventories, and interviews with current and past employees. Areas potentially affected by UXO are managed according to policies that require decontamination of areas to depths below the ground surface depending on the proposed future land use.

Information on the potential presence of RXO and UXO at SEDA is available from recent studies, visual inspections, and interviews with past and present SEDA staff. RXO might be present inside 37 buildings and any of the 519 ammunition storage igloos. The presence of UXO is suspected at eleven areas, including firing ranges and areas that are or were permitted for the disposal or burning of munitions (see Sections 4.8.4 and 4.8.5). The amount of UXO at firing ranges is suspected to be minor since the vast majority of spent munitions was nonexplosive ball ammunition.

For real property contaminated with ammunition, explosives, or chemical agents, DoD policy requires that the contaminated property be decontaminated with the most appropriate technology to ensure protection of the public consistent with the proposed end use of the property (DoD 6055.9-STD, *Ammunition and Explosive Safety Standards*). For UXO remediation, DoD has established standard assessment depths where depth of UXO removal is dependent upon the projected end use of an area. For unrestricted uses (e.g., commercial, residential, utility, subsurface recreation, construction activity), UXO must be remediated to a 10-foot depth. Assessment planning at construction sites for any projected use requires assessing the presence of UXO at 4 feet below planned excavation depths. For public access uses, including farming, surface recreation, vehicle parking, and surface supply storage, UXO remediation is required to a 4-foot depth. Limited public access (e.g., livestock grazing, wildlife preserve) requires a 1-foot UXO sweep and cleanup. For uses not yet determined, only a surface cleanup is required.

Potential RXO and UXO areas total approximately 1,210 acres. Most of this total acreage supports the 519 ammunition storage igloos. Figure 4-4 indicates the location of buildings and areas with RXO- or UXO-related qualifications on use. Ammunition storage igloos are to be investigated due to the potential for UXO use or disposal.

4.9.6 Storage Tanks

A total of 141 underground storage tanks (USTs) are present at SEDA. All of these tanks are in compliance with New York State Petroleum Bulk Storage (PBS) regulations. Of the 141 USTs, 59 are currently in use, 81 are temporarily inactive, and 1 is permanently closed in place. Those tanks which are temporarily inactive are being monitored under an agreement with NYSDEC to suspend

the permanent closure process, a process that normally starts after 60 days of nonuse. Nine tanks currently meet 1998 UST standards (i.e., double-wall construction or corrosion protection, leak detection, and overflow spill prevention) as specified in 40 CFR Part 280, and 131 tanks do not meet the standards. Of these 131 tanks, 122 tanks are exempt oil tanks only used for residential heating. The remaining nine tanks will either be upgraded to 1998 standards or permanently closed before 1998. All permitted single-wall heating oil tanks will be removed or closed prior to transfer.

4.10 PERMITS AND REGULATORY AUTHORIZATIONS

The Nuclear Regulatory Commission (NRC) has issued three licenses to SEDA for transportation, storage, inspection, minor maintenance, and demilitarization of munitions containing depleted uranium (DU).⁵ These licenses are identified as SUC-1190, SUC-1275, and SUC-1380. Upon relocation of DU at SEDA to off-site storage or disposal sites, decommissioning activities of former DU storage and handling sites will begin. The NRC licenses will be terminated upon completion of the decommissioning activities.

All of the 141 USTs at SEDA are in compliance with New York State PBS regulations. The USTs are permitted under New York State PBS Registration/Permit 8-416118.

The two STPs at SEDA are covered by an SPDES permit. SPDES Permit NY0021296 provides authorization for the Army to discharge from these STPs until 1999. Effluent limitations reflect that both STPs are capable of achieving tertiary treatment. A third STP is closed and could not easily be activated for reuse.

SEDA presently has 22 air emission point sources registered with NYSDEC, only 13 of which are active (NYSDEC Air Permit 453089-0046). Only five of the active sources are sufficient to require the full permitting and registration process specified in the New York State environmental code. The remaining sources are classified as trivial or exempt but are still tracked by the depot. The operating permits cover emissions from seven units burning fuel oils and two incinerator units burning classified documents. The remaining 13 registered sources include paint booths (7), a battery storage/charging area, a woodworking shop, abrasive blasting booths (3), and a vapor degreaser (Woodward-Clyde, 1996a).

As described in Section 4.9, SEDA is an interim status RCRA TSDF and is considered a large-quantity generator. The installation currently has an interim status permit for 6 satellite accumulation areas. The EPA Hazardous Generator Number for SEDA is NY 0213820830.

Performance of the Army mission at SEDA involves grants of interest in real estate. These include easements, in-leases (leaseholds obtained by the Army), licenses, and permits. Table 4-5 identifies the grants presently in effect at SEDA.

⁵DU is a by-product of spent armor-piercing ammunition and requires special handling because of its uranium content.

**Table 4-5
Grants at SEDA**

Duration and Number	Type of Grant and Description	Remarks
1994-1999 DACA51-5-94-107	In-lease: Right to install 8-in iron water main pipe across rail track	Annual lease payment to Conrail
1994-1999 DACA51-5-94-106	In-lease: Right to attach 1-in diam communication cable at Kendaia	Annual lease payment to Conrail
1994-1999 DACA51-5-94-090	In-lease: Right to lay 3-in diam communication cable at Kendaia	Annual lease payment to Conrail
1994-1999 DACA51-5-94-099	In-lease: Railroad crossing at airfield Gate 16	Annual lease payment to Conrail
1958-perpetual G-NY-515C	Easement: Right-of-way over airfield runway approach	Perpetual/assignable avigation easement on 61.2 acres at north end of airfield
1960-2010 DA 30-075-ENG-9496	Easement: NYSE&G power transmission lines	Power lines on western perimeter (northern one-third of base) between State Route 96A and SEDA fence
1944-indefinite NYDRE (M) 3807	Easement: To extend road across portion of SEDA	Road to allow maintenance of rail track just north of Kendaia Creek on SEDA property east of State Route 96A
1942-perpetual NYDRE (M) 3806	Easement: To use cemetery plot on SEDA	Granted to Cemetery Association, First Baptist Church
1982-2038 DACA51-2-88-91	License: NYSE&G power transmission line	Annual payments from NYSE&G to install, operate, and maintain 65-ft overhead line on SEDA property near Main Gate
1977-2027 DACA51-2-77-619	Easement: NYSE&G underground power lines	To furnish service to LORAN-C site
1984-2009 DACA51-9-84-165	Easement: Water line to Sampson State Park	Water line along West Kendaia Road on Sampson State Park Property
1985-indefinite DACA51-9-85-225	Permit: Water line replacement	Sampson State Park permit for water line granted by Town of Romulus to SEDA

4.11 BIOLOGICAL RESOURCES

The USFWS and NYSDEC's, Natural Heritage Program were consulted regarding conditions at SEDA within their respective areas of responsibility, including those involving sensitive species and habitats. Response letters from the agencies are provided in Appendix F.

4.11.1 Vegetation

Wooded areas containing both hardwood and softwood trees cover approximately 3,600 acres of SEDA, with hardwood stands accounting for 95 percent of the total woodland acreage (SEDA, No date a). Dominant hardwood species include red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), shagbark hickory (*Carya ovata*), bitternut hickory (*Carya cordiformis*), pignut hickory (*Carya glabra*), and various oaks (*Quercus* sp.). White pine (*Pinus strobus* L.) and eastern hemlock (*Tsuga canadensis*), planted mainly in plantation form, compose the remaining 5 percent of the woodland area.

Agricultural fields on the depot, abandoned since establishment of the installation in 1941, have undergone secondary successional changes. The current successional stage, characterized as sapling shrub community, contains maple (*Acer* sp.), white ash (*Fraxinus americana*), hawthorn (*Crataegus* sp.), grape (*Vitis* sp.), raspberry and blackberry (*Rubus* sp.), poison ivy (*Toxicodendron radicans*), and various grasses. According to the Seneca County Soil and Water Conservation District, no noxious weeds are known to exist on the depot.

The remaining upland portions of the depot are in the initial stages of old field succession. Clear zones are maintained by mowing along roads and within the igloo area.

A total of 87 wetland parcels have been identified on SEDA (USFWS, 1995). Although a formal vegetation inventory of these areas has not been conducted, typical scrub-shrub wetlands plants found in the Finger Lakes region of New York include black willow (*Salix nigra*), buttonbush (*Cephalanthus occidentalis*), sweet pepperbush (*Clethra alnifolia*), and silky dogwood (*Cornus amomum*). Typical emergent vegetation in this region includes wool rush (*Scirpus cyperinus*), soft rush (*Juncus effusus*), bur reed (*Sparganium americanum*), smartweed (*Polygonum amphibium*), purple loosestrife (*Lythrum salicaria*), cattail (*Typha* sp.), sensitive fern (*Onoclea sensibilis*), and northern arrow wood (*Viburnum recognitum*).

A riparian corridor exists along Kendig Creek that connects the main portion of SEDA to Seneca Lake. The corridor consists of steeply-sloping stream banks that support a community of woody vegetation. Dominant species found in this area include sugar maple, red maple, black oak (*Quercus velutina*), and white oak (*Quercus alba*). The corridor is surrounded by farmland and a housing area.

4.11.2 Wildlife

A diverse assemblage of mammals, birds, reptiles, amphibians, and fish species have been observed on the installation. Large mammals known to inhabit SEDA are the coyote (*Canis latrans*), red fox (*Vulpes fulva*), and white-tailed deer (*Odocoileus virginianus*). In addition to "normal" white-tailed deer, resident populations include deer with a rare genetic trait that produces an all-white coat color. (See Section 4.11.3 for a further discussion of the white deer population.) Other mammals found on

the depot include the gray squirrel (*Sciurus carolinensis*), meadow vole (*Microtus pennsylvanicus*), groundhog (*Marmota monax*), beaver (*Castor canadensis*), raccoon (*Procyon lotor*), and muskrat (*Ondatra zibethicus*).

Past wildlife surveys of the installation have identified nearly 100 bird species using the wetlands, grasslands, shrublands, and woodlands of the installation (SEDA, No date c). In addition to abundant and diverse habitat, one reason for the large number of bird species on SEDA is the installation's proximity to the Eastern Flyway. While many of the species are short-term migrants, numerous others have been observed breeding on an annual basis. Some of the common breeders include the green heron (*Butorides striatus*), mallard (*Anas platyrhynchos*), blue-winged teal (*Anas discors*), wood duck (*Aix sponsa*), American kestrel (*Falco sparverius*), osprey (*Pandion haliaetus*), ring-necked pheasant (*Phasianus colchicus*), great horned owl (*Bubo virginianus*), eastern bluebird (*Sialia sialis*), eastern meadowlark (*Sturnella magna*), and tree swallow (*Tachycineta bicolor*).

Other birds believed, but not definitively known, to breed on the depot include the pileated woodpecker (*Dryocopus pileatus*), blue-winged teal (*Anas discors*), spotted sandpiper (*Actitis macularia*), ruby-throated hummingbird (*Archilochus colubris*), red-eyed vireo (*Vireo olivaceus*), and scarlet tanager (*Piranga olivacea*).

All of the birds that have been observed to breed, or are believed to breed, on the depot on an annual basis are protected under the Migratory Bird Treaty Act (MBTA), except the ring-necked pheasant.

Reptiles and amphibians common to SEDA include the common snapping turtle (*Chelydra serpentina*), northern black snake (*Coluber c. constrictor*), dusky salamander (*Desmognathus* sp.), northern ringneck snake (*Diadophis punctatus edwardsii*), black rat snake (*Elaphne o. obsoleta*), four-toed salamander (*Hemidactylium scutatum*), gray treefrog (*Hyla versicolor*), eastern milk snake (*Lampropeltis t. triangulum*), northern water snake (*Nerodia s. sipedon*), smooth green snake (*Ophiodys v. vernalis*), slimy salamander (*Plethodon g. glutinosus*), pickerel frog (*Rana palustris*), and brown snake (*Storeria* sp.) (Poole, 1996).

Fish species identified on SEDA include the banded killifish (*Fundulus daphanus*), bluegill (*Lepomis macrochirus*), common carp (*Cyprinus carpio*), creek chub (*Semolitus atromaculatus*), long nose dace (*Rhinichthys cataractae*), channel catfish (*Ictalurus punctatus*) common shiner (*Notropis cornutus*), largemouth bass (*Micropterus salmoides*), bullhead (*Ictalurus nebulosus*), and spotfin shiner (*Notropis spilopterus*).

4.11.3 Sensitive Biological Resources

A Rare Species Survey was conducted on SEDA from March to September 1996 (Poole, 1996). Given the short survey time, only those areas on the installation having the highest habitat potential to support species of national, regional, or state concern were targeted, with areas of lesser potential surveyed as time allowed. Therefore, not all areas on SEDA were surveyed. Results are presented below.

Federally Listed Species. Except for the occasional transient individual, no federally listed endangered, threatened, or candidate species are known to occur on SEDA (Clough, personal communication, 1996; Poole, 1996).

State-Listed Species. Five state-listed species were found to occur on SEDA. These species include the osprey (threatened), northern harrier (*Circus cyaneus*; threatened), large-leafed aster (*Aster schreberi*; rare), northern reedgrass (*Calamagrost stricta* var. *inexpansa*; rare), and rough avans (*Geum virginianum*; rare). Both bird species have been identified nesting on the installation. Nest and plant locations are identified in Figure 4-5.

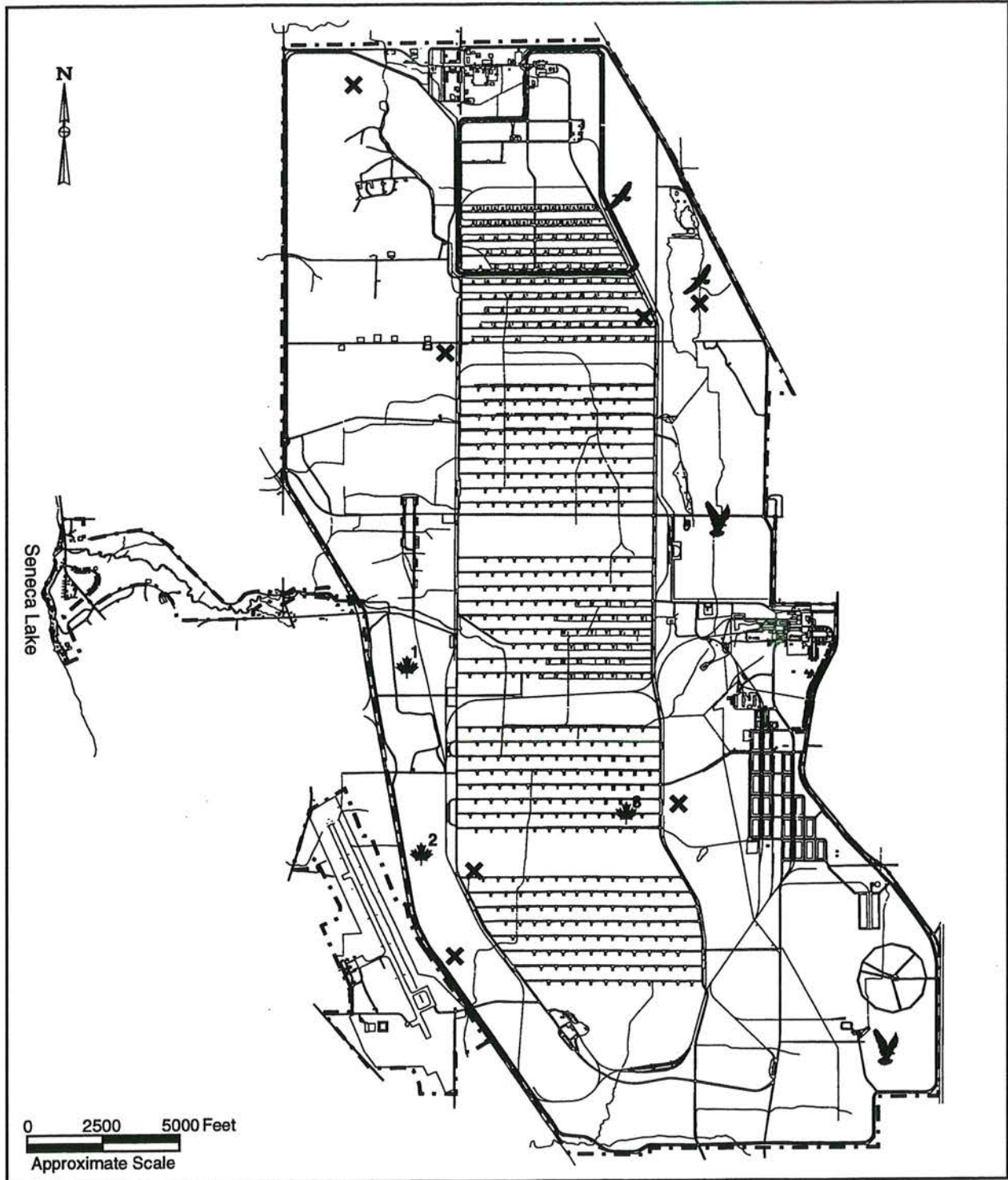
The eastern bluebird, a species of special concern in New York, is known to breed on the depot, though it was not identified during the survey. The Cooper's hawk (*Accipiter cooperii*), short-eared owl (*Asio flammeus*), grasshopper sparrow (*Ammodramus savannarum*), sedge wren (*Cistothorus platensis*), least bittern (*Ixobrychus exilis*), and common barn owl (*Tyto alba*) are also listed as New York species of special concern, though they are considered only potential inhabitants of the depot. The state-endangered loggerhead shrike (*Lanius ludovicianus*) and state-threatened red-shouldered hawk (*Buteo lineatus*) are also considered potential inhabitants of SEDA.

In addition to the five state-listed species encountered during the survey, suitable habitat was documented for 10 rare species of unconfirmed occurrence—cornel-leaved aster (*Aster puniceus*), brown bog sedge (*Carex buxbaumii*), false hop sedge (*Carex lupuliformis*), yellow harlequin (*Corydalis flavula*), rusty flatsedge (*Cyperus odoratus*), northern tansy-mustard (*Descurainia pinnata*), Nuttall's tick clover (*Desmodium nuttallii*), shrubby St. John's wort (*Hypericum prolificum*), small bur-reed (*Sparganium minimum*), and spreading globeflower (*Trollius laxus*).

No state-listed mammals, amphibians, or reptiles were identified during the survey.




Unique Population. The population of white-tailed deer on SEDA include individuals that possess a rare genetic anomaly, expressed as an all-white coat. This condition differs from albinism in that the white deer are not lacking pigmentation, as evidenced by their brown eyes and noses. Other physical traits believed to be associated with white pelage are a tendency toward palmate (flattened or moose-like) antlers with lacking brow tines and a shorter body. While it is fairly common for the occasional white deer to appear in a large population of normal, brown white-tailed deer, it is uncommon for an entire herd to develop. White deer herds have been reported in only two locations—Grand Island, Michigan, and Seneca Army Depot. In both instances, the herd-founding white deer were held in an enclosure and actively protected to promote their survival.

Only the white herd at SEDA has been successfully maintained for a long period of time; the Grand Island herd was decimated after a few years by an unidentified disease. In the case of SEDA, a fence that enclosed as many as 40 deer inside the depot was erected in the early 1940s. With thousands of acres of habitat available to them and no hunting pressure, the deer population exploded. Since no new deer were entering the population during this growth period, the gene pool was limited and the mutated alleles carrying the genes for the white coat were expressed. From the time of their first appearance at SEDA, these deer have been intensely managed and subjected to only limited hunting, which has allowed them to thrive. There are presently about 175 white deer on the depot (Woodward-Clyde, 1996b).



LEGEND

Rare Bird Sightings

-  Opsrey
-  Northern Harrier
-  Raptor Nest Location

 **Rare Plant Locations**

- 1 - *Aster schreberi* - large leaf aster
- 2 - *Calamagrost stricta var. inexpandata* - northern reedgrass
- 3 - *Geum virginianum* - rough avans

Source: Woodward-Clyde, 1996b; USFWS, 1995a.

Sensitive Species

**Seneca Army Depot Activity
Romulus, New York**

Figure 4-5

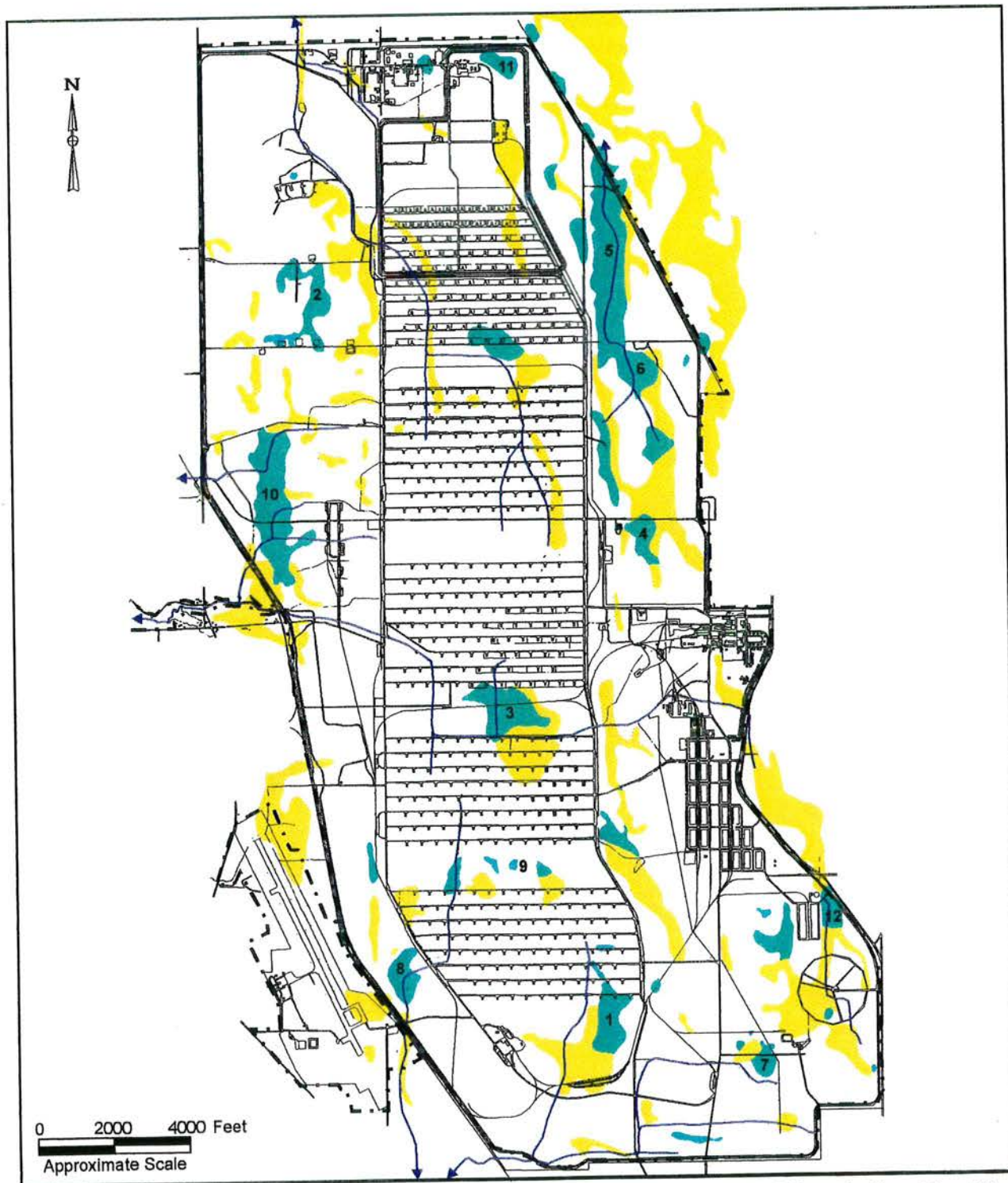
Based on the unsuccessful establishment of local white deer herds in other reported cases, these deer appear less adapted for survival than normal brown deer. The greater visibility of the white coat likely makes them more vulnerable to predators. Also, the unusual antlers of some white males may not enable them to spar well with normal males; at least two white males have been gored to death at SEDA (Stone and Rasmussen, 1984). In addition, a few white deer have been reported to have a greater tendency of blood clotting, which could also be contributing to their lower relative survival.

4.11.4 Wetlands




The SEDA Wetlands, Fish and Wildlife Plan identifies 87 distinct wetlands on the depot. Total wetland acreage is estimated to be approximately 496 acres (USFWS, 1995a). The dominant wetland systems occurring on SEDA, based on the Cowardin et al. (1979) classification system, are palustrine and lacustrine. Specific wetland classes represented include open water, scrub/shrub, emergent, forested, and some wet grasslands. Palustrine forested wetlands account for 47 percent of SEDA's wetlands and emergent wetlands account for 25 percent of wetlands on the depot (USFWS, 1995a).

Wetlands of special note that are identified in the SEDA Wetlands, Fish and Wildlife Plan are described below (Figure 4-6).

- *Wetland 1.* A palustrine forested wetland is located to the north of the Ovid Road railroad yard in the south-central section of the depot. The wetland occurs within and to the south of the E igloos. The palustrine forested habitat is extensive and is interspersed with upland habitat. The wetland is associated with the Romulus silty clay loam, which is a poorly drained hydric soil (USFWS, 1995a).
- *Wetland 2.* To the west of the North/South Baseline Road and the north of the East/West Gate Two Road in the west central section of the depot is an exceptional open water habitat. Two species of amphibians, the American toad (*Bufo americanus*) and the spotted newt (*Notothalmus viridescens*) have been observed breeding in this area (USFWS, 1995a). These species require the special habitats, with periods of drydown for breeding, that are provided by this wetland.
- *Wetland 3.* In the central section of the depot, from the railroad between the C and D igloos and extending into the D igloos, is a large palustrine forested and scrub/shrub wetland. Beaver activity within the wetland has raised water levels and, in time, may increase the area of the wetland. The wetland is associated with the Romulus silty clay loam (USFWS, 1995a).
- *Wetland 4.* The wastewater treatment wetland, located to the north of STP 4 along West Romulus Road, represents the largest monotypic emergent wetland on the depot. The wetland is dominated by cattails (*Typha* sp.), but common reed grass (*Phragmites australis*) is increasing in density. In addition to providing a large area for wildlife use, this wetland serves the installation by providing tertiary treatment of wastewater (see also Section 4.8.2).
- *Wetland 5.* The duck ponds located in the northeastern section of the depot are a created wetland complex with a water control structure. The ponds are 23 acres in size and have 11 acres of open water habitat. Several wetland habitats occur, including open water, emergent,



LEGEND

-  Wetlands (Numbers correspond to text descriptions)
-  Hydric Soils
-  Streams

Wetlands and Hydric Soils

**Seneca Army Depot Activity
Romulus, New York**

Figure 4-6

Source: Woodward-Clyde, 1996b; USFWS, 1995a.

palustrine forested, and palustrine scrub/shrub. The area is important for its recreational value and habitat diversity, and several waterfowl, song and wading birds, and mammals use the area (USFWS, 1995a).

- *Wetland 6.* Along the East Patrol Road and south of the duck ponds there is a palustrine forested and scrub/shrub wetland that appears to be increasing in size on its southern end along the telephone line, apparently as a result of beaver activity (USFWS, 1995a).
- *Wetland 7.* The largest piece of contiguous scrub/shrub habitat on the depot is located to the east of Buildings 608-612 and the southwest of the U.S. Coast Guard station. The dominant soil type mapped in this area is the poorly drained, hydric, Ilion silty clay loam. The area is surrounded by open meadow habitat that provides important habitat for the northern harrier, a New York State species of concern (USFWS, 1995a).
- *Wetland 8.* The wetlands located on the southwestern boundary of the depot along Indian Creek have been modified as a result of beaver activity. Wetland acreage in this area has increased as much as 50 percent in one season as a result of beaver dam construction. The area is predominantly an emergent wetland bordered by scrub/shrub habitat. The dominant plant species present in the emergent wetland is common reed grass (*Phragmites australis*), a species that typically forms dense monotypic stands. These wetlands represent the only ones on SEDA that have developed in the poorly drained, hydric, Sloan silt loam (USFWS, 1995a).
- *Wetland 9.* To the north of the E igloos is a forested area probably consisting of a mosaic of wetland and upland habitats. Due to its location and vegetative characteristics, the area is essentially inaccessible. The location has been ditched so the natural hydrology has been altered. Soils in the area are nonhydric with hydric and nonhydric inclusions. The water table is low except in areas adjacent to an intermittent stream and a ditch that runs north-south through the area (USFWS, 1995a).
- *Wetland 10.* Along the west-central boundary of the depot, to the north and south of West Romulus Road is an extensive palustrine forested wetland. The area to the south of Romulus Road is predominantly wetland, whereas the area to the north is interspersed with upland. The soil in this area is the hydric Romulus silty clay loam. This mapping unit is the dominant soil associated with wetlands on SEDA (USFWS, 1995a).
- *Wetland 11.* In the northern section of the property, to the east of the housing area there is a palustrine forested wetland located in the Darien silt loam. The extent of the wetland is less than that shown on the National Wetland Inventory maps (USFWS, 1995a).
- *Wetland 12.* A palustrine forested wetland surrounds Buildings 356 and 357 adjacent to the southeastern boundary of the depot. The wetland is located in the hydric Ilion silty clay loam and consists of a scrub/shrub habitat that is in transition toward a palustrine forested wetland. The area appears to be increasing in size as a result of poor drainage (USFWS, 1995a).

In addition to the wetlands listed above, there are many others too small to be included in Figure 4-6. Most of these wetlands would also not show up on the U.S. Fish and Wildlife National Wetland Inventory maps. For this reason the maps offer only a general guide to where the more extensive

wetlands are located on the depot. Because of the potential for the presence of wetlands at SEDA, jurisdictional boundary determinations must be made prior to any land disturbances in areas that would be affected by the disturbance.

4.11.5 Resource Management

Game Species Management. Deer populations are intensely managed on SEDA. Population indices are calculated by NYSDEC through use of a computer program that predicts the size and age class distributions of the herd. Data for the model are generated from aerial counts, deer harvest figures, and observation from deer agers. These trained agers sample the harvested population for age, sex, and beam diameter measurements. From the indices generated, NYSDEC is able to provide the depot with a recommended harvest figure for that particular year. Hunting by the public is limited to SEDA guests, who, due to security requirements, must be escorted throughout the depot (SEDA, No date a). To maintain a large white deer population, only a limited number of the deer are allowed to be hunted each year, as determined by SEDA resource managers.

Management efforts to restore the ring-necked pheasant population at SEDA are centered around establishing suitable nesting cover (SEDA, No date a). Suitable nesting cover has been determined to consist of fields of dense, native grasses at least 5 acres in area. To provide this habitat in past years, managers from the depot teamed with NYSDEC to plant cool season grasses such as timothy (*Phleum pratense*), reed canarygrass (*Phalaris arundinacea*), and birdsfoot trefoil (*Lotus corniculatus*).

Nongame Species Management. Management efforts for enhancing populations of bluebirds and wood ducks have been undertaken in past years with highly successful results. Artificial nesting boxes have been constructed for both species to encourage nesting on the depot. This program has proven successful over the years, as evidenced by the reestablishment of local populations.

Pest and Predator Control. Small mammal population control includes management of muskrats, woodchucks, and beaver (SEDA, No date a). Muskrats are perceived as a nuisance because they burrow into pond dikes, while woodchucks cause problems by burrowing into earth-covered structures. Trapping is encouraged on the depot and is performed by contractors and in-house personnel. Beaver dams have become fairly prevalent on the depot in recent years due to a regional increase in beaver populations. At least two creeks on SEDA contain a series of dams, which are altering water levels and flooding roads. To remedy this, beaver are trapped. One problem with beaver trapping, however, is that once individuals are removed, their vacancy is quickly filled by other beavers in the area. In addition to trapping, beaver control tubes are being used as a means of controlling water levels. These perforated tubes allow water to flow less interrupted under and around the dams, minimizing the frequency of flooding.

Annual trapping of fox and raccoon by depot employees is sufficient to keep the populations of these species under control. The coyote population has increased at SEDA and in the region over the past few years. Numerous sightings on the depot are not uncommon. During the 1990 deer harvest, four coyotes were killed in accordance with state game laws (SEDA, No date a).

Forest Management. Forests on SEDA are managed to produce high-quality sawtimber and firewood, as well as recreational and aesthetic benefits (SEDA, No date a). Where objectives collide,

multiple-use planning is practiced. For example, some forest management practices, such as reforestation, are planned such that a future cash crop is produced at the same time that wildlife habitat is provided. This is achieved by planting conifers, which provide a pulpwood cash crop at maturity and grouse and songbird habitat in the meanwhile. Planting stock is procured from the Soil and Water Conservation Service in Waterloo, New York, for planting by SEDA employees.

4.12 CULTURAL RESOURCES

The Army fully recognizes and adheres to its affirmative responsibilities under the National Historic Preservation Act (NHPA) to preserve and protect prehistoric and historic resources. Section 106 of the NHPA, along with its regulation at 36 CFR Part 800, "Protection of Historic Properties," requires that the Army identify cultural resources on its property, evaluate those resources for eligibility for the National Register of Historic Places (NRHP), and estimate potential effects from Army actions, as well as identify mitigation measures to be taken. These regulations also require that federal agencies consider the effects of their proposed activities (i.e., new construction or new lease) on significant resources. Section 106 also requires consultation with the State Historic Preservation Officer (SHPO) and other interested parties where necessary.

4.12.1 Background

Prehistory. Four prehistoric periods are recognized in the Finger Lakes region of New York. They include the Paleo-Indian era (10,000-7000 B.C.), the Archaic era (7000-1000 B.C.), the Woodland era (1000 B.C.-A.D. 1550), and the Early Contact period (A.D. 1550-1760) (Envirosphere, 1986). The Paleo-Indian era represents the earliest human occupation in North America and is characterized by a low population density and the widespread distribution of tools made from nonlocal stone. Members of this period were highly mobile and linked to the exploitation of large game animals, seasonably available plants, and accessible, high-quality lithic resources. Paleo-Indian members most likely settled this area of New York after the withdrawal of the glaciers around 10,000-9500 B.C. While the remains of mammoth and mastodon associated with this time period are lacking, stone artifacts such as Clovis points have been discovered along with unifacial scrapers, drills, and knives. Site types associated with this period (chipping stations, base camps, hunting camps, kill sites, and isolated point find locations) have not been identified at SEDA, but isolated point finds have been reported from surrounding areas (Envirosphere, 1986).

The Archaic era is divided into three periods—early, middle, and late. The distribution of bifurcate-base projectile points, Kirk points, and Plano points along major rivers, lakes, coastlines, and marshes is characteristic of the Early Archaic period. Some isolated points of Early Archaic type have been identified in New York State, but none in the SEDA area. Artifacts such as scrapers, choppers, and other tools suggesting increased woodworking and forest adaptation are indicative of the Middle Archaic period (Envirosphere, 1986). Broad, side-notched projectile points used as indicators of this period were found at the ash landfill site in the southwest quadrant of SEDA (USACE, 1995).

The establishment of a mixed deciduous forest and modern, stable biological and climatic patterns by 3500 B.C. are correlated with the rise in known archeological sites from the Late Archaic period. This period denotes a settlement pattern based on seasonal variation and resource availability. Two sites from the Lamoka phase (3400-2500 B.C.) are relatively close to SEDA (one in Geneva in Seneca County and the other at Lamoka Lake in Schuyler County), but no sites have been identified on

SEDA. The sites identified near SEDA are primarily large, semipermanent open camps on lakes and rivers characterized by storage pits, basin hearths, and semipermanent housing (Envirosphere, 1986).

The Woodland era is also divided into early, middle, and late periods. The Early Woodland period marks the beginning of greater population stability and long-term settlement, development of ceramics, horticulture, and inter-regional exchange. The culture of the Middle Woodland period appears to have been rather stable and unchanging, whereas the Late Woodland period experienced a great change in almost every aspect including complex social and political customs, population growth, and slash-and-burn farming. Many sites from the Late Woodland period have been identified in the Finger Lakes region of New York, but none have been identified on SEDA (Envirosphere, 1986).

The Early Contact period is characterized by permanent palisaded villages with seasonal and special purpose camps. Farming was an important means of subsistence supported by hunting and gathering during this period. Iroquois Tribes, particularly the Seneca and Cayuga, were inhabiting this region when Europeans first made contact around the middle of the 16th century. Cabins, long houses, storage pits, cooking pits, and burial grounds were constructed during this period (Envirosphere, 1986).

History. The area now known as SEDA was originally occupied by the Cayuga and Seneca Tribes of the Six Nations Iroquois Confederacy. The area around SEDA was set aside for veterans of the Revolutionary War but was not distributed until 1791; however, settlement had already begun in 1789 by other deeded landowners and squatters. As a result, few war veterans settled the lands they had been allotted. The towns of Romulus and Ovid were incorporated in 1794, and by 1795 the area had been settled and was agricultural-based. The area experienced a steady population increase until the early 1800s, when the Erie Canal facilitated transportation to points westward. Many of the residents of Seneca County took advantage of the convenient and inexpensive transportation and moved west to the Prairie states. Pressures from the Panic of 1837 and the Civil War continued to direct interest and population away from the Finger Lakes region. Those who remained in the area lived on small farms, and agriculture was the base of the economy until the early 1900s (Envirosphere, 1986).

During the early 20th century, agricultural activities continued to flourish (approximately 105 farms occupied the area that is now SEDA, covering approximately 10,600 acres) and small industries began to develop in the area. In addition, government-related jobs began to emerge. The location, population, and availability of transportation sources (including railroads and canals) made Seneca an attractive location as an Army ordnance depot and a Navy training station. In addition, the Willard State Hospital, a government-owned and operated hospital, provided jobs (Envirosphere, 1986).

Military History. Before World War II, the area now occupied by SEDA was primarily agricultural. Upon acquisition by the Army in 1941, existing buildings were either demolished or moved. SEDA was originally established as the Seneca Ordnance Depot. The bulk of the construction of the Seneca Ordnance Depot was completed between 1942 and 1943, and by the end of World War II nearly 650 of the installation's buildings had been constructed. Construction of the North Depot Activity in 1956-1957 added 51 buildings to the installation, including facilities for the storage and maintenance of special weapons and administration, barracks, and support buildings. The installation was further expanded in 1957 with the transfer of an airfield and family housing from the former Sampson Air Force Base, located between the western boundary of Seneca Ordnance Depot and the eastern shore

of Seneca Lake, to SEDA. In 1960, the Capehart family housing units (Elliot Acres) were built in the administrative area of the Main Post (BTI, 1984).

In August 1963, Seneca Ordnance Depot was transferred to the US Army Supply and Maintenance Command from the Chief of Ordnance and renamed Seneca Army Depot. In 1979, a LORAN-C transmitting station was established on 205 acres in the southeast corner of Seneca Army Depot for the Coast Guard. Significant downsizing in the military led to the renaming of the Seneca Army Depot as the Seneca Army Depot Activity in 1993. In 1996, SEDA was reassigned from the U.S. Army Depot System Command to the Industrial Operations Command (Woodward-Clyde, 1996b).

4.12.2 Previous Historic Resource Investigations/Section 106 Consultations

An Archeological Overview and Management Plan was completed for SEDA in 1986 by the National Park Service (Envirosphere 1986). Based upon map and archival research, this document provided background information on potential historic resources, including the presumed locations of four archeological sites (NYSM-4824, NYSM-4825, NYSM-4826, and UB-1260) originally identified around 1900, and the potential locations of 231 historic home and farmsteads which were removed when SEDA was constructed. The document also defined disturbed portions of SEDA where archeological potential was reduced and outlined future research strategies for those areas which had a greater potential to possess intact archeological resources.

In 1984 the Historic American Buildings Survey office of the National Park Service conducted an inventory and assessment of the built environment at SEDA (Building Technology, Inc. 1984). Eighty-five separate building types were examined and assessed according to the criteria for listing on the NRHP. One structure on SEDA, Building 2301, a possible mid-nineteenth or early twentieth century home located on the Seneca Army Airfield, was identified as potentially eligible for the NRHP.

In 1994, WCH Industries conducted an archeological investigation of an approximately three (3) acre area which was to be impacted as part of an ash landfill remediation project. The research identified a small scatter of prehistoric artifacts representing the Middle Archaic and Early Woodland periods and concrete foundations from a historic farm operation. WCH recommended that the prehistoric site was potentially eligible for the NRHP but did not recommend further work for the historic farm site.

In 1995, John Milner and Associates, Inc., attempted to relocate five previously identified sites, three identified in the 1986 report and two additional sites previously discovered as part of the background search (NYSM-4823; NYSM-4825; NYSM-4826; NYSM-4840; and UB-1260). Approximately 149 acres were surveyed for this project using shovel testing and ground surface examinations. None of the sites were relocated. The age of the original site information (ca. 1900), land transformations since that time, and ambiguity in the records (two separate locations were noted for NYSM-4826), contributed to the near impossibility of relocating these sites.

In 1996, Panamerican Consultants conducted architectural and archeological surveys of two tracts totaling approximately 720 acres within the Seneca Army Airfield. Seventeen structures were evaluated, including the previously identified Building 2301, and none were recommended to be eligible for the NRHP. The archeological survey testing of the acreage proceeded on the basis of high, medium, and low probability areas and located three historic period sites. One of those sites, field site

number PCI/SADA 1, was sufficiently intact to be recommended as being potentially eligible for the NRHP. The researchers also attempted to relocate site NYSM-4824, identified in the 1986 report, but no trace of that site was found.

Also, in 1996, Milner and Associates, Inc. (McVarnish and Cook) prepared a background study of the historic resources potentially present at SEDA. This report discussed the historical development of the area and identified historic associations of individuals with a number of the house site locations previously identified in the 1986 report.

Early in 1996, the New York State Historic Preservation Officer (NYSHPO) was notified of the BRAC closure and possible disposal of SEDA and was invited to consult on the action. In support of the BRAC action, the U.S. Army Corps of Engineers, Fort Worth District contracted in 1997 for an architectural inventory of all of the buildings and structures located on SEDA and the development of an overall archeological survey strategy (Geo-Marine, Inc. [GMI]). For the archeological portion of the contract, GMI was required to: 1) develop a field methodology for conducting archeological research of SEDA lands and 2) define the research potential for site types that may be discovered during future surveys of the facility. The NYSHPO archeological services reviewer, Dr. Robert Kuhn, has been contacted concerning the development of an archeological field survey methodology for SEDA lands. The results of these discussions were incorporated into the GMI report, which will be sent to the NYSHPO following its review by the Army.

In 1997, Ms. Nancy Todd, a representative from the NYSHPO Field Services Bureau toured SEDA to examine its buildings and structures. Ms. Todd noted in a February 28, 1997, memorandum that although additional information was needed to make a formal eligibility determination, she believed that the entire 10,865 acres, which make up SEDA, may constitute an NRHP district and that the special weapons area (Q area) may be a separate district. The 1997 GMI study, noted above, has examined the SEDA buildings and structures for National Register eligibility. The GMI study, which is currently under Army review, does not recommend any of the World War II era buildings at SEDA to be eligible for the National Register. The Q area is being evaluated to determine whether it has the exceptional significance necessary to make it eligible for the NRHP as a Cold War era property. After the Army completes its review, the GMI study will be provided to the NYSHPO for comment.

The U.S. Army Corps of Engineers, New York District, provided the 1994 WCH, 1995 Panamerican, and two 1996 Milner reports to the NYSHPO Field Services Bureau for review in May 1997. An archeological reviewer for the Field Services Bureau, Ms. Ellen Cesarski, has found all but the Milner historical background document to be inadequate. The technical managers at the U.S. Army Corps of Engineers, New York District, are working to resolve this issue. This issue must be resolved to determine the amount of survey that will be necessary to complete the archeological inventory for SEDA prior to its disposal.

At this time, Section 106 consultations for SEDA are ongoing. The building inventory and assessment prepared by GMI will be coordinated with the NYSHPO shortly. Archeological field work for those areas requiring examination will begin as soon as discussions have been completed with the NYSHPO on the adequacy of past surveys and a determination is made concerning the field methodology to be used for future surveys. Pending the outcome of these consultations and field efforts, any historic properties identified at SEDA will be the subject of further Section 106 consultations between the

Army, the NYSHPO, and the ACHP. The Army will not dispose of any SEDA historic properties prior to completion of the NHPA Section 106 consultation process.

4.12.3 Native American Resources

The Cayuga and Seneca Tribes of the Iroquois Nation occupied the area that is now SEDA. The tribes were members of the Six Nations Iroquois Confederacy, an alliance of tribes believed to have originated to prevent the invasion of the Algonquian groups from the Lake Ontario region. The goal of the Six Nations Iroquois Confederacy was to establish a common decision-making body to mediate intertribal disputes and to set a common policy regarding both Native American and European outsiders (Envirosphere, 1986).

In 1777, the Six Nations Iroquois Confederacy disbanded when the Oneida Tribe sided with the American government and the remaining tribes sided with the British government. After the Revolutionary War, the British ceded their land to the American government, including Iroquois land. The Iroquois were eventually forced off their land except for a few small reservations. The Seneca Tribe living around SEDA left for reservations in western New York and Canada in 1789.

The location of SEDA within the former territory of the Six Nations Iroquois Confederacy is well established. Specifically, this property lies within what was the eastern extent of the lands occupied by the Seneca Nation in 1779. Lands immediately to the east were within the territory of the Cayuga Nation (GPG, 1996). To date, no Iroquois sites have been identified by any archeological studies. SEDA, however, has invited the various bands and tribal groups of the Seneca, the Tonawanda, the Cayuga, the Mohawk, the Tuscarora, the Onondaga, and the Oneida, Indian Nations to consult and be kept informed of any actions potentially affecting resources of significance to them.

4.13 LEGACY RESOURCES

The Legacy Resource Management Program, established by the 1991 Defense Appropriations Act, provides funding for integrated stewardship of all DoD natural and cultural resources. Under the act, priority is given to identifying legacy resources on BRAC-listed bases and providing for their protection after closure. The Legacy Resource Program has funded a Wetlands Survey, conducted in June 1996, and a Rare Species Survey, completed in September 1996 (see also Section 4.11.3).

4.14 ECONOMIC DEVELOPMENT

Background. This section describes the contribution of SEDA to the economy and social conditions in the region. The socioeconomic indicators for this study include regional economic development (employment and income), population, housing, public health and safety, environmental justice, and homeless and other special programs. In addition, school, social services, recreational and community facilities, and visual and aesthetic values are discussed. These indicators characterize the ROI that would be most affected by the SEDA disposal action and subsequent reuse.

An ROI is a geographic area selected as a basis on which social and economic impacts of project alternatives are analyzed. The criteria used to determine the ROI are the residency distribution of SEDA employees, the commuting distances and times, and the location of businesses providing goods and services to SEDA and its personnel and their dependents.

Information describing the socioeconomic environment is presented here for both Seneca and Ontario Counties in the Finger Lakes region of New York. Two ROIs were established because the city of Geneva, in Ontario County, was home to a large majority of the total workforce at SEDA in 1995; however, Ontario County also includes suburbs of Rochester that are somewhat large and could skew the analysis of impacts (Section 5.0). In 1995, almost 25 percent of the depot's workforce resided in Ontario County (mostly Geneva) and more than 65 percent resided in Seneca County. The Army's EIFS model, which is used to analyze impacts (see Section 5.4.14 and Appendix G), makes projections based on county-wide data. Because the city of Geneva cannot be evaluated separately from the rest of Ontario County, the entire county must be included. Therefore, Seneca County and Ontario County together make up one ROI (the two-county ROI), and Seneca County alone makes up the other ROI. Seneca County covers 390 square miles and Ontario County covers 663 square miles, for a total of over 1,000 square miles. These counties receive the majority of SEDA procurement and contractual spending and provide necessary goods and services for SEDA, including housing, public services, and transportation.

Economic development data include local industry trends, income distribution, occupational composition of the labor force, employment trends, and installation contribution to the regional economy.

4.14.1 Regional Economic Activity

The total workforce population for the two-county ROI in 1994 was 66,656 (Seneca County, 16,800; Ontario County, 49,856). In 1990, unemployment in Seneca County was 5.9 percent; in Ontario County, 5.1 percent. Unemployment in the state of New York was 6.9 percent, which is similar to the U.S. average of 6.3 percent (USDOD, 1990).

The top industries in Seneca and Ontario Counties are public service industries, wholesale and retail trade, and manufacturing. Goulds Pumps, Inc. is the largest employer in Seneca County. It is also the world's largest manufacturer of pumps (Seneca County Tourism, No date a). Agriculture is also a large industry in Seneca County. The value of agricultural production in Seneca County increased from over \$25 million in 1987 to nearly \$32 million in 1992. The dairy sector leads the way as the single highest valued agricultural commodity produced in Seneca County. Tables 4-6 and 4-7 list some of the major employers for Seneca and Ontario Counties, respectively. In 1992, 97 percent of jobs within the two-county ROI were in nonagricultural industries, and only 3 percent were in agricultural industries. The four primary categories of nonagricultural employment were services, wholesale and retail trade, manufacturing, and government. Together, services and trade employed approximately 49 percent of the total labor force (USBEA, 1994). Table 4-8 presents employment structure by occupational category in the ROI.

The service industry was the largest source of jobs in the two-county ROI, employing approximately 26 percent of the total workforce. Wholesale and retail trade were the second-largest source of jobs, providing about 23 percent. Government and manufacturing employed approximately 18 percent and 15 percent, respectively. As the nonagricultural industry grew by 2 percent between 1980 and 1992, the service sector grew the fastest, with the manufacturing sector showing the greatest decline (USBEA, 1994).

**Table 4-6
Seneca County Major Employers**

Employer's Name	Number of Employees
Goulds Pumps, Inc.	1,413
Geneva General Hospital	1,100
Seneca County	488
Finger Lakes Outlet Center	400
NYS Department of Corrections	342
Waterloo Central School	325
Seneca Army Depot Activity (excluding military)	240
Seneca Knitting Mills	240
Seneca Falls Central School	215
New York Chiropractic College	186
Total number employed	4,949

Source: Seneca County Chamber of Commerce, No date a.

**Table 4-7
Ontario County Major Industrial Employers**

Employer's Name	Number of Employees
Tenneco Packaging	700
Seneca Foods Corporation	574
Cannadaigua Wine Company, Inc.	502
Bristol Mountain Ski Resort	425
G.W. Lisk Company, Inc. (solenoid manufacturer)	370
Crosman Corporation (air gun manufacturer)	360
Zoto's International (hair product manufacturer)	300
Abbey Industries (multiservice workshop)	300
O'Connell Electric Company	275
NYSEG (electric and gas company)	272
Total number employed	4,018

Source: Ontario County Office of Economic Development, 1996.

**Table 4-8
Employment by Industry**

Occupation of Employed Persons	Seneca and Ontario Counties' Distribution of Employment (1994)	% Change in Distribution of Employment (1980-1994)
Services	16,933 (28%)	+9%
Wholesale and Retail Trade	14,881 (24.1%)	+2%
Government	10,705 (17%)	-5%
Manufacturing	9,647 (15.6%)	-7%
Construction	3,898 (6.3%)	+2.5%
Finance, Insurance, and Real Estate	2,459 (4%)	-2%
Transportation and Public Utilities	2,006 (3.3%)	+0.4%
Other	984 (1.6%)	+1%
Mining	74 (0.1%)	same
<i>Total Nonagricultural</i>	<i>61,587 (96%)</i>	<i>+1.5%</i>
<i>Total Agricultural</i>	<i>2,250 (4%)</i>	<i>-1.5%</i>
Total	63,837	---

Source: USBEA, 1994.

**Table 4-9
1990 Median Household Income**

Seneca County	Ontario County	State of New York	United States
\$28,604	\$33,133	\$32,965	\$30,056

Sources: Grolier, 1995; USDOC, 1990.

The average household size for the two counties combined is approximately three persons. The 1990 median household income in Seneca County was \$28,604. The 1990 median household income in Ontario County was \$33,133. Table 4-9 compares median household incomes to state and national figures.

4.14.2 Installation Contribution, Local Expenditures

SEDA employed 417 persons, civilian and military, in 1995. Total annual salary expenditures were approximately \$11,229,720 (Absolom, personal communication, 1996b).

SEDA's estimated local nonsalary (operational) expenditures were approximately \$4.9 million (fiscal year 1995). This figure reflects expenditures for utilities, services, maintenance, and operations but does not include expenditures for technical procurements (RKG Associates, 1996).

4.14.3 Installation Workforce Structure and Salaries

Table 4-10 lists 1995 personnel levels and salaries for SEDA.

4.15 SOCIOLOGICAL ENVIRONMENT

The sociological indicators for this section include population, housing, public safety, environmental justice, and homeless and other special programs.

4.15.1 Demographics

Population characteristics in the ROI are provided for the baseline year of 1995. To illustrate trends, data are also provided for 1980 and 1990, as well as forecasts for 2000 where appropriate. Demographic data include population trends and forecasts, and other key socioeconomic indicators.

The workforce population at SEDA was 417 persons. Approximately 135 SEDA personnel and dependents lived on the installation in family housing units in 1995 (Absolom, personal communication, 1996b).

In 1995, the population in the two-county ROI was estimated to be 131,731 (Seneca County, 32,593; Ontario County, 99,138) (RKG Associates, 1996). The population in 1990 was 128,784 and had increased by approximately 5 percent since 1980. The population of the two-county ROI is projected to continue to increase but at a rate slower than in the past. Sixty percent of Seneca County's residents live in rural areas, and 71 percent of residents of Seneca and Ontario Counties together live in rural areas (USDOD, 1990).

The majority of the population within the two-county ROI is between 30 and 34 years of age, similar to the national average of 34 years of age. Fifty-one percent of the population is female; 49 percent is male (USDOD, 1990). The percentages are the same for Seneca County alone.

Table 4-10
1995 Personnel Levels and Salaries

Employee Type	Number	Average	Total
Permanent Military - Officer	1	\$83,000	\$83,000
Permanent Military - Enlisted	1	\$18,420	\$18,420
Permanent Civilian - GS series	149	\$41,700	\$6,213,300
Wage Grade	120	\$40,200	\$4,824,000
Exchange and Commissary	0	N/A	N/A
Other Nonappropriated Funds	13	\$7,000	\$91,000
Contractual Workers	0	N/A	N/A
Total	271	N/A	\$11,229,720

N/A = not available

Source: Absolom, personal communication, 1996b.

4.15.2 Housing

On-Base Housing. Throughout 1995, an average of 135 military personnel and dependents lived on the installation in family housing (Absolom, personal communication, 1996b). Only two of these personnel were employed at SEDA. Three main areas at SEDA provide housing. Elliot Acres contains 45 buildings with 124 residential units ranging in size from 1,300 to 1,900 square feet. These units consist of 10 single-family houses, 13 duplex buildings, and 22 four-plex townhouse buildings. The Institutional Area (North Depot) includes 450-person barracks. The barracks were not occupied in 1995.

The Lake Housing Area is divided into three subareas: Flac Drive, consisting of 30 single-family dwellings constructed in the 1980s and 1990s; Colonel's Drive, consisting of five older single-family dwellings (relocated to the site in the 1940s); and 21 lakefront cottages along the shores of Seneca Lake.

Off-Base Housing. More than 65 percent of the SEDA workforce resides within Seneca County and nearly 25 percent within Ontario County (RKG Associates, 1996). The two ROIs contain a range of housing environments, primarily rural (USDOD, 1990). There are more than 53,000 housing units in Seneca and Ontario Counties, approximately 89 percent of which are occupied (Table 4-11).

Table 4-11
ROI Housing Quantity, Quality, and Cost

Housing Characteristics	Seneca County	Ontario County
Quantity:		
Number of units	14,314	38,947
Occupancy rates		
Owner-occupied	74%	73%
Renter-occupied	26%	27%
Vacancy rates	14.2%	10.3%
Quality:		
Median rooms of all housing units	6	6
Median persons per housing unit	2	2
Median age of units (years)	39	30
Percent lacking complete kitchen facilities	1.1%	0.7%
Percent lacking complete plumbing facilities	1.8%	0.6%
Cost:		
Median sale price	\$57,500	\$78,300
Median rental rate	\$308	\$364

Source: USDOD, 1990.

About 71 percent of the housing units are located in rural areas, and 29 percent are designated urban. The median value of an owner-occupied housing unit in Seneca County is approximately \$57,500; median contract rent averages \$308 per month. The median value of an owner-occupied housing unit in Ontario County is approximately \$78,300; median contract rent averages \$364 per month (USDOD, 1990).

4.15.3 Public Services

Law Enforcement Services. In 1995, security for SEDA was provided by 26 personnel from the Security Division under the Office of Installation Management. This provided a ratio of staff to population on the installation of approximately 1 to 7. Typical calls are related to accidents, domestic disturbances, vandalism, larceny of government property, and assistance to the fire department (e.g., roadblocks). In 1995, there were 29 guards on post and 10 patrol vehicles (Plate, personal communication, 1996; Ward, personal communication, 1996).

Law enforcement services in Seneca County are provided by the New York State Police Department (12 miles from SEDA) and Seneca County Sheriff's Office (10 miles from SEDA). The Federal Bureau of Investigation provides "SWAT" support to SEDA through a mutual aid agreement with a response time of 2 to 4 hours (RKG Associates, 1996).

Fire Protection Services. The SEDA Fire Prevention and Protection Branch is located in Building 103 and provides fire protection and prevention, as well as hazardous materials (HAZMAT) and spill response service (RKG Associates, 1996). In 1995, the SEDA fire department had 15 full-time fire fighters and eight pieces of equipment. The equipment included two airfield crash vehicles, a 100-foot aerial ladder truck, a 50-foot telesquirt, trio combination crash and structural pumper trucks, an ambulance, and a rescue/HAZMAT van. Typical calls to the SEDA fire department consist of false alarms with sprinkler or fire detection systems or structural fires involving electrical transformers or faulty kitchen equipment (Simons, personal communication, 1996).

Medical Services. Medical services at SEDA are provided by the SEDA Occupational Health Clinic. In 1995, the clinic employed one registered nurse, one secretary, and one reservist physician who came in twice a month to perform routine physicals and exams. The clinic also has access to a small support staff from Fort Drum if further help is required. Emergency medical technician support is provided by the SEDA fire department, as well as the registered nurse on staff (Brewer, personal communication, 1996; RKG Associates, 1996).

Medical services outside SEDA are provided by several area hospitals and clinics. Geneva General Hospital has 443 beds and provides a full range of primary care and medical/surgery specialty services. Geneva General also has a walk-in urgent care center in Waterloo, as well as a nursing school, adult day care center, child care center, dialysis center, and medical detoxification unit. Other area hospitals and clinics include Schuyler Hospital and Cayuga Medical Center.

The Willard State Hospital is a drug and alcohol abuse treatment facility.

4.15.4 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. The purpose of the order is to avoid the disproportionate placement of any adverse environmental or economic impacts from federal policies and actions on minority and low-income populations. Data for the analysis of environmental justice include race and ethnicity, and poverty status of populations within the ROIs. The racial and economic population characteristics of Seneca and Ontario Counties are very similar. As identified by the 1990 census, approximately 97 percent of the two-county ROI is white and 1.8 percent is black (USDOC, 1990).

The median household income in 1990 was approximately \$28,604 for Seneca County and \$33,133 for Ontario County. The median household income for Seneca was below the U.S. median household income of \$30,056 and the New York median household income of \$32,965. The median household income for Ontario County was above both the U.S. and New York median household incomes (USDOC, 1990). The U.S. poverty threshold is \$9,890 for a family of three, the median household size for both ROIs (Grolier, 1995). The Census Bureau bases the poverty status of families and individuals on 48 threshold variables, including income, family size, number of family members under 18 and over 65 years of age, and amount spent on food. Eight percent of the population living in the two counties were classified by the U.S. Census as living below the poverty level in 1990 (see Table 4-12). The national average, as well as the average for the state of New York, is 13 percent (USDOC, 1990). Table 4-12 depicts race, ethnicity, and poverty status characteristics of Seneca and Ontario Counties.

The ethnic population characteristics of Seneca and Ontario Counties are also very similar. As identified by the 1990 census, less than 1 percent of the population of both ROIs is American Indian, Eskimo, or Aleut. Less than 1 percent of the population is Asian or Pacific Islander. Approximately 1 percent of the population has been identified as being of Hispanic origin (USDOC, 1990).

4.15.5 Homeless and Other Special Programs

Ontario County does not have any homeless shelters or programs. However, the Ontario County Department of Social Services offers many varied public support programs. The department provides several emergency financial assistance programs to families and single adults in need of money for food, shelter, clothing, or other essential items. The Home Energy Assistance Program, Emergency Aid to Adults, Emergency Assistance to Families, Home Relief, Food Stamps, and Job Opportunity and Basic Skills programs are just a few of the programs offered by Ontario County. The county also offers basic Medicaid assistance. The county has a transportation program under which transportation is provided for those in need of medical visits, counseling, and similar services.

A Child Support Office locates absent parents, establishes paternity, and supports obligations through the courts (Ontario County Department of Social Services, 1996).

Seneca County does not have a formal homeless shelter or program. If the Department of Social Services finds out that someone is homeless, it works to set up that person or family in temporary housing until permanent affordable housing can be found (Ryrko, personal communication, 1996).

Table 4-12
Race, Ethnicity, and Poverty Status for the SEDA ROIs

	Seneca County	Seneca and Ontario Counties
Total Population	33,683	128,784
Total White	32,731 (97%)	125,004(97%)
Total Black	538 (1.6%)	2,256 (1.8%)
Total Native American	84 (0.2%)	312 (0.2%)
Total Asian	215 (0.6%)	715 (0.6%)
Total Other	115 (0.3%)	497 (0.4%)
Total Hispanic	363 (1%)	1,629 (1.2%)
Living in Poverty	10.4%	8%

Source: USDOC, 1990.

Note: The racial classification used by the U.S. Census Bureau generally adheres to the guidelines in Federal Statistic Directive No. 15, which provides standards on ethnic and racial categories for statistical reporting to be used by all federal agencies. The racial categories used in the 1990 census data products were as follows: White; Black; American Indian, Eskimo or Aleut; Asian or Pacific Islander; and Other.

4.15.6 Protection of Children

Executive Order 13045 seeks to protect children from disproportionately incurring environmental health risks or safety risks that might arise as a result of Army policies, programs, activities, and standards. Historically, children have been present at SEDA as residents and visitors (e.g., users of recreational facilities). On such occasions, the Army has taken precautions for their safety by a number of means, including use of fencing, limitations on access to certain areas, and provision of adult supervision. In addition, Army regulations related to transferring property (e.g., Lead-Based Paint regulations) help to ensure that past Army practices will not pose a future threat to children who subsequently use the property.

4.16 QUALITY OF LIFE

4.16.1 Schools

The U.S. Department of Education provides federal impact aid to school districts that have federal lands within their jurisdiction because federal property is exempt from local taxes. This federal impact aid is authorized under Public Law 103-382 as payment in lieu of taxes. School districts receive federal funding for each student whose parents live on or work on federal property. The amount of federal school aid a school district receives is dependent on the number of "federal" students the

district supports in relation to the total district student population. Schools receive more funding for students whose parents both live and work on federal property. Total funding varies year by year according to congressional appropriations for the program, but in general funding has ranged from \$250 to \$1,750 per pupil.

There are no schools for dependents of SEDA personnel located on the installation. School-age dependents of military personnel living on post attend Romulus Central School, a public education facility in Seneca County. The school includes grades K through 12 (SEDA, No date e). There are several other schools in Seneca and Ontario Counties, including public, private, and parochial schools. There are four school districts in Seneca County—Waterloo Central, South Seneca Central, Romulus Central, and Seneca Falls (Seneca County Chamber of Commerce, No date b). A total of 5,334 students were enrolled in the four school districts of Seneca County for the 1994-1995 school year. The student-to-teacher ratio was 13 to 1.

Ontario County has nine public school districts—Cannadaigua, Bloomfield, Geneva City, Gorham-Middlesex, Manchester-Shortsville, Naples, Phelps-Clifton Springs, Honeoya, and Victor. During the 1994-1995 school year, 17,774 students attended Ontario County Public Schools.

There are 32 colleges and universities throughout the 14 counties of the Finger Lakes region that are within 2 hours, driving time from SEDA (Seneca County Chamber of Commerce, No date b).

4.16.2 Family Support

The SEDA Career Center in Building 116 provides counseling services and information for SEDA employees as well as Seneca County residents. It is a joint effort of Seneca County and SEDA. The center offers technical assistance with software packages, career guide books and videos, job listings, automated government application preparation, and many other job-related services (SEDA, No date d).

The Family Advocacy Manager operates a program for the prevention, identification, reporting, and treatment of child abuse, neglect, spouse abuse, and families under stress. The program provides education and crisis intervention, referral, and support services. Family Support Services provide SEDA support services for employees and their families at the Counseling Center (Building 116). It provides drug and alcohol/mental health counseling, biochemical testing, and related services. Family Support Services provides information, assistance, and referral to members of the military community in meeting personal and family concerns (SEDA, No date e).

Ontario County Department of Social Services offers many varied public support programs. The department provides several emergency financial assistance programs to families and single adults in need of money for food, shelter, clothing, food, or other essential items (Ontario County Department of Social Services, 1996).

4.16.3 Shops and Services

There are numerous shops and services in Seneca and Ontario Counties, including the Finger Lakes Outlet Center in the town of Junius, with approximately 130 stores covering 400,000 square feet (Seneca County Chamber of Commerce, No date b). Ontario County also offers numerous shops and

services including the Eastview Mall and Main Street shopping (Ontario County Tourism Bureau, No date).

4.16.4 Recreation

There are two clubs on the installation—a Non-Commissioned Officers' (NCO) Club and the Officers' Club. The NCO Club, located on the south end of the installation, serves lunch; the Officer's Club, located on the east shore of Seneca Lake in the Lake Housing Area, offers dining four nights a week, as well as a Sunday brunch. Both clubs provide catering and party service.

Recreation Services at SEDA operates a boathouse, a lakeshore travel park, and a community activity center. The boathouse is located on the shore of Seneca Lake. For a fee, visitors may rent 18-foot boats, water skis, and paddle boats. The lakeshore travel park has 21 fully furnished mobile homes and 8 campsites. The community activity center is located on the south end of the installation and provides a variety of entertainment and exercise equipment (SEDA, No date e).

Parks and public golf courses are abundant throughout the two-county ROI. There are more than 10 golf courses in the two counties. Several historical sites and museums are located in Seneca and Ontario Counties. In Seneca County these include the Deere Haven Museum, National Women's Hall of Fame, Waterloo Memorial Day Museum, and Women's Rights National Historical Park (Seneca County Tourism, No date a). Ontario County offers the Cumming Nature Center, Ganondagan State Historic Site, and Prouty-Chew Museum (Ontario County Tourism Bureau, No date a).

More than 30 wineries and touring farms make up several wine trails in the two counties, including the Cayuga Wine Trail in Seneca County and the Seneca Lake Wine Trail spanning both Seneca and Ontario Counties (Seneca County Tourism, No date a). Seneca County alone has 14 wineries, which produce from 3,000 to 50,000 gallons of wine each year (The Sullivan Trail RC&D Council, No date).

Seneca County is home to three state parks—Cayuga Lake, Sampson, and Seneca Lake. These parks offer swimming, boating, camping, playing fields, and picnic areas. Seneca County is also within an hour's drive of eight other Finger Lakes state parks and six state marina facilities (Seneca County Chamber of Commerce, No date b). The Montezuma National Wildlife Refuge and the Willard Wildlife Management Area in Seneca County give visitors an up-close look at wildlife native to the area. Visitors to the Montezuma National Wildlife Refuge can view various birds and wildlife at times specified by the refuge. The refuge is a breeding ground and nesting place for migratory birds and other wildlife. It provides wildlife-oriented educational and recreational opportunities for thousands of visitors each year. School field trips can be scheduled throughout the year at the three outdoor classroom sites at the refuge (Seneca County Tourism, No date a; USFWS, 1995b).

4.16.5 Visual and Aesthetic Values

Most of SEDA's Main Post area is undeveloped and has a rustic attractiveness. The depot is situated in an upland area that forms a divide between Seneca Lake and Cayuga Lake. Occasional sweeping vistas are visible in open space areas. Although not pristine, approximately 9,000 acres of SEDA is open space. Much of this land is wooded and includes more than 80 wetland areas. The Lake Housing Area is picturesque and serene. Outside the cantonment areas the natural environment is largely intact and has a positive aesthetic appearance.

The white deer herd at SEDA, one of the rarest deer herds known to exist, gives SEDA a unique and valuable resource. The white deer has been made the official emblem of SEDA, and knowledge of the deer's existence has spread across the Nation.

The rural landscape surrounding SEDA is aesthetically pleasing. SEDA is in the Finger Lakes heartland and is surrounded by quiet woodlands. In the fall, brightly colored leaves from nearby forests light up the skyline. Carved out by glaciers over 10,000 years ago, the Finger Lakes region is enclosed by lush, rolling hills.

The rural nature of the area lends itself to farming and livestock production. There are over 26,000 dairy cows and 1,800 farms with 332,000 acres under cultivation and 88,600 acres as permanent pasture or woodland (The Sullivan Trail RC&D Council, No date).

The Montezuma National Wildlife Refuge provides glimpses of beautiful migratory waterfowl on their journeys to and from nesting areas in northeastern and east-central Canada (USFWS, 1995b).

4.17 INSTALLATION AGREEMENTS

SEDA has established a mutual aid agreement with the Federal Bureau of Investigation for "SWAT" support (Absolom, personal communication, 1996b). See Section 4.15.3 for more information on police protection services.

SEDA currently has mutual aid agreements with all 13 Seneca County fire departments (volunteer) as well as the city of Geneva Fire Department (paid). SEDA falls within the service area boundaries of three of the volunteer fire districts (Romulus, Ovid, and Varick). These three fire departments are located within 5 miles of SEDA. See Section 4.15.3 for information on fire protection services on the depot.

A mutual aid agreement has also been established with South Seneca Ambulance Corps located in Ovid, New York (Absolom, personal communication, 1996b).

SEDA provides potable water for approximately 125 hookups and wastewater treatment at the rate of about 50,000 gpd to the hamlet of Romulus, located in the towns of Romulus and Varick, under a utility sharing agreement pursuant to Army Regulation 420-41. The agreement includes a 30-day termination clause following written notification.

Sampson State Park and SEDA have entered into an agreement and utility sales contract for SEDA to sell up to 40,000 gpd of potable water to the park.

Under its SDWA compliance schedule with EPA Region 2, SEDA has entered into a utility sales service contract with the town of Varick specifying that SEDA will be a water customer of the town of Varick not later than October 1997. Current water use at SEDA is approximately 100,000 gpd.

SEDA has an agreement with the village of Willard's sewage treatment plant for use of existing plant capacity of up to an additional 35,000 gpd over the 22,500 gpd currently sent there by SEDA. This agreement is not assignable to future property owners.

SECTION 5.0: ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES

5.1 INTRODUCTION

5.1.1 Background

This section describes the environmental and socioeconomic consequences of implementing the primary Army proposed action (disposal of excess property) and the secondary action to be taken by other parties (property reuse). The proposed actions are evaluated in the context of the disposal alternatives and reuse scenarios presented in Section 3.0.

The discussion of consequences is divided into five major subsections:

- *No Action Alternative.* Analysis of impacts associated with caretaker status (Section 5.2).
- *Disposal Alternatives.* Analysis of impacts associated with implementation of the encumbered disposal alternative and the unencumbered disposal alternative (Section 5.3).
- *Reuse Scenarios.* Analysis of impacts associated with reuse scenarios (alternatives) of various levels of intensity (Section 5.4). The SEDLRA reuse plan, as amended, recognizes constraints to redevelopment of the installation. The plan would seek transfer or conveyance of six of the seven areas at SEDA identified for redevelopment (Lake Housing, PID, Elliot Acres Housing, Warehouse and Distribution Area, Airfield/Special Events/Institutional & Training, and Institutional). The majority of the SEDA property (more than 8,100 acres) is proposed for use as a conservation/recreation area. The amended reuse plan also identifies a 110-acre parcel, located adjacent to the PID Area and the Warehouse and Distribution Area for possible construction of a state prison. Future intensity-based reuse scenarios assume that redevelopment/reuse will occur on other parts of the installation at the current low intensity (i.e., the LIR scenario). A MLIR and MIR are also evaluated to account for additional redevelopment that might occur.
- *Mitigation Summary.* Identification of possible mitigation measures for the potential impacts of the alternatives analyzed (Section 5.5).
- *Cumulative Effects.* Analysis of impacts of each alternative action on all resource areas to evaluate cumulative effects likely to occur given the disposal and reuse of all excess installation property and other reasonably foreseeable actions within the affected environment/ROI (Section 5.6). Cumulative effects address past, present, and reasonably foreseeable near-term future activities.

5.1.2 Definition of Key Terms

Evaluation of potential impacts on the physical, economic, and sociological environments as a result of disposal and reuse of SEDA relies on use of several key terms and concepts. These include direct impacts, indirect impacts, short-term impacts, long-term impacts, cumulative effects, mitigation, and significance. Detailed discussions of these terms are provided in Appendix H.

5.1.3 Methodology for Analysis of Reuse Alternatives

This EIS analyzes potential environmental effects of implementing the SEDLRA reuse plan in terms of intensity-based probable reuse scenarios. Resource demands and outputs potentially affecting the environment that could occur as a result of implementing the reuse plan must be compared to the resource demands and outputs that have occurred in the past. Characteristics of the baseline have been identified to permit comparisons.

- For matters related to infrastructure, baseline information is founded on there being 3,724,534 square feet of usable built space that requires electricity, water, sewer, heat, and other services. This baseline figure is derived by subtracting the space taken by the installation's unmanned ammunition storage igloos and safety shelters from its total built space. This space requires only nominal electrical service and no water, sewer, or heating services. Resource areas that rely on infrastructure elements include electricity, fuel oil or coal, natural gas, steam, solid waste landfill or incineration capacity, industrial wastewater, industrial potable water, industrial traffic, and railways.
- For matters related to population, baseline information is founded on an on-base population of 417 personnel, approximating the number of employees at SEDA at the time of announcement of closure. Resource areas that rely on the population element include amounts of sanitary wastewater, potable water usage, employee traffic, and public transportation.

5.1.4 Summary of Reuse Obligations and Limitations

Army disposal of SEDA would result in management of the property by other federal agencies or ownership by public and private-sector entities. Except as encumbrances might affect reuse, upon transfer or conveyance the Army would no longer manage or control activities that would occur on the land. Elimination of the Army from land use decision making would have several ramifications.

Proponency. The Army would not be the proponent for future activities on SEDA lands. The SEDLRA reuse plan envisions multiple proponents. For its respective areas, proponency obligations will fall on the SCIDA. Other areas might be conveyed directly from the Army to the public or private sector. The entire range of possible actions that could occur, including land use planning and plan implementation, economic development, management of facilities, capital improvements, and further transfer or conveyance, would take place at the discretion of future facility owners and managers.

Applicable Controls. Transfer or conveyance of SEDA lands to other federal agencies would result in continuation of federal land management practices and application of federal statutes pertaining to resources. Transfer or conveyance of SEDA lands to nonfederal entities would result in continuation of many federally sponsored protections, such as those prohibiting takings of species protected pursuant to the ESA or requiring permits for takings pursuant to the MBTA and the requirement for permits for certain activities occurring in or adjacent to wetlands. Transfer or conveyance of SEDA lands to nonfederal entities could also result in application of several additional statutes and regulations not applicable to federal ownership. For example, any future development of SEDA property, other than that which remains under federal control, would be subject to the SEQR. The

U.S. Coast Guard LORAN Station and the Army's enclave are known examples of areas that will remain under federal control.

Magnitude of Redevelopment. Upon transfer or conveyance, the SCIDA would be fully responsible for redevelopment of the SEDA property conveyed to it. The magnitude of redevelopment would be a function of several factors, all of which, with the exception of certain encumbrances, would be beyond the control of the Army. Although this EIS evaluates up to a medium intensity reuse of that portion of the installation available for transfer or conveyance to the SCIDA, the likelihood of such reuse's occurring is completely speculative. Some constraints identified in this EIS suggest that a medium intensity level of reuse would be difficult to attain. For instance, the presence of the white deer herd might preclude redevelopment of portions of the installation or result in specific areas being found unsuitable for further development in order to effectively manage the deer herd. Analysis of an MIR level does not constitute an endorsement by the Army that such redevelopment would be warranted or prudent.

This EIS is prepared by the Army to facilitate its decision making concerning disposal, to aid the public in understanding potential environmental and socioeconomic consequences of reuse of the installation, and to fulfill the Army's obligations under NEPA. As a result of consultation among the Army, NYSDEC, and Seneca County, this EIS is intended also to support decision making by State and local governments to fulfill those entities' obligations under the SEQR. Toward these ends, NYSDEC and Seneca County are cooperating agencies in preparation of this EIS.

Mitigation. Examination of potential impacts resulting from disposal and reuse of SEDA includes identification of mitigation actions that could avoid, reduce, or compensate for the severity of those predicted impacts. Upon disposal, and except as circumscribed by encumbrances, responsibility for implementation of mitigation actions would rest with the agencies or entities receiving the property. Where appropriate, this EIS identifies mitigation actions that subsequent managers or owners could implement to ameliorate adverse impacts. Whether such mitigation would be effected, however, rests in the sound discretion of those future owners and managers. The Army's listing of mitigation actions that could be taken represents a beginning point for future owners and managers to consider as they assume stewardship of the property.

5.2 NO ACTION ALTERNATIVE

5.2.1 Introduction

Closure of SEDA would result in the Army's placing all installation assets into an inactive or "caretaker" status until the property disposal process is complete. Because the decision to close SEDA has been mandated by law, and since there is no certain completion date for the property disposal process, the no action alternative has been defined as minimal maintenance of the installation in caretaker status indefinitely.

As described in Section 2.3.1, for a period of at least 12 months following operational closure, the Army could provide for levels of maintenance that would ensure transfer of facilities in optimal condition for reuse. Subsequent to that time frame, however, the Army may reduce the level of maintenance to that consistent with federal government standards for excess and surplus property.

This latter caretaker activity would be less intense than that immediately following closure and pending transfer of assets to the SCIDA. The caretaker status evaluated in this section refers to the latter type of maintenance activities, which could occur for an indefinite period until transfer or disposal of the installation.

The environmental consequences identified in this section reflect the absence of current mission-related activities at the installation.

5.2.2 *Land Use*

Direct. Long-term minor beneficial impacts would be expected. SEDA would no longer have a mission to store ammunition during caretaker status. Areas adjacent to locations previously used for ammunition transport, handling, and storage would no longer be encumbered by safety zone requirements needed to protect personnel. Accordingly, parcels adjacent to and throughout the ammunition storage area would be available for use on an interim leasing basis prior to final disposal by transfer or conveyance. The availability prior to final disposal would support redevelopment and productivity affecting future land uses.

Indirect. Long-term minor adverse effects would be expected. Continuation of caretaker status by the Army would occur upon failure of the Army to find a willing buyer or transferee of the property. In this event, the Army lands would remain beyond the jurisdiction of Seneca County and would represent a lost opportunity for raising of tax receipts to fund orderly development within the county.

5.2.3 *Climate*

Direct. No impacts would be expected.

Indirect. No impacts would be expected.

5.2.4 *Air Quality*

Direct. Long-term minor beneficial impacts would be expected. Caretaker activities at SEDA would involve fewer emission-producing activities than normal mission-related operations at the installation. Activities associated with infrastructure maintenance, site remediation, and security operations would contribute only minor quantities of emissions from the use of motor vehicles, paints and solvents, and small internal combustion engines such as mowing equipment. Emissions from stationary sources such as the depot's boilers and space heaters would decrease considerably from their current levels. Creation of new air emission sources would not be expected as a result of caretaker activities.

Indirect. Long-term minor beneficial impacts on area air quality would be expected to result due to reduced Army air emissions related to caretaker activities.

5.2.5 Noise

Direct. Long-term minor beneficial impacts would be expected. In contrast to normal operations, caretaker activities would not involve operation of the airfield or disposal or demolition of conventional ammunition.

Indirect. Long-term minor beneficial impacts would be expected. Reduced noise levels might have a somewhat beneficial effect on wildlife that use SEDA habitat for nesting and roosting.

5.2.6 Geology

Direct. No impacts would be expected. Under the no action alternative, natural resources and land management programs would continue to ensure the preservation of vegetative cover and erosion controls.

Indirect. Long-term minor beneficial impacts would be expected. Beneficial effects on soils would occur as a result of remedial actions taken for existing hazardous waste sites on SEDA.

5.2.7 Water Resources

Direct. No impacts would be expected.

Indirect. Long-term minor beneficial impacts would be expected. Beneficial effects on groundwater quality would occur as a result of remedial actions taken for existing hazardous waste sites on SEDA. Caretaker activities would involve fewer vehicles as potential sources of contaminants that could be conveyed in stormwater runoff. In a similar manner, caretaker activities would involve less use of fertilizers, fuels, and pesticides and reduced warehouse and shop activities, which also contribute to stormwater contaminant loads.

5.2.8 Infrastructure

Direct. Short-term minor adverse and minor beneficial impacts would be expected. Beginning in the fall of 1997, potable water was provided to Sampson State Park from SEDA under an agreement and utility sales contract. During caretaker status, potable water would need to be provided to the park either through SEDA's system or by some other means pending completion of the Varick water project. Drinking water would have to be provided to the enclave area. The Army would not operate the wastewater treatment at STP 4 under caretaker status. The hamlet of Romulus and the Army's enclave would still require wastewater treatment because they are in the STP 4 service area. Some arrangement would need to be made for an entity to operate STP 4, or an alternative wastewater disposal system would be needed. Reduction in solid waste generation during caretaker status would result in long-term minor beneficial impacts on landfill capacities. Compared to normal operations, less water, heating fuels, and electricity would be used during caretaker status, representing a lower level of consumption of resources. No impacts on the communications system would be expected.

Indirect. Long-term minor adverse impacts and long-term minor beneficial impacts would be expected. Caretaker efforts would include minimal maintenance necessary to support caretaker

operations on the installation. Utilities systems elements (i.e., pipes, wires, and cables) could deteriorate, notwithstanding caretaker efforts to maintain the systems at a level sufficient to permit resumption of operations. Based on the duration of the caretaker status, reduced use or nonuse of infrastructure, including heating and electrical systems, could result in degradation. Those systems which are already somewhat deteriorated, such as Water Tower 109, which is close to the end of its useful life, could deteriorate further. No impacts on the communications system would be expected. All of the roads on the depot are currently under used. Freeze-and-thaw cycles typical of SEDA's climate could result in some structural damage to the roads. Some road maintenance would be required during caretaker status.

5.2.9 Hazardous and Toxic Substances

Direct. Long-term minor beneficial impacts would be expected. The Army would continue to remediate any contaminated sites at SEDA, and storage and use of hazardous materials would decline to a minimal level. Unused storage tanks would be drained and closed or removed in accordance with applicable federal, state, and local regulations.

During caretaker status, deteriorated asbestos and LBP would continue to be subject to Army management policies and practices. Any remedial activities such as repair of deteriorated ACM would be managed, and such materials would be disposed of properly and in accordance with all applicable federal, state, and local regulations.

Indirect. No impacts would be expected.

5.2.10 Permits and Regulatory Authorizations

Direct. No impacts would be expected. However, expiring permits and other regulatory authorizations necessary to continue Base Cleanup Plan (BCP) activities under BRAC IRP would need to be renewed or extended during the caretaker period.

Indirect. No impacts would be expected.

5.2.11 Biological Resources

Direct. Long-term minor beneficial and adverse impacts would be expected. Beneficial impacts on biological resources, including all state-listed and special concern plant and wildlife species, could occur as the result of decreases in human disturbances, such as automobile traffic and trampling of vegetation. Adverse impacts on wildlife contained by the fence (which will remain in place during caretaker status) could occur over the long term in the form of a depleted gene pool and reduced fitness. This particular impact could be felt by the depot's white deer, which could at first experience short-term increases in population size due to less disturbance, but later develop complications associated with inbreeding as the result of being maintained in a closed system in perpetuity. As indicated in Section 4.11.3, studies of white deer have indicated that, in addition to the all-white coat, white deer possess characteristics (e.g., blood clotting) that appear to reduce their viability. Without the influx of new and "healthy" genes into the population, survival of the white deer would likely be reduced in the long term.

During caretaker status, deer management would be limited to fence maintenance and hunting to remove surplus numbers of deer, in accordance with state hunting regulations. Maintaining the deer population such that it exists within the depot's carrying capacity, as opposed to being too large, could benefit other wildlife species by ensuring the availability of quality habitat. Deer populations that are out of balance with their environment have been known to overforage to an extent that inhibits vegetative growth.

Other adverse impacts could result from less intense wildlife and land management efforts. In particular, current management practices that enhance habitat for small game and nongame species, such as the ring-necked pheasant and wood duck, would not be expected to be continued during caretaker status (Absolom, personal communication, 1997a). The result would be fewer available nesting sites, or the presence of lesser-quality habitats, for these and other species. The eastern bluebird, a state species of special concern, could also be adversely affected under this alternative since the nest box program would cease to be implemented.

One species that would experience less management pressure, but could actually benefit from it, is the beaver. Without active trapping of beaver, population sizes could increase.

Sewage treatment plant 4, which provides wastewater treatment for the Main Post and the hamlet of Romulus, currently supplies water to wetlands 4, 5, and 6. Wetland 4 is the largest emergent wetland on the depot (see Figure 4-6). If, during caretaker status, use of the wastewater treatment plant is discontinued, which is unlikely, these wetlands would be adversely affected. These wetlands are located within the headwaters adjacent to a watershed divide. The elimination of the 0.15-mgd flow from the treatment plant (0.1 mgd from SEDA and 0.05 mgd from the hamlet of Romulus) would result in a modification of existing wetland hydrology by restricting water supplied to the wetlands to natural flows within the small headwaters drainage area. Historical records confirm that no wetlands existed there before SEDA and the establishment of the treatment plant.

Indirect. Short-term minor beneficial and long-term minor adverse impacts would be expected. With the anticipated increase in beaver populations, it is likely that the creation of more dens would cause a short-term increase in wetland acreage. It is equally likely, however, that, over time, beaver activity could modify hydrologic conditions in existing wetlands, causing an overall reduction in wetland acreage by shifting wetlands to open, deep-water habitats.

5.2.12 Cultural Resources

Direct. Long-term minor beneficial environmental impacts would be expected. Cessation of operations would reduce the probability that construction or renovation activities, except for restoration activities, might affect the integrity of NRHP-eligible properties that might be present at SEDA.

Indirect. Long-term minor adverse environmental impacts could potentially occur. NRHP-eligible properties will be maintained in accordance with caretaker status measures stipulated in an agreement document between the Army, NYSHPO, and ACHP.

5.2.13 Legacy Resources

Direct. No impacts would be expected.

Indirect. No impacts would be expected.

5.2.14 Economic Development

Direct. Long-term minor adverse impacts would be expected. Minor adverse effects would result from a decrease in employment from baseline conditions. The benefits of job creation as a result of reuse activities would be lost, resulting in a foregone economic opportunity. Implementation of caretaker status would also result in a decrease in local expenditures by the installation.

Indirect. Long-term minor adverse impacts would be expected. Foregone direct employment would translate into losses in indirect employment and income.

5.2.15 Sociological Environment (including Environmental Justice and Protection of Children)

Direct. Long-term minor adverse impacts would be expected. Due to the reduced number of employees present on a daily basis, there could be an increase in vandalism, trespassing, or theft. Reduced staffing could also result in less timely discovery of fire and longer fire fighting response times. Response times could also increase for medical emergencies for the caretaker force. No impacts on demographics, housing, environmental justice, or homeless and other special programs would be expected. The Army's proposed action to dispose of property at SEDA essentially consists of transferring or conveying title of real estate to other entities. The proposed disposal action does not involve activities that would pose any disproportionate environmental health risks or safety risks to children. Only 0.1 percent of the population of the two-county ROI lived on SEDA in 1995 (two people). Even if all 417 former employees were to move from the ROI, there would still be no effect on these sociological attributes because the 417 persons represent only 0.3 percent of the population of the ROI.

Indirect. No impacts would be expected.

5.2.16 Quality of Life

Direct. Short-term minor adverse impacts would be expected. Local school districts would receive less federal funding because of a decrease in the number of "federal" students in the ROI that each school district supports. Caretaker status would have no impact on family support, shops and services, recreation, or visual and aesthetic resources.

Indirect. No impacts would be expected.

5.2.17 Installation Agreements

Direct. Short-term minor adverse impacts would be expected. Under caretaker status the Army would be unable to continue in mutual aid agreements and utility agreements that are currently in place.

Beneficiaries of these agreements would need to make other arrangements following closure of the installation.

Indirect. No impacts would be expected.

5.2.18 Cumulative Effects

Caretaker status would be expected to result in long-term minor adverse cumulative impacts. Deterioration could set in if caretaker status were to continue for a long time (i.e., in excess of 10 years). Contributing factors to deterioration would include reduced infrastructure maintenance, reduced building maintenance and repair, and the decrease in personnel at the site (which could lead to increased vandalism). The area most susceptible to deterioration would be the Mixed Use Area because of its lack of appeal for redevelopment. The rise of deterioration could discourage private sector investment and stall redevelopment of the portions of the site having economic potential, thereby delaying replacement of job losses brought about by closure.

5.3 DISPOSAL ALTERNATIVES

5.3.1 Introduction

Section 3.1 discussed the rationale associated with the development of alternatives to the primary Army action of disposal of excess property at SEDA. The encumbered disposal alternative has been formulated to consider the type and degree of reuse constraints to be imposed on future owners as a condition of disposal and reuse. These encumbrances are imposed by the Army to protect future Army requirements or interests; to make available as soon as possible, through expedient disposal, BRAC property that is determined to be available and suitable for the planned reuse; to transfer the responsibility to protect important natural or cultural resources to future owners through the use of deed restrictions or covenants; or to meet special mitigation requirements or additional deed restrictions that are mutually agreed upon by the Army and a regulatory agency. The unencumbered disposal alternative evaluates impacts that would be associated with disposal of the property without constraints on reasonably foreseeable reuse. Encumbrances applicable to SEDA property were identified in Section 3.2.1.

Sections 5.3.2 through 5.3.17 identify the potential direct and indirect impacts of encumbered and unencumbered disposal of SEDA property.

5.3.2 Land Use

Encumbered Disposal, Direct. Long-term minor adverse impacts would be expected. Where land use is viewed as development of real estate to its highest and best economic use, encumbrances related to historical resources, remedial activities, UXO, and wetlands would impair development of SEDA.

Encumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. The tendency caused by encumbrances to deny development of SEDA would maintain or increase the amount of lands within the region associated with conservation and preservation of environmental

resources such as wildlife or significant habitat. Retention of SEDA as generally undeveloped would maintain the existing multiplicity of conservation areas in the region.

Unencumbered Disposal, Direct. Long-term minor beneficial and short-term minor adverse impacts would be expected. Elimination or removal of encumbrances that constrain development would permit greater potential for flexibility in land use planning. Transfer or conveyance of SEDA property without restrictions could result in its having a higher economic value. Elimination of the remedial activities encumbrance, however, would necessitate completion of hazardous substance site cleanup which, by law, is required prior to transfer or conveyance. This would delay return of the property to the inventory of usable lands and forestall reuse.

Unencumbered Disposal, Indirect. Long-term minor adverse impacts would be expected. Elimination or removal of the wetlands encumbrance could potentially expose biological resources to loss or damage, resulting in degradation or loss of land conservation values.

5.3.3 Climate

Encumbered Disposal, Direct. No impacts would be expected.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.4 Air Quality

Encumbered Disposal, Direct. Long-term minor beneficial impacts would be expected. The remedial activities encumbrance would provide for continued access for the Government to attend to equipment used in remediation of hazardous waste at locations transferred for reuse. Depending on the nature of the remediation and the type of treatment, this equipment has the potential to release trace amounts of contaminants into the air. It is not always possible to achieve complete breakdown of the pollutants in contaminated soil or groundwater. The Government will need access to the remediation equipment to ensure the proper operation and maintenance of the air pollution control measures used to minimize the release of these contaminants.

Section 176(c) of the CAA requires federal agencies to ensure that their actions are consistent with the act and with federally enforceable air quality management plans. EPA's General Conformity Rule requires a formal conformity determination document for federal actions occurring in nonattainment or maintenance areas (i.e., areas that are violating or have in the past violated the federal ambient air quality standards). Because SEDA is located in an air quality control region that is in compliance or is unclassified for NAAQS, the BRAC disposal action is exempt from the General Conformity.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.5 Noise

Encumbered Disposal, Direct. Short-term minor adverse impacts would be expected. Some remedial activities, such as well installation, construction of a pump-and-treat facility, or transport of contaminated media, could create localized short-term noise impacts. These would generally affect only the immediate vicinity, however, and would for the most part occur only during daytime hours. None of the site remediation actions or equipment used would be out of character with the current land uses and associated activities at SEDA. Elimination of some UXO would also be required under encumbered disposal and would require sweeping for, excavation of, and possible onsite detonation of any ordnance that might be present. These activities could result in sporadic short-term increases in noise levels.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. Short-term minor adverse impacts would be expected. Elimination of the UXO encumbrance would be required under unencumbered disposal and would result in short-term increases in noise levels related to excavation and removal of UXO and possibly detonation in place.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.6 Geology

Encumbered Disposal, Direct. Short-term minor beneficial impacts would be expected. Use of the easements and rights-of-way encumbrance would avoid removal or relocation of infrastructure elements such as underground power lines, water lines, and roads. Avoidance of ground-disturbing activities associated with infrastructure removal or relocation would preclude related adverse impacts to soils.

Encumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. Beneficial effects on soils would occur as a result of the remedial action encumbrance ensuring cleanup of hazardous waste sites that occur on SEDA.

Unencumbered Disposal, Direct. Short-term and long-term minor adverse impacts would be expected. Elimination of the UXO encumbrance would involve excavation and removal of UXO and possibly its detonation in place. This would have adverse impacts on soils and microtopography, which would be short-term based on the success of surface regrading and restoration of vegetative cover, where appropriate. Removal of the easements and rights-of-way encumbrance could result in the need to remove or relocate certain infrastructure elements, such as roads or water lines, resulting in adverse impacts to soils from associated ground disturbance.

Unencumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. Beneficial effects on soils would occur as a result of remedial actions at existing hazardous waste sites on SEDA.

5.3.7 Water Resources

Encumbered Disposal, Direct. Long-term and short-term minor beneficial impacts would be expected. The wetland encumbrance would preserve and protect areas of SEDA where wetlands occur. Wetlands typically provide water quality improvement and flood control functions. Use of the easements and rights-of-way encumbrance would avoid removal or relocation of infrastructure elements such as underground powerlines, water lines, and roads. Avoidance of ground disturbance associated with infrastructure removal or relocation would preclude related short-term minor adverse impacts to surface water quality that could occur if proper erosion and sediment control practices were not implemented during construction and other ground-disturbing activities.

Encumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. Beneficial effects on groundwater quality would occur as a result of the remedial action encumbrance ensuring cleanup of hazardous waste sites that occur on SEDA. Also, imposition of an encumbrance prohibiting the use of groundwater until completion of remedial activities in an area affected by contamination would protect human health.

Unencumbered Disposal, Direct. Long-term and short-term minor adverse impacts would be expected. Elimination of the wetlands encumbrances could result in long-term adverse effects on water-dependent resources at SEDA. In the absence of the wetlands encumbrance, potential construction of buildings or other structures within or adjacent to wetlands could result in direct adverse impacts on water and habitat quality. Removal of the easements and rights-of-way encumbrance could result in the need to remove or relocate certain infrastructure elements, such as roads or water lines, resulting in short-term minor adverse impacts to surface water quality unless proper erosion and sediment controls are used during construction and other ground-disturbing activities.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.8 Infrastructure

Encumbered Disposal, Direct. Long-term minor beneficial impacts would be expected. Several portions of infrastructure systems use ACM (heating system thermal insulation) and LBP (installed equipment). Imposition of encumbrances related to ACM and LBP would protect human health by providing for informed management decisions regarding workplace facilities and residential units.

Encumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. Reliance on the easements and rights-of-way encumbrance would allow continuation of real estate agreements entered into previously. Use of the encumbrance would avoid removal or relocation of infrastructure elements such as underground or overhead power lines, water lines, and roads. Avoidance of ground-disturbing activities would indirectly avoid potential adverse effects on soils and surface water quality.

Unencumbered Disposal, Direct. Long-term minor adverse impacts would be expected. The absence of encumbrances related to ACM and LBP could result in exposure to these health hazards.

Unencumbered Disposal, Indirect. Long-term minor adverse impacts would be expected. Elimination of the easements and rights-of-way encumbrance could result in owners' having to remove or relocate certain infrastructure elements (roads, utility lines), resulting in adverse effects on soils and surface water quality.

5.3.9 Hazardous and Toxic Substances

The presence of hazardous substances is a condition that is neither directly nor indirectly affected by the disposal process. CERCLA requires that before property is transferred, necessary remedial actions must be completed or remedial action must be in place, proven to be operating effectively, and approved by the EPA Regional Administrator (see also footnote in Section 2.3.2). If additional remediation is needed beyond the date of transfer, the Federal Government will be responsible only for remediation of contamination that is attributable to activities of the Federal Government prior to transfer. CERCLA also requires that on properties where hazardous materials were released or disposed of, the type and quantity of material and time at which release or disposal occurred must be disclosed in the deed.

Regardless of the type of disposal, the Army is under a mandate to characterize contamination, define the appropriate remediation in coordination with regulatory agencies, and conduct required remediation.

DoD policy with regard to LBP and ACM is to manage them in a manner protective of human health and the environment. DoD will manage LBP at SEDA in accordance with the provisions of the Residential Lead-Based Paint Hazard Reduction Act of 1992, which requires that federal property transferred for residential use and constructed after 1960 and before 1978 be inspected for LBP and LBP hazards and the results of the inspection provided to prospective purchasers or transferees. Residential property constructed before 1960 must be inspected and all LBP hazards abated if future residential uses are to occur in the buildings. Information pertaining to ACM on the property will be provided to prospective purchasers or transferees, and where property is determined to be in such condition as to pose a threat to human health at the time of transfer, it will be remediated. Any additional remediation by future changes in reuse would be the responsibility of the new landowner.

DoD policy requires that property contaminated with ammunition, explosives, or chemical agents be decontaminated with the most appropriate technology to ensure protection of the public consistent with the proposed end use of the property. In decontamination projects preparing land for unrestricted uses (e.g., commercial, residential, utility, subsurface recreation, construction activity), UXO must be remediated to a 10-foot depth. Assessment planning at construction sites for any projected use requires assessing the presence of UXO at 4 feet below planned excavation depths. For lands proposed for public access uses, including farming, surface recreation, vehicle parking, and surface supply storage, UXO remediation is required to a 4-foot depth. For lands proposed for limited public access (e.g., livestock grazing, wildlife preserve), decontamination requires a 1-foot UXO sweep and cleanup. For uses not yet determined, only a surface cleanup is required.

Radioactive material contamination is also subject to Army policy and practices and, where required, will be remediated in compliance with NRC requirements.

Encumbered Disposal, Direct. No impacts would be expected.

Encumbered Disposal, Indirect. Long-term minor adverse and minor beneficial indirect impacts would result from imposition of hazardous substance related encumbrances. Imposition of the remedial activities, LBP, and ACM encumbrances could adversely affect land use by constraining development of the BRAC property to less than its highest and best economic use. Those encumbrances could be viewed by prospective users of the property as burdens, thereby reducing the size and diversity of the entities potentially having interest in the property. The use of the remedial activities encumbrance would signal the incomplete status of cleanup of hazardous substance contamination. This, too, would have a dampening effect on the types of activities that would move to the property.

Long-term minor beneficial impacts would also be expected. Beneficial effects on fill deposits, underlying soils, and groundwater would occur as a result of the remedial action encumbrance ensuring cleanup of hazardous waste sites that occur on SEDA. Several portions of infrastructure systems at SEDA use ACM (heating system thermal insulation) and LBP (installed equipment). Imposition of encumbrances related to ACM and LBP would protect human health by providing for informed management decisions regarding workplace facilities. Imposition of the LBP encumbrance would also result in property recipients' actions to ensure the elimination of any hazards associated with LBP that might affect children or other persons occupying residential structures. The remedial activities encumbrance would allow economic development activities to begin immediately, having a beneficial effect on local sales volume, employment, and income, and could provide jobs for persons associated with cleanup activities. Moreover, disposal of the property could also result in the addition of resources to the local tax base.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. Long-and short-term minor adverse and long-term minor beneficial indirect impacts would result from the removal of hazardous substance-related encumbrances. Removal of the remedial activities, UXO, LBP, and ACM encumbrances would require that those hazards be abated prior to transfer of the property. The removal or abatement of soil and groundwater contamination, UXO, LBP, and ACM could have a long-term beneficial effect on land use by eliminating development constraints and allowing development of the BRAC property to its highest and best economic use. However, in the short term, removal of those encumbrances would significantly delay the transfer of property to the community and forestall economic recovery until such time that the hazards were abated (which could take several years).

Removal of the UXO encumbrance could have short-term adverse effects on geology and soils, and microtopography. Removal of UXO is a ground-disturbing activity that would likely result in some erosion of soils (including prime farmland soils) and siltation of nearby surface water, alteration of microtopography, and degradation of habitat. The removal of encumbrances related to ACM and LBP could have long-term adverse effects on human health and safety.

5.3.10 Permits and Regulatory Authorizations

Encumbered Disposal, Direct. No impacts would be expected. Permits and regulatory authorizations to continue activities previously conducted by the Army would be subject to procedures and rules of the regulating agencies.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.11 Biological Resources

Encumbered Disposal, Direct. Long-term minor beneficial impacts would be expected. Use of the wetland encumbrance would preserve and protect areas on SEDA where wetlands occur.

Encumbered Disposal, Indirect. Long-term minor beneficial impacts would be expected. In recognizing the encumbrance protecting wetlands, wildlife that use wetland habitats would indirectly benefit. These species, as well as those located in proximity to a wetland, would also benefit if the encumbrance requires a protective buffer around each wetland.

Unencumbered Disposal, Direct. Long-term minor adverse impacts on wetlands would be expected. Although federal and state wetland regulations would apply under the unencumbered disposal alternative, only jurisdictional wetlands would be regulated. No impacts on state-listed wildlife or plant species would be expected to occur because state and local laws would still be enforced.

Unencumbered Disposal, Indirect. Long-term minor adverse impacts would be expected. The loss of any wetlands would reduce the amount of habitat available for some species of wildlife. State and federal regulation of wetlands under the unencumbered disposal scenario would not necessarily equate to the protection of these wetlands.

5.3.12 Cultural Resources

Encumbered Disposal, Direct. No impacts would be expected. Section 106 consultations and historic property identifications are ongoing for SEDA. Under this alternative, deed restrictions with specific reference to SEDA and the NYSHPO would be passed on to the new owners as a condition of the transfer or conveyance of the SEDA property, ensuring protection of any NRHP-eligible properties that might be present. Example deed restrictions titled "Standard Preservation Covenant for Conveyance of Property that Contains Historic Buildings and Structures" and "Standard Preservation Covenant for Conveyance of Property that Includes Archeological Sites" are presented as Appendices D and E. They describe a process for consulting with the SHPO to arrive at mutually agreeable and appropriate measures for mitigating the adverse effects of a proposed undertaking.

Encumbered Disposal, Indirect. Long-term minor impacts would be expected. After property transfer or conveyance, the new owners might seek to lessen or remove the preservation deed restriction, resulting in a degradation or loss of the properties eligible for the NRHP. If the properties cannot be preserved intact, the preservation deed restriction requires the new owner(s) to consult with the SHPO and to undertake recordation of the properties in accordance with the Secretary of the Interior's standards for recordation and any applicable state standards. Recordation would mitigate the potentially adverse effects of the undertaking to a minor level.

Unencumbered Disposal, Direct. Long-term minor adverse impacts would be expected. Under this alternative, NRHP-eligible properties at SEDA would be adversely affected by the withdrawal of federal protection. If SEDA historic properties must be disposed of without preservation covenants, the Army, the NYSHPO, and the ACHP would consult in accordance with Section 106 of the NHPA to determine appropriate measures for treating the loss of these properties.

Unencumbered Disposal, Indirect. Long-term minor adverse impacts would be expected. Under this alternative, a long-term adverse effect would be associated with the potential degradation or loss of NRHP-eligible properties at SEDA. As a result, people living near SEDA would lose these components of their historical heritage. The adverse effects of the undertaking could be mitigated to an insignificant level by implementing appropriate treatment measures, which would be determined through Section 106 consultations involving the Army, the NYSHPO, and the ACHP.

5.3.13 Legacy Resources

Encumbered Disposal, Direct. No impacts would be expected.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.14 Economic Development

Encumbered Disposal, Direct. Long-term minor beneficial and adverse impacts would be expected. At specific sites requiring hazardous substances remediation, the remedial activities encumbrance would allow economic development activities to begin immediately, having a beneficial effect on local sales volume, employment, and income. Restrictive covenants prohibiting land uses that would eliminate or degrade wetlands would limit the potential reuse of areas surrounding the wetlands, resulting in an adverse impact on sales volume, employment, and income. Occupancy of residences built before 1960 with LBP would be delayed pending abatement activities. This would result in lower total rental and sales dollars collected from residents.

Encumbered Disposal, Indirect. Short-term minor beneficial effects would be expected. Employment and income created by predisposal activities (e.g., UXO decontamination projects) could generate indirect jobs in the local economy. The increase in economic activity attributable to these indirect effects would be small.

Unencumbered Disposal, Direct. Long-term minor beneficial and short-term minor adverse impacts would be expected. The increased potential for development could then lead to the creation of new jobs and increased economic activity in the region. Removal of encumbrances protecting wetlands and threatened and endangered species would allow for more rapid economic development of the property. However, the Army's inability to transfer the property by deed prior to completion of remedial activities would directly affect the potential reuse of portions of SEDA, resulting in the foregone economic benefit of immediate reuse.

Unencumbered Disposal, Indirect. Long-term beneficial impacts would be expected. Removal of the encumbrance prohibiting land uses that negatively affect wetlands would allow for increased development potential, resulting in future increases in sales volume, employment, and local income.

5.3.15 *Sociological Environment (including Environmental Justice and Protection of Children)*

Encumbered Disposal, Direct. Short-term minor beneficial impacts would be expected. The remedial activities encumbrances, reflecting the continuation of ongoing cleanup action under the BRAC IRP, would involve initiation of economic redevelopment opportunities by providing jobs for persons associated with cleanup activities. Encumbrances would not contribute to creation of disproportionately high or adverse human health or environmental impacts on minority or low-income populations of the surrounding communities. No impacts on public services would be expected.

The Army's proposed action to dispose of property at SEDA essentially consists of transferring or conveying title of real estate to other entities. The proposed disposal action does not involve activities that would pose any disproportionate environmental health risks or safety risks to children. Imposition of the LBP encumbrance would result in property recipients' actions to ensure the elimination of any hazards associated with LBP that might affect children or other persons occupying residential structures.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. Long-term minor adverse and beneficial impacts would be expected. Elimination of the remedial activities encumbrance, thereby rendering the Army unable to return to the property periodically to perform cleanup actions, would preclude transfer of the property by deed. This would directly affect the reuse of portions of the installation. Removal of the ACM and LBP encumbrances, the latter of which could occur only upon completion of thorough abatement projects in housing constructed before 1960, would enhance the economic value of the property and the development potential of the facilities. This could lead to more rapid redevelopment and creation of jobs. Rapid redevelopment could lead to a population increase and an increased demand for housing, as well as an increased need for public services. No impacts on environmental justice or homeless and other special programs would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.16 *Quality of Life*

Encumbered Disposal, Direct. Long-term minor beneficial impacts would be expected. Protection of wetlands would maintain current recreational and aesthetic resources of the area. Imposition of encumbrances concerning ACM and LBP would ensure protection of human health in both the workplace and residential areas. Use of the groundwater use prohibition encumbrance would protect occupants of property where contamination has reached groundwater supplies. No impacts on schools, family support, or shops and services would be expected.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. Long-term minor adverse and beneficial impacts would be expected. Elimination of the ACM encumbrance could result in workplace and residential exposure harmful to human health. With respect to housing constructed prior to 1960, elimination of the LBP encumbrance, which could occur only upon completion of abatement projects, would ensure elimination of potential LBP hazards to residents.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.17 Installation Agreements

Encumbered Disposal, Direct. No impacts would be expected.

Encumbered Disposal, Indirect. No impacts would be expected.

Unencumbered Disposal, Direct. No impacts would be expected.

Unencumbered Disposal, Indirect. No impacts would be expected.

5.3.18 Cumulative Effects

Encumbered disposal would be expected to result in long-term minor beneficial cumulative impacts. The essence of disposal is the transfer of ownership and management of assets (real property and its natural resource components) from the Army to state and local government and the private sector. The Army's inclusion of encumbrances would result in positive effects on people and the land as future activities occurred. A prohibition on groundwater use at one portion of the installation until completion of remediation and restrictions on terrain-disturbing activities at UXO locations would protect health and safety. Deed requirements for the maintenance of historical resources eligible for inclusion on the NRHP would preserve culturally important resources. Reliance by the Army on a remedial activities encumbrance would allow economic redevelopment and job creation to commence without having to wait until completion of all remediation actions. Retention of existing easements would support infrastructure and would give continuity to uses of buildings and land. Together, these encumbrances would allow informed management and use of SEDA assets.

Unencumbered disposal would be expected to result in long-term minor adverse cumulative impacts. Transfer or conveyance of SEDA property without encumbrances could place human health and safety at risk, could cause loss of cultural resources, and could unduly burden management of resources. Such risks and losses would reduce the value of the property, possibly to such an extent that private sector entities would seek other properties for their endeavors and, thereby, not replace the jobs lost as a result of closure of the installation.

5.4 REUSE SCENARIOS

5.4.1 Introduction

The reuse scenarios evaluated in this document are referenced as the MIR scenario, MLIR scenario, and LIR scenario. As noted in Section 3.3.1, these reuse scenarios do not attempt to predict the exact

nature or pattern of reuse activities that will ultimately occur at SEDA. The scenarios are beneficial in identifying likely activities and the range of associated impacts that would be expected to occur under the various levels of reuse intensity encompassed by the SEDLRA reuse plan.

Sections 5.4.2 through 5.4.17 identify and discuss the environmental or socioeconomic consequences of the three reuse scenarios. The reuse scenarios are evaluated based on the assumption that the Army would implement its preferred alternative, encumbered disposal. Reuse of SEDA property is proposed to principally involve five major types of uses—residential, warehousing, planned industrial development, institutional, and open space/wildlife management. In the following sections, the five reuse categories of the SEDLRA reuse plan, and examples of the range of activities that might occur within a given category, are discussed under each reuse intensity scenario (MIR, MLIR, and LIR) and alternative impact (direct and indirect) as they may apply. Full build-out to MIR could occur over a 20-year time frame.

As defined in Section 5.1.1, cumulative effects are considered those which could result from the incremental effects of an action when considering past, present, or reasonably foreseeable future actions, regardless of the agencies or parties involved. Cumulative effects can result from individually minor, but collectively significant, actions taking place over time as they may relate to the entire installation and in the region. As stated in Section 5.4.18, current and proposed development activities within the region appear limited compared to those proposed for SEDA. The following sections summarize the potential cumulative impacts for each action, and within each resource area, where appropriate.

5.4.2 Land Use

Medium Intensity, Direct. Long-term significant adverse impacts would be expected. Assuming an average FAR of 0.1, the MIR scenario would involve more than 6 million square feet of built space over the 1,480 acres of property and an estimated 5,864 jobs. This amount of built space would represent more than what is now present at SEDA, and the FAR would be more than an order of magnitude greater. This intensity would be wholly inconsistent with adjacent agricultural land uses that are predominant in or planned for the vicinity of SEDA and with proposed conservation/recreation uses within SEDA.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Development of an MIR scenario over a 20-year period would likely involve the relocation of most development and investment capital from other development projects within the ROI. This could adversely affect the ability of those other locations to create or maintain jobs. This effect on the ability of locations to create and maintain jobs could affect the land use patterns of the area.

Medium-Low Intensity, Direct. No impacts would be expected. Assuming an average FAR of 0.05, the MLIR scenario would involve about 3 million square feet of built space over the 1,480 acres of property and an estimated 2,040 jobs. This would represent less built space than presently occurs at SEDA; however, it should be noted that the FAR would be greater than that presently at the facility due to the fact that a large portion of the facility would be used for conservation/recreation. This intensity of reuse would not present a degree of change of such magnitude as to cause substantial changes in land use patterns either on or off the installation.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected. Assuming an average FAR of 0.025, an LIR scenario would involve approximately 1.5 million square feet of built space and an employee population of about 886. The area is able to support this intensity of development both at the facility and in the surrounding areas.

Low Intensity, Indirect. No impacts would be expected.

5.4.3 Climate

Medium Intensity, Direct. No impacts would be expected.

Medium Intensity, Indirect. No impacts would be expected.

Medium-Low Intensity, Direct. No impacts would be expected.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected.

Low Intensity, Indirect. No impacts would be expected.

5.4.4 Air Quality

Medium Intensity, Direct. Long-term minor adverse impacts would be expected. Activities under the MIR scenario would be expected to add various emission sources associated with industrial operations and construction activity. These emissions would replace Army activity that previously contributed less than 25 tons per year of criteria air pollutants from the use of fuel oil boilers, paint spray booths, incinerator units, and other miscellaneous sources. It is expected that there would be an overall net increase in emissions under the MIR scenario.

New industrial uses at SEDA would likely contribute to emissions of the criteria pollutants sulfur dioxide, carbon monoxide, nitrogen oxides, and inhalable particulate matter. Reactive organic compounds, which are ozone precursors, would also likely be emitted. Because no specific industrial use proposals have been identified, it is not possible to estimate reasonably the quantities of these emissions. It is unlikely that there would be any significant impacts on ambient air quality, however, because the operators of any new emission sources would be required to comply with New York and federal air quality regulations. These regulations include a requirement to obtain appropriate air emission permits that specify emission limits and appropriate air pollution control equipment. The permit process is designed to control sources that might cause significant adverse impacts on air quality. As mentioned in Section 4.4.1, SEDA's location in an ozone transport region would necessitate more stringent controls for new sources of ozone precursors.

Occasional emissions of hazardous air pollutants could also occur under the MIR scenario, depending on the type of industrial reuse. Examples of common industrial products classified as hazardous air

pollutants include certain pesticides, chlorine, several types of solvents, and a variety of petroleum products. These chemicals, as well as several others that are often used during industrial operations, can be harmful to human health and the environment if released at excessive concentrations. It is difficult to predict the extent to which chemicals would be used under reuse without knowing the types of industries expected to locate at SEDA. The use of chemicals is highly regulated, however, and occasional emissions associated with the MIR scenario would not be expected to significantly affect air quality.

Construction activities associated with the MIR scenario would create temporary sources of fugitive dust and vehicle emissions that would primarily be confined to immediate project areas. These emissions have been estimated based on the anticipated need for construction and generalized estimates for the duration of construction activities and the pace at which construction would take place. The analysis assumed that a total construction area of approximately 150 acres would be disturbed over a 20-year build-out period. This acreage is based on the anticipated need for new industrial buildings and warehouses as shown in Table 3-2. It takes into account the fact that many of the current SEDA buildings would prove unsuitable for reuse. To determine estimates of annual emissions, it was assumed that construction would occur evenly over a 20-year build-out period.

Estimated construction emissions would be 0.1 ton of reactive organic compounds, 2 tons of nitrogen oxides, 0.9 ton of carbon monoxide, 0.2 ton of sulfur oxides, and 2.8 tons of inhalable particulate matter. Construction-related emissions would not be expected to create any significant ambient air quality impacts due to the relatively small quantities of these emissions and the dispersed locations of the construction sites.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect emissions associated with the MIR scenario would result primarily from an increased level of vehicle traffic. Commuter travel by the future employees and heavy truck travel associated with the MIR scenario would contribute to vehicle emissions in Seneca County and the surrounding region.

Once the new and renovated light industrial, commercial, institutional, and warehouse space is occupied, associated vehicle traffic would generate additional emissions in the region. Table 5-1 summarizes the expected annual emissions that would occur with 6,671 future employees commuting to and from the property and 100 heavy truck trips being made to the facility each workday. The estimates are based on data and procedures for vehicle emissions distributed by EPA.

Industrial and heavy truck emission rates are typical rates for gasoline and diesel trucks operating in a low-altitude region like Seneca. The speeds, travel times, and types of vehicles driven by the commuting workforce were based on a composite of previous studies for rural and suburban areas.

Table 5-1 shows that the net change in emissions associated with an increased workforce and greater heavy truck activity would increase emissions of reactive organic compounds, nitrogen oxides, inhalable particulate matter, and carbon monoxide above EPA de minimis levels. (De minimis levels are thresholds established by the EPA General Conformity Rule. To help evaluate the disposal of SEDA [see Section 5.3.3], the de minimis concept can be used to help interpret the predicted changes in emissions.) Because the de minimis thresholds would be exceeded, it is likely that there would be an adverse impact on ambient air quality. Depending on the future traffic patterns, localized carbon monoxide and inhalable particulate matter problems could occur and the increased emissions of

Table 5-1
Summary of Quantifiable Direct and Indirect Air Emissions, MIR Scenario

	Emissions (tons/year)				
	ROG	NO _x	PM ₁₀	CO	SO _x
1995 Emission Estimates¹					
Private Vehicle Emissions	12.5	17.8	17.3	114.1	1.4
Government Vehicle Emissions	0.2	0.2	0.2	1.5	0.1
Total	12.7	18.0	17.5	115.6	1.5
Reuse Emission Estimates²					
Private Vehicle Emissions	125.0	117.5	162.9	1,150.4	10.1
Industrial Truck Emissions	2.4	10.2	4.4	20.0	0.8
Total	127.4	127.7	167.3	1,170.4	10.9
Change in Emissions from Baseline to Reuse	114.7	109.7	149.8	1,054.8	9.4
EPA De Minimis Threshold for Maintenance Areas³	50	100	100	100	100

¹1995 emission estimates are based on 505 commuting employees, 50 on-site government trips, and 75 contractor/vendor trips per day. The on-site government trips were assumed to involve 10% automobiles, 70% light trucks, 5% medium trucks, and 15% heavy trucks.

²Reuse emission estimates are based on 5,864 employees and 100 heavy truck trips per day.

³SEDA is located in an air quality attainment area. The Maintenance Areas threshold is provided only as a reference.

Note:

ROG = reactive organic compounds CO = carbon monoxide PM₁₀ = inhalable particulate matter
 NO_x = oxides of nitrogen SO_x = sulfur oxides

Source: Tetra Tech, 1997.

reactive organic compounds could aggravate ozone conditions downwind of SEDA. It is unlikely, however, that these problems would be of sufficient magnitude to cause the Genesee-Finger Lakes or downwind air quality control regions to fall into nonattainment for federal ambient air quality standards. This is based on the expectation that future overall regional emissions are likely to remain similar to or decrease from their current levels (Walsch, personal communication, 1997; Wheeler, personal communication, 1996).

Medium-Low Intensity, Direct. Long-term minor adverse impacts would be expected. Considerations relevant to the MIR scenario would apply to the less intense MLIR scenario.

Medium-Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Table 5-2 displays the estimated vehicle emissions that would result under the MLIR scenario. These estimates are based on fewer employee commutes and heavy truck trips compared to the MIR scenario. It is even less likely that the emissions under the MLIR scenario will cause the region to fall into nonattainment for federal ambient air quality standards. Only the carbon monoxide emissions are above EPA de minimis threshold levels, and these emissions are not expected to cause violations of the federal ambient air quality standards because they would not be expected to be concentrated at any congested intersections.

Table 5-2
Summary of Quantifiable Direct and Indirect Air Emissions, MLIR Scenario

	Emissions (tons/year)				
	ROG	NO _x	PM ₁₀	CO	SO _x
1995 Emission Estimates¹					
Private Vehicle Emissions	12.5	17.8	17.3	114.1	1.4
Truck Emissions	0.2	0.2	0.2	1.5	0.1
Total	12.7	18.0	17.5	115.6	1.5
Reuse Emission Estimates²					
Private Vehicle Emissions	43.5	40.9	56.7	400.2	3.5
Truck Emissions	1.2	5.1	2.2	10.0	0.4
Total	44.7	46.0	58.9	410.2	3.9
Change in Emissions from Baseline to Reuse	32.0	28.0	41.4	294.6	2.4

¹ 1995 emission estimates are based on 505 commuting employees, 50 on-site government trips, and 75 contractor/vendor trips per day. The on-site government trips were assumed to involve 10% automobiles, 70% light trucks, 5% medium trucks, and 15% heavy trucks.

² Reuse emission estimates are based on 2,040 employees and 50 heavy truck trips per day.

Note:

ROG = reactive organic compounds CO = carbon monoxide PM₁₀ = inhalable particulate matter
 NO_x = oxides of nitrogen SO_x = sulfur oxides

Source: Tetra Tech, 1997.

Low Intensity, Direct. No impacts would be expected. Considerations relevant to the MIR and MLIR scenarios would apply to the less intense LIR scenario. Emissions from stationary sources would be expected to remain similar to or increase only slightly from 1995 levels, and the reduced need for construction would decrease emissions from this source.

Low Intensity, Indirect. No impacts would be expected. Considerations relevant to the MIR and MLIR scenarios would apply to the less intense LIR scenario. Emissions of all criteria pollutants except carbon monoxide would be well below EPA de minimis thresholds. The carbon monoxide emissions would not be expected to cause violations of the federal standard because they would not be concentrated at congested intersections.

5.4.5 Noise

Medium Intensity, Direct. Long-term minor adverse and beneficial impacts would be expected. Industrial activities that would locate in the PID Area could involve use of equipment that would produce noise affecting adjacent areas. This would primarily be of concern to residents of the current and proposed housing at Elliot Acres. The potential for localized noise problems would depend on what industries would actually locate in the PID Area and the distance between these noise sources and the nearest housing. As already identified by the SEDLRA reuse plan, restrictions should be established that would limit the development of new housing at Elliot Acres adjacent to this potential noise source (RKG Associates, 1996).

Recreational activities taking place at the proposed Special Events site would be expected to, on average, contribute less noise than has historically been associated with the airfield. This would

benefit wildlife in the Conservation/Recreation Area as well as the few off-post residents living nearby. Certain events that might be held under the MIR scenario, such as concerts or drag racing events, would create only temporary adverse noise impacts. Continued use of the training ranges in this portion of the installation is not expected to pose any incompatibility with the activities identified with the MIR scenario.

Reuse of the depot as an institutional area would not be expected to pose any substantial noise-related concerns.

Medium Intensity, Indirect. Short- and long-term minor adverse impacts would be expected. Temporary adverse impacts on the noise environment would be caused as a result of construction of several million square feet of new space and potential renovation of existing space. Construction noise is not considered a significant impact, however, because it would be localized and temporary, and would most likely occur only during daylight hours.

Traffic generated by reuse activities and travel by an employee population estimated to exceed 6,600 persons would have long-term effects on the noise environment. Noise from traffic would be most noticeable in the vicinity of the present main entrance and along Route 96. The estimated noise levels would be 65 to 70 dB at distances of 50 to 100 feet from the affected roadways. This noise level is within the acceptable range for the surrounding office and industrial space. The construction of a new access road would minimize potential noise problems at the Elliot Acres Housing area created by heavy truck traffic requiring access to the Warehouse and Distribution Area.

Medium-Low Intensity, Direct. Long-term minor adverse impacts would be expected. Use of 2.7 million square feet of built space and an employee workforce of just over 2,300 persons would pose substantially less occasion for noise than the MIR scenario.

Medium-Low Intensity, Indirect. Short- and long-term minor adverse impacts would be expected. The amount of construction or renovation to establish an MLIR scenario and noise associated with traffic principally attributable to approximately 2,300 employees would pose substantially less occasion for noise than an MIR scenario.

Low Intensity, Direct. No impacts would be expected. Considerations relevant to the MLIR scenario would apply to the less intense LIR scenario. The noise levels expected to occur would be similar to or only slightly higher than current levels, which are within an acceptable range for all land uses.

Low Intensity, Indirect. No impacts would be expected. Considerations relevant to the MLIR scenario would apply to the less intense LIR scenario.

5.4.6 Geology

Medium Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 2,700,720 square feet of floor space would be needed under the MIR scenario. Under the worst-case scenario, where all new buildings are one story, 2,400,720 square feet, or 55 acres, of land disturbance could occur under the MIR scenario in this area. Additional land disturbances associated with parking lots, walkways, and other ancillary development would also be expected.

The Warehouse and Distribution Area currently has approximately 2,444,300 square feet of available floor space. Existing structures include warehouses, shops and garages, and other buildings. Table 3-2 estimates that 2,395,800 square feet of floor space would be needed under the MIR scenario. If all proposed uses could be accommodated by existing buildings, no new land disturbance would be necessary. However, new building construction would probably be necessary to accommodate proposed uses.

The Institutional area in the North Depot currently has approximately 303,400 square feet of available floor space. Table 3-2 estimates that 435,600 square feet of floor space would be needed under the MIR scenario. Under the worst-case scenario, where all new buildings are one story, 32,200 square feet of land disturbance could occur under the MIR scenario in this area.

As a consequence of construction in the three planning areas discussed above, the MIR scenario could result in long-term minor adverse impacts on soil resources and existing landforms in these parcels. New construction would affect soils directly through excavation, grading, and removal. Clearing of vegetation associated with construction would also expose soils to potential erosion.

Conveyance of the Lake Housing Area to provide sale proceeds to the SCIDA for funding other development would probably not result in greater intensities of use in the area. Near-term construction of additional dwelling units in the area would not be likely under the MIR scenario. Two factors make it unlikely that construction in the Lake Housing area would occur. First, no interest has been shown by private-sector entities having the capital to increase the number of dwelling units. Second, the rural location of the housing may reduce demand because of the distance from the more populous areas, which have more numerous job opportunities. Nonetheless, any new construction that does occur in the area would result in adverse impacts on soils similar to those discussed above.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas could potentially have adverse impacts on geological resources similar to those discussed above, but to a lesser degree.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Adverse impacts could occur resulting from the deposition of eroded soils if adequate erosion and sediment control practices are not applied during construction activities.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas could potentially have adverse impacts on geological resources similar to those discussed above, but to a lesser degree.

Medium-Low Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 1,350,360 square feet of floor space would be needed under the MLIR scenario. Under the worst-case scenario, where all new buildings are one story, 1,050,360 square feet, or approximately 25 acres, of land disturbance could occur under the MLIR scenario in this area. Additional land disturbances

associated with parking lots, walkways, and other ancillary development would also be expected. Impacts similar to those discussed under the MIR scenario would be expected to occur, but to a lesser degree.

Existing floor space in the Warehouse and Distribution Area and in the Institutional Area would be adequate to support square footage requirements under the MLIR scenario if all proposed uses could be accommodated by existing structures. If construction of new buildings occurs to accommodate proposed uses, impacts similar to those discussed under the MIR scenario would be expected to occur, but to a lesser degree.

While considered unlikely, any new construction that does occur in the Lake Housing area under the MLIR scenario would result in adverse impacts on soils similar to those discussed for the MIR scenario, but to a lesser degree.

Any redevelopment activities that do occur in the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges under the MLIR scenario could potentially have adverse impacts on geological resources similar to those under the MIR scenario, but to a lesser degree.

Medium-Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect impacts similar to those discussed under the MIR scenario would be expected to occur under the MLIR scenario, but to a lesser degree.

Low Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 675,180 square feet of floor space would be needed under the LIR scenario. Under the worst-case scenario, where all new buildings are one story, 345,000 square feet, or approximately 8 acres, of land disturbance could occur under the LIR scenario in this area. Additional land disturbances associated with parking lots, walkways, and other ancillary development would also be expected. Impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

Existing floor space in the Warehouse and Distribution Area and in the Institutional Area would be adequate to support square footage requirements under the LIR scenario if all proposed uses could be accommodated by existing structures. If construction of new buildings occurs to accommodate proposed uses, impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

While considered unlikely under the LIR scenario, any new construction that does occur in the Lake Housing Area would result in adverse impacts on soils similar to those discussed under the MLIR scenario, but to a lesser degree.

Any redevelopment activities that do occur in the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges under the LIR scenario could potentially have adverse impacts on geological resources similar to those under the MIR scenario, but to a lesser degree.

Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect impacts similar to those discussed under the MLIR scenario would be expected to occur under the LIR scenario, but to a lesser degree.

5.4.7 Water Resources

Medium Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 2,700,720 square feet of floor space would be needed under the MIR scenario. Under the worst-case scenario, impervious surfaces in this parcel could be increased by 2,400,720 square feet, or 55 acres, if all new buildings are one story. Additional increases in impervious surfaces associated with parking lots, walkways, and so forth would also be expected.

The Warehouse and Distribution Area currently has approximately 2,444,300 square feet of available floor space. Existing structures include warehouses, shops and garages, and other buildings. Table 3-2 estimates that 2,395,800 square feet of floor space would be needed under the MIR scenario. If all proposed uses could be accommodated by existing buildings, no new land disturbance would be necessary. However, new building construction would probably be necessary to accommodate proposed uses, resulting in increased impervious surfaces in this area.

The Institutional Area currently has approximately 303,400 square feet of available floor space. Table 3-2 estimates that 435,600 square feet of floor space would be needed under the MIR scenario. Under the worst-case scenario, impervious surfaces in this parcel could be increased by 32,200 square feet if all new buildings are one story.

The MIR scenario could result in long-term adverse impacts on water quality in the three planning areas discussed above and in adjacent areas as a result of increases in stormwater runoff. Concentrations of pollutants such as lubricants, fuels, and antifreeze in stormwater runoff from increased impervious surfaces could result in adverse impacts on surface water quality on SEDA.

Conveyance of the Lake Housing Area to provide sale proceeds to the SCIDA for funding other development would probably not result in greater intensities of use in the area. Near-term construction of additional dwelling units in the area would not be likely under the MIR scenario. Two factors make it unlikely that construction in the Lake Housing Area would occur. First, no interest has been shown by private-sector entities having the capital to increase the number of dwelling units. Second, the rural location of the housing might reduce demand because of the distance from the more populous areas, which have more numerous job opportunities. Nonetheless, any new construction that does occur in the area would result in adverse impacts on water resources similar to those discussed above.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas could potentially have adverse impacts on water resources similar to those discussed above, but to a lesser degree.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Stormwater runoff conveying deicing salts, fuels, lubricants, antifreeze, fertilizer, and pesticides from future construction of new residential units in the Lake Housing Area could have long-term adverse impacts on aquatic resources and wildlife dependent on aquatic resources.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas could potentially have adverse impacts on water resources similar to those discussed above, but to a lesser degree.

Medium-Low Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 1,350,360 square feet of floor space would be needed under the MLIR scenario. Under the worst-case scenario, impervious surfaces in this parcel could be increased by 1,050,360 square feet, or approximately 25 acres, if all new buildings are one story. Additional increases in impervious surfaces associated with parking lots, walkways, and other ancillary development would also be expected under the MLIR scenario, but to a lesser degree than those under the MIR scenario.

Existing floor space in the Warehouse and Distribution Area and in the Institutional Area would be adequate to support square footage requirements under the MLIR scenario if all proposed uses could be accommodated by existing structures. If construction of new buildings occurs to accommodate proposed uses, impacts similar to those discussed under the MIR scenario would be expected to occur, but to a lesser degree.

Medium-Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect impacts similar to those discussed under the MIR scenario would be expected to occur, but to a lesser degree.

Low Intensity, Direct. Long-term minor adverse impacts would be expected. The PID Area currently has approximately 330,000 square feet of available floor space. Table 3-2 estimates that 675,180 square feet of floor space would be needed under the LIR scenario. Under the worst-case scenario, impervious surfaces in this parcel could be increased by 345,000 square feet, or approximately 8 acres, if all new buildings are one story. Additional increases in impervious surfaces associated with parking lots, walkways, and other ancillary development would also be expected. Impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

Existing floor space in the Warehouse and Distribution Area and in the Institutional Area would be adequate to support square footage requirements under the LIR scenario if all proposed uses could be accommodated by existing structures. If construction of new buildings occurs to accommodate proposed uses, impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

Although unlikely, any new construction that occurs in the Lake Housing Area under the LIR scenario would result in adverse impacts on water resources similar to those discussed under the MLIR scenario, but to a lesser degree.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas under the LIR scenario could potentially have adverse impacts on water resources similar to those discussed under the MLIR scenario, but to a lesser degree.

Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

5.4.8 Infrastructure

Medium Intensity, Direct. Long-term significant and minor adverse impacts would be expected. Under the MIR scenario, an additional 433 residents and 6,254¹ employees would use the infrastructure at SEDA. These figures can be compared to the 170 residents and 417 employees at SEDA in 1995. The increases in population would pose additional demands on electricity, wastewater, and potable water.

The existing potable water system at SEDA is capable of pumping 936,000 gpd. In 1995, SEDA's 417 employees and approximately 100 dependents and other nonemployees used an annual daily average of 100,000 gpd, resulting in 193 gpd/person. Using this rate, an additional 6,254 employees and approximately 260 dependents² would generate the need for 1.3 mgd, significantly exceeding the maximum pumping rate of the system.

Following completion of the Varick water project, no impacts on the future ability of the town of Varick to provide water to its customers would be expected. Because the system is operating at about 60 percent capacity, an increase in water demand to 1.3 mgd would not exceed the system's capacity. This projected water consumption is based on reuse scenarios that could occur on SEDA and does not account for the possibility of an industry with exceptionally high water demand.

Both wastewater treatment systems that serve SEDA are considered to be in fair condition. STP 715 in the North Depot has not been in use since 1993, when the buildings in this area of the installation were closed and boarded. STP 715 is a tertiary treatment plant that has an operating capacity of 0.375 mgd with a maximum flow of 1.0 mgd. This treatment plant could serve the North Depot area if reused.

The Main Post and east-central portion of the installation are served by STP 4. This tertiary treatment system has a capacity of 250,000 gpd and has a baseline average demand of 150,000 gpd. This quantity is 100,000 gpd below operating capacity. The treatment plant, however, would require some improvements for the system to accommodate peak flows under the MIR scenario because STP 4 has some current limitations during peak flow periods. At full capacity, the system could provide adequate treatment to only one-third of the facilities served. According to the SEDLRA reuse plan, this system would require additional storage using equalization tanks to run at full capacity (RKG Associates, 1996).

The hamlet of Romulus, located in the towns of Romulus and Varick, currently generates approximately 50,000 gpd of wastewater treated by STP 4. An agreement between the new owner of

¹The number of additional residents and additional employees under each reuse scenario was generated by subtracting the number of residents and employees at SEDA in 1995 (170 and 417, respectively) from the projected resident and employee populations (employee populations provided in Table 3-2); (i.e., 603 - 170 = 433 and 6,671 - 417 = 6,254).

²This number represents the number of residents projected minus the probable number of residents who would also be employees on this property under reuse (i.e., 433/2.5 persons per household = 173; therefore, 433 - 173 = 260) and therefore are already included in the employee count of 6,254.

the plant and Seneca County (or the town of Varick) would be required to maintain wastewater treatment for the hamlet. Without such an agreement, adverse public health and economic impacts would occur.

New York State Electric and Gas, which supplies all electrical power to SEDA, has the capacity to provide additional electrical demand to SEDA. The increases in electrical consumption associated with the MIR scenario would not impact the utility or other power customers in the ROI.

Solid waste generated at SEDA is removed by Waste Management of Syracuse and is hauled to the Seneca Meadows landfill. Seneca Meadows, Inc. has indicated that even with the increase in solid waste generated under the MIR scenario, solid waste removal services in the ROI would not be adversely affected.

While the roadway capacity is probably sufficient to meet the increased demand associated with medium intensity development, additional signage and traffic signals might be necessary on the facility. Detailed traffic studies should be completed once the redevelopment plan is finalized.

No direct impacts on the heating systems on SEDA would occur.

There would be no impacts on the communications systems available at SEDA. The communications equipment is owned and operated by SEDA and would be removed at the time of disposal. Telephone service could continue to be provided by the current providers, Trumansburg Home Telephone Company and NYNEX.

Potential impacts associated with siting of a prison at SEDA are included within the range of activities comprising the MIR. Siting of a prison at SEDA, however, would be expected to have an independent, noticeable effect with respect to the timing of infrastructure improvements and upgrades. That is, should the state seek to locate a prison at SEDA, construction of additional potable water, sanitary wastewater treatment, and roadway capacity would be accelerated to occur at one point in time to meet a prison's requirements. In the absence of a prison, it would be expected that redevelopment would occur on a more piecemeal basis, with improvements being initiated for each infrastructure element as its individual capacity became saturated.

Medium Intensity, Indirect. Short-term minor adverse impacts would be expected. In the Lake Housing Area, 21 of the 77 units would require installation of individual heating oil tanks. Adding meters for electricity and water or installing individual heating oil tanks would result in upgrades to the infrastructure. Noise and soil disturbance would be associated with laying or replacing infrastructure components such as electrical poles, pipes, or telecommunications cables. These impacts, however, would be temporary and negligible.

Both STP 715 and STP 4 have I/I problems that would need repairs for long-term reuse. Additionally, STP 4 must remain operational for it to continue to serve the hamlet of Romulus. If it were shut down, it could not be easily reopened.

Increased traffic might cause increased "wear-and-tear" on the roads. This would result in the need for more frequent repairs and rehabilitation.

Medium-Low Intensity, Direct. Short-term minor adverse impacts would be expected. Under the MLIR scenario, there would be an addition of 433 residents and 1,963³ employees. The additional 433 residents would use 64,950 gpd of potable water. The demand for potable water for employees under the MLIR scenario would be 865,854 gpd, based on the calculations described in the MIR scenario. Even though this calculation is more than twice the national average for water consumption, the demand would still be below the pumping capacity of the depot's potable water system. This demand would not affect the ability of the town of Varick to provide water to its customers after completion of the water project.

The Willard wastewater treatment system would not be impacted by the 433 additional residents under the MLIR scenario. The system would be capable of supporting the additional residents as well as the 170 current residential users at the Lake Housing Area of SEDA.

The hamlet of Romulus, located in the towns of Romulus and Varick, currently generates 50,000 gpd of wastewater treated by STP 4. An agreement between the new owner of the plant and Seneca County or the town of Varick would be required to maintain wastewater treatment for the hamlet. Without such an agreement, adverse public health and economic impacts would occur, but to a lesser degree than under the MIR.

Infrastructure related to electricity, solid waste, and communications systems would not be affected in the MLIR scenario. The utility services in the ROI would be expected to continue to operate effectively under the increases in electricity, solid waste, and telephone services in the MLIR scenario.

No direct impacts on the heating system would occur. Impacts on traffic and transportation would be similar to those under medium intensity, direct.

Medium-Low Intensity, Indirect. Short-term minor adverse impacts would be expected. Indirect impacts similar to, but less severe than, those expected for the MIR scenario would also occur in the MLIR scenario. Impacts on traffic and transportation would be similar to those under medium intensity, indirect.

Low Intensity, Direct. No impacts would be expected. The additional 433 residents would use 64,950 gpd of potable water. The 603⁴ employees in the LIR scenario would require about one-third less (310,974 gpd) potable water than the 936,000 gpd pumping capacity at SEDA. This figure is below the capacity of the town of Varick's future ability to provide water to its customers.

The Willard wastewater treatment system would not be adversely affected by the addition of 433 residents in the Lake Housing Area. The impacts on STP 4 would be similar to those described under the MIR scenario, but to a lesser degree than the MLIR scenario.

³The number of residents was derived in the same manner as described under the MIR scenario. The number of additional employees under each reuse scenario was generated by subtracting the number of employees at SEDA in 1995 (417) from the employee population provided in Table 3-2 (i.e., 2,380 - 417 = 1,963).

⁴The number of residents was calculated as described under the MIR scenario. The number of additional employees under each reuse scenario was generated by subtracting the number of employees at SEDA in 1995 (417) from the employee population provided in Table 3-2 (i.e., 1,020 - 417 = 603).

Impacts to traffic and transportation would be similar to those under medium intensity, direct.

Low Intensity, Indirect. No impacts would be expected to utilities or communications systems. Impacts to traffic and transportation would be similar to those under medium intensity, indirect.

5.4.9 *Hazardous and Toxic Substances*

Medium Intensity, Direct. No impacts would be expected. As discussed in Section 5.3.9, the Army would take necessary remedial action to protect human health and the environment in any transfer of property. Reuse activities associated with industrial, commercial, or mixed use of the SEDLRA areas could create the potential for hazardous spills and would be required to be conducted in accordance with federal and state requirements pertaining to hazardous materials and hazardous substances. Permitting and enforcement mechanisms would provide assurance against contamination of environmental media and would be protective of human health and the environment.

Medium Intensity, Indirect. No impacts would be expected.

Medium-Low Intensity, Direct. No impacts would be expected. Conditions in an MLIR scenario would be similar to those in the MIR scenario.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected. Conditions in an LIR scenario would be similar to those in the MIR and MLIR scenarios.

Low Intensity, Indirect. No impacts would be expected.

5.4.10 *Permits and Regulatory Authorizations*

Medium Intensity, Direct. No impacts would be expected. Operating permits and regulatory authorizations for activities in an MIR scenario would be required for infrastructure systems and specific activities by reuse entities. Permits and authorizations to continue activities previously conducted by the Army would be subject to procedures and rules of the regulating agencies. For operational matters not now covered, future owners and operators would be required to obtain permits and authorizations independently. Continuity of permitting and enforcement mechanisms would provide assurance against contamination of environmental media and would be protective of human health and the environment.

Medium Intensity, Indirect. No impacts would be expected.

Medium-Low Intensity, Direct. No impacts would be expected. Conditions in an MLIR scenario would be similar to those described in the MIR scenario.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected. Conditions in the LIR scenario would be similar to those described in the MLIR scenario.

Low Intensity, Indirect. No impacts would be expected.

5.4.11 Biological Resources

Medium Intensity, Direct. Both long-term minor adverse and minor beneficial impacts would be expected. Table 3-2 estimates that 2,700,720 square feet, or 55 acres, of additional floor space could be required in the PID Area under the MIR scenario, if all new buildings were one story. The institutional area could require an additional 32,200 square feet of floor space. The warehouse distribution area currently has enough existing floor space to accommodate estimated needs under the MIR scenario; however, some additional construction (e.g., administrative buildings, parking lots, sidewalks) would probably be required to meet user needs.

Wetlands occur within or adjacent to the three main redevelopment areas. If development in these areas were permitted through the federal and state permitting processes, direct impacts on wetlands could occur. Impacts on wetlands associated with construction could include the placement of fill, removal of vegetation, modification of substrates, and modification of existing hydrology. Lost wetland acreage or alteration of wetland characteristics could, in turn, adversely affect wildlife that use these habitats. Construction in upland areas between wetlands could also result in adverse impacts on vegetation and wildlife by reducing the amount of available terrestrial habitat and blocking the movement of small vertebrates and invertebrates among both wetland and upland habitats (i.e., fragmentation effects). Mitigation to compensate for adverse effects on wetland resources could occur through the CWA section 404 permitting process. Short-term impacts associated with erosion on construction sites followed by potential deposition in wetlands would be expected if proper erosion and sediment controls were not applied during construction.

Further adverse impacts on wetlands could result under this scenario if the increased use of the PID Area and the Warehouse and Distribution Area increased wastewater flows to STP 4. The discharge from STP 4 flows to wetlands 4, 5, and 6. These wetlands include the largest emergent wetland and open water area on SEDA. If the discharge from the treatment plant is significantly increased, as a result of increased wastewater flows, the existing hydrology in these wetlands could be modified, affecting existing wetland characteristics.

Beneficial impacts on biological resources would be expected in the Ammunition Storage Area. The SEDLRA reuse plan identifies conservation/recreation as the only feasible use for the 8,300-acre parcel. Preserving this property as such would ensure the long-term presence of suitable habitat for many species, including the osprey (because they nest in this area due to its proximity to Seneca Lake), eastern bluebird, and rare white deer, as well as the protection of sensitive wetland ecosystems. If, for some reason, the Ammunition Storage Area is not transferred to the state, adverse impacts on some or all of these sensitive resources could occur. The white deer herd, for example, could eventually be lost if the fence is removed from the depot. Other species could be adversely affected if this area becomes developed for industrial purposes.

Conveyance of the Lake Housing Area to provide sale proceeds to SCIDA for funding other development would probably not result in greater intensities of use in the area. Near-term construction of additional dwelling units in the area would not be likely under the MIR scenario. Two factors make it unlikely that construction in the Lake Housing area would occur. First, no interest has been shown by private-sector entities having the capital to increase the number of dwelling units. Second, the rural

location of the housing may reduce demand because of the distance from the more populous areas having more numerous job opportunities. Nonetheless, any new construction that does occur in the area would result in adverse impacts on biological resources similar to those discussed above.

Due to the nature of activities proposed for the Ammunition Storage Area, Airfield/Special Events Area, or Training Ranges, it is likely there would be no, or only minimal, redevelopment activity and, therefore, no increases in intensity levels. Any redevelopment activities that do occur in these areas, if not properly located or maintained, could potentially have adverse impacts on biological resources similar to those discussed above, but to a lesser degree.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Increased stormwater runoff from new buildings, roads, and parking lots could adversely affect water quality in wetlands within or adjacent to areas where new construction occurs. The increased human presence associated with the MIR scenario could result in the indirect harassment of wildlife and potential displacement from some SEDA habitats.

Medium-Low Intensity, Direct. Long-term minor adverse and long-term beneficial impacts would be expected. Under this scenario, it is estimated that approximately 25 acres (1,050,360 square feet) of additional floor space could be required in the PID Area. Although the Institutional Area and the Warehouse and Distribution Area currently contain enough floor space to accommodate the estimated needs, some additional construction would probably be required to meet user needs. Impacts on wetlands similar to those discussed under the MIR scenario would be expected to occur, though to a lesser degree since less development would be required. Beneficial impacts on biological resources in the ammunition storage area similar to those under the MIR scenario would occur under the MLIR scenario.

Although unlikely, if construction of new residential buildings were to occur at the Lake Housing Area under the MLIR scenario, impacts similar to those discussed under the MIR scenario would be expected to occur, but to a lesser degree.

Medium-Low Intensity, Indirect. Long-term minor adverse impacts would be expected. Indirect impacts on biological resources similar to those discussed under the MIR scenario would be expected to occur, though to a lesser degree.

Low Intensity, Direct. Long-term minor adverse impacts would be expected. Table 3-2 estimates that 345,000 square feet, or approximately 8 acres, of additional floor space could be required in the PID Area under the LIR scenario, if all new buildings are one story. The Institutional Area and Warehouse and Distribution Area currently have enough floor space to accommodate estimated needs under the LIR scenario; however, some additional construction would probably be required. Impacts on biological resources similar to those discussed under the MLIR scenario would be expected to occur, though to a lesser degree.

Although unlikely, if construction of new residential buildings were to occur at the Lake Housing Area under the LIR scenario, impacts similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

Low Intensity, Indirect. Long-term minor adverse indirect impacts would be expected. Impacts on biological resources similar to those discussed under the MLIR scenario would be expected to occur, but to a lesser degree.

5.4.12 Cultural Resources

Medium Intensity, Direct. No adverse or nonmitigable impacts would be expected if covenants were used. If the encumbered disposal alternative were used to dispose of SEDA properties, deed restrictions for NRHP-eligible properties would be developed in consultation with the New York SHPO and the ACHP. (See Appendices D and E for example deed language and Section 5.3.12 for a discussion of deed restrictions.) If the unencumbered disposal alternative were used to dispose of SEDA properties, the Army, the NYSHPO, and the ACHP would consult in accordance with Section 106 of the NHPA to determine appropriate measures for treating the loss of these properties. Recordation of the historic properties, to a standard agreed upon by the Section 106 consultations, would mitigate the adverse impacts to a minor level. Therefore, adverse impacts could be either avoided through the use of deed restrictions or mitigated to a minor level through recordation measures.

Medium Intensity, Indirect. No adverse or nonmitigable impacts would be expected.

Medium-Low Intensity, Direct. No adverse impacts would be expected if covenants were used. Long-term minor adverse impacts would be expected if the unencumbered disposal alternative were used and mitigation measures were determined to be necessary for subsequent reuse.

Medium-Low Intensity, Indirect. No adverse or nonmitigable impacts would be expected.

Low Intensity, Direct. No adverse impacts would be expected if the unencumbered disposal alternative were used and mitigation measures were determined to be necessary.

Low Intensity, Indirect. No adverse impacts would be expected if covenants were used. Long-term minor adverse impacts would be expected if the unencumbered disposal alternative were used and mitigation measures were determined to be necessary for subsequent reuse.

5.4.13 Legacy Resources

Medium Intensity, Direct. No impacts would be expected.

Medium Intensity, Indirect. No impacts would be expected.

Medium-Low Intensity, Direct. No impacts would be expected.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected.

Low Intensity, Indirect. No impacts would be expected.

5.4.14 Economic Development

Methodology. Socioeconomic effects of the implementation of the disposal and reuse scenarios are estimated using the EIFS model (USACERL, 1994). The EIFS model is a computer-based economic tool that calculates multipliers to estimate the direct and indirect effects of a given action. Changes in base employment and spending represent the direct effects of the action. Based on the input data and calculated multipliers, the model estimates ROI changes in sales volume, employment, income, population, housing, and school enrollment, accounting for the direct and indirect effects of the action.

The analysis uses the social and economic indicators presented in Sections 4.14 through 4.16. The EIFS model outputs for each reuse scenario represent net changes in sales volume, employment, income, population, housing, and school enrollment from BRAC parcel closure levels.

For purposes of this analysis, a change can be considered significant if it falls outside the normal range of ROI economic variation. To determine historical variability, the EIFS model calculates a rational threshold value (RTV) profile for the ROI. This analytical process uses historical data for the ROI and calculates fluctuations in sales volume, employment, income, and population patterns. The historical extremes for the ROI become the threshold of significance for social and economic change. If the estimated effect of a reuse scenario falls outside the RTVs, the effect could be significant. Appendix G discusses this methodology in more detail and presents the model output tables developed for this analysis.

The model requires the following input data: the names of counties composing the ROI, the number of civilian and military personnel and their salaries affected by the scenario, and the change in local procurement due to the action. The model also requires the percent of civilians expected to relocate. For both the medium-low and low reuse intensities, the percent expected to relocate from outside the ROI would be zero. Any new jobs created by those reuse scenarios could be more than filled by unemployed persons already in the area. Under the medium intensity reuse scenario, it was determined that 38 percent of civilians are expected to relocate.

Table 5-3 lists the EIFS model input parameters. EIFS model output data for the reuse scenarios are shown in Tables 5-4 through 5-9. Appendix G describes the EIFS model in more detail and contains the model input and output tables.

Medium Intensity, Direct. Long-term minor beneficial impacts would be expected. The MIR scenario assumes a 0.1 FAR applied to the entire site. Approximately 5,864 employees would work on the site under this scenario (Table 3-2).

Using the two-county ROI, approximately 2,440 new jobs would be created as a result of direct expenditures associated with reuse activities, generating increases in local income and spending (Table 5-4).

This increase in new jobs would decrease unemployment in the two-county ROI. ROI income would increase by almost \$33.7 million as a result of direct jobs generated by reuse activities. Sales volume increases directly attributable to reuse would total more than \$245 million and exceed historical fluctuations in the short term.

Using figures for Seneca County only, 1,578 new jobs would be created as a result of direct expenditures associate with reuse generating increases in local income and spending (Table 5-5).

This increase in jobs would exceed RTVs in Seneca County. ROI income would increase by over \$23.5 million as a result of direct jobs generated by reuse activities. Sales volume increases directly attributable to reuse would total nearly \$190 million, exceeding RTVs in the short term.

Table 5-3
EIFS Model Input Parameters

Reuse Intensity	Employee Population¹	Change in Employee Population²	Total Expenditure Per Employee³	Change in Total Expenditures⁴
LIR	886	469	\$48,436	\$22,716,484
MLIR	2,040	1,623	\$48,436	\$78,611,628
MIR	5,864	5,447	\$48,436	\$3263,830,892

¹ See Table 3-2 for derivation of employee population for reuse scenarios.

² Projected reuse population minus 1995 baseline population (417).

³ Average expenditure per employee calculated from national Bureau of Economic Analysis employment levels weighted to reflect county employment levels (see Appendix G).

⁴ Total expenditure per employee multiplied by the change in employee population.

Table 5-4
EIFS Standard Model Output for MIR (Seneca and Ontario Counties)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$245,047,000	N/A	N/A
Total Sales Volume	\$571,837,000	25.9%	-6.292% to 6.923%
Direct Employment	2,439	N/A	N/A
Total Employment	11,137	18.5%	-3.473% to 4.488%
Direct Income	\$33,691,000	N/A	N/A
Total Income	\$206,619,000	8.8%	-3.449% to 6.609%
Local Population	5,005	3.9%	-1.982% to 1.342%
Local Off-Base Population	5,005	N/A	N/A
Number of School Children	838	N/A	N/A
Demand for Housing			
Rental	547	N/A	N/A
Owner-Occupied	1,523	N/A	N/A
Total Housing Demand Increase	2,070	N/A	N/A
Civilian Employees Expected to Relocate	2,070	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.

Source: EIFS model.

Table 5-5
EIFS Standard Model Output for MIR (Seneca County Only)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$190,216,000	N/A	N/A
Total Sales Volume	\$298,916,000	62.5%	-5.406% to 8.042%
Direct Employment	1,578	N/A	N/A
Total Employment	7,927	53.1%	-4.123% to 6.192%
Direct Income	\$23,540,000	N/A	N/A
Total Income	\$164,367,000	28.9%	-3.015% to 6.640%
Local Population	4,871	14.5%	-2.949% to 1.103%
Local Off-Base Population	4,871	N/A	N/A
Number of School Children	839	N/A	N/A
Demand for Housing			
Rental	532	N/A	N/A
Owner-Occupied	1,538	N/A	N/A
Total Housing Demand Increase	2,070	N/A	N/A
Civilian Employees Expected to Relocate	2,070	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.
Source: EIFS model.

Table 5-6
EIFS Standard Model Output for MLIR (Seneca and Ontario Counties)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$73,015,000	N/A	N/A
Total Sales Volume	\$170,386,000	7.7%	-6.292% to 6.923%
Direct Employment	727	N/A	N/A
Total Employment	3,319	5.5%	-3.473% to 4.488%
Direct Income	\$10,039,000	N/A	N/A
Total Income	\$61,565,000	2.6%	-3.449% to 6.609%
Local Population	0	0	-1.982% to 1.342%
Local Off-Base Population	0	N/A	N/A
Number of School Children	0	N/A	N/A
Demand for Housing			
Rental	0	N/A	N/A
Owner-Occupied	0	N/A	N/A
Total Housing Demand Increase	0	N/A	N/A
Civilian Employees Expected to Relocate	0	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.
Source: EIFS model.

Table 5-7
EIFS Standard Model Output for MLIR (Seneca County Only)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$56,677,000	N/A	N/A
Total Sales Volume	\$89,066,000	18.6%	-5.406% to 8.042 %
Direct Employment	470	N/A	N/A
Total Employment	2,362	15.8%	-4.123% to 6.192%
Direct Income	\$7,014,000	N/A	N/A
Total Income	\$48,975,000	8.6%	-3.015% to 6.640%
Local Population	0	0	-2.949% to 1.103%
Local Off-base Population	0	N/A	N/A
Number of School Children	0	N/A	N/A
Demand for Housing			
Rental	0	N/A	N/A
Owner-Occupied	0	N/A	N/A
Total Housing Demand Increase	0	N/A	N/A
Civilian Employees Expected to Relocate	0	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.

Source: EIFS model.

Table 5-8
EIFS Standard Model Output for LIR (Seneca and Ontario Counties)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$21,099,000	N/A	N/A
Total Sales Volume	\$49,237,000	2.2%	-6.292% to 6.923%
Direct Employment	210	N/A	N/A
Total Employment	959	1.6%	-3.473% to 4.488%
Direct Income	\$2,901,000	N/A	N/A
Total Income	\$17,790,000	0.8%	-3.449% to 6.609%
Local Population	0	0	-1.982% to 1.342%
Local Off-base Population	0	N/A	N/A
Number of School Children	0	N/A	N/A
Demand for Housing			
Rental	0	N/A	N/A
Owner-Occupied	0	N/A	N/A
Total Housing Demand Increase	0	N/A	N/A
Civilian Employees Expected to Relocate	0	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.

Source: EIFS model.

Table 5-9
EIFS Standard Model Output for LIR (Seneca County Only)

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	\$16,378,000	N/A	N/A
Total Sales Volume	\$25,737,000	5.4%	-5.406% to 8.042%
Direct Employment	136	N/A	N/A
Total Employment	683	4.6%	-4.123% to 6.192%
Direct Income	\$2,027,000	N/A	N/A
Total Income	\$14,152,000	2.5%	-3.015% to 6.640%
Local Population	0	0	-2.949% to 1.103%
Local Off-Base Population	0	N/A	N/A
Number of School Children	0	N/A	N/A
Demand for Housing			
Rental	0	N/A	N/A
Owner-Occupied	0	N/A	N/A
Total Housing Demand Increase	0	N/A	N/A
Civilian Employees Expected to Relocate	0	N/A	N/A
Military Employees Expected to Relocate	0	N/A	N/A

Note: N/A = not applicable.

Source: EIFS model.

Medium Intensity, Indirect. Long-term minor beneficial effects would be expected. Reuse activities in the two-county ROI would generate secondary jobs and generate additional income in the region.

Secondary jobs created, in combination with the direct employment, would boost total employment in the ROI by 11,137 jobs. Additional income generated from indirect expenditures would increase ROI income by a total of about \$206.6 million. Total sales volume (direct and indirect) would increase by over \$571.8 million. These figures exceed historical fluctuations; however, effects would be spread out over a number of years. Using figures for Seneca County alone, long-term minor beneficial effects would be expected as well. Reuse activities would generate secondary jobs and additional income in the region. Secondary jobs created, in combination with the direct employment, would boost total employment in the ROI by 7,927 jobs. Additional income generated from indirect expenditures would increase ROI income by a total of about \$164.4 million. Total sales volume (direct and indirect) would increase by over \$298.9 million. These figures exceed historical fluctuations; however, the effects would be spread out over a number of years.

Medium-Low Intensity, Direct. Long-term minor beneficial effects would be expected. The MLIR scenario assumes a 0.05 FAR applied to the site. In the two-county ROI, approximately 2,040 employees would work on the reused site under this scenario (Table 3-2). About 727 new jobs would be generated as a result of direct expenditures associated with reuse activities, generating increases in income and spending (Table 5-6). ROI income would increase by over \$10.0 million due to creation of direct jobs. Sales volume increases directly attributable to reuse would total approximately \$73.0 million. These increases would fall within historical fluctuations for the two-county ROI.

Long-term beneficial impacts would be expected in Seneca County alone. Analysis of Seneca County shows that sales volume increases directly attributable to reuse would total more than \$56.7 million and exceed historical fluctuations. As a result of direct expenditures associated with reuse activities, 470 new jobs would be generated, creating increases in income and spending (Table 5-7). ROI income would increase by over \$7 million due to creation of direct jobs.

Medium-Low Intensity, Indirect. Long-term minor beneficial effects would be expected. Reuse activities would generate secondary jobs and additional income in the two-county ROI. Secondary jobs in combination with direct jobs created would boost total employment by 3,319 jobs. Total sales volume (direct and indirect) would increase by approximately \$170.4 million.

These figures exceed historical fluctuations; however, these increases would be spread out over a number of years. Additional income generated as a result of direct and indirect expenditures would increase ROI income by a total of about \$61.6 million, falling within historical fluctuations.

Analysis of Seneca County alone estimates that secondary jobs in combination with direct jobs created would boost total employment by 2,362 jobs. Additional income generated as a result of direct and indirect expenditures would increase ROI income by a total of almost \$49 million. Total sales volume (direct and indirect) would increase by approximately \$89.1 million. Although these figures exceed historical fluctuations, the effects would be spread out over a number of years.

Low Intensity, Direct. Long-term minor beneficial effects would be expected. The LIR scenario assumes an FAR of 0.025 applied to the site. Approximately 886 employees would work on the reused site under this scenario (see Table 3-2). In the two-county ROI, about 210 new jobs would be generated as a result of direct expenditures associated with reuse activities, generating increases in income and spending (Table 5-8). ROI income would increase by approximately \$2.9 million due to creation of direct jobs. Sales volume increases directly attributable to reuse would total approximately \$21.1 million. These increases fall within historical fluctuations for the two-county ROI.

In Seneca County alone, minor beneficial effects would be expected. As a result of direct expenditures associated with reuse activities, 136 new jobs would be generated, creating increases in income and spending (Table 5-9). ROI income would increase by approximately \$2.0 million due to creation of direct jobs. Sales volume increases directly attributable to reuse would total approximately \$16.4 million. These figures fall within historical fluctuations in the region.

Low Intensity, Indirect. Long-term beneficial effects would be expected in the two-county ROI. Reuse activities would generate secondary jobs and additional income. Secondary jobs in combination with direct jobs created would boost total employment by 959 jobs. Additional income generated as a result of direct and indirect expenditures would increase ROI income by a total of nearly \$17.8 million. Total sales volume (direct and indirect) would increase by over \$49.2 million. These increases would fall within historical fluctuations.

Analysis of indirect impacts in Seneca County alone indicates that reuse activities would generate secondary jobs and additional income in the region, resulting in beneficial impacts. Secondary jobs in combination with direct jobs created would boost total employment by 683 jobs. Additional income generated as a result of direct and indirect expenditures would increase ROI income by a total of more

than \$14.1 million. Total sales volume (direct and indirect) would increase by over \$25.7 million. These increases would fall within historical fluctuations.

5.4.15 Sociological Environment (Including Environmental Justice and Protection of Children)

Medium Intensity, Direct. Short-term adverse impacts would be expected. The direct jobs created under this scenario could increase the ROI population by as much as 5,005. This increase would exceed historical fluctuations (see Table 5-4). In Seneca County alone, the population is expected to increase by 4,871, which also exceeds historical fluctuations, resulting in adverse impacts.

More than enough vacant housing units are available in either ROI to absorb the housing demand resulting from the population increase under the MIR scenario (see Section 4.15.2). Some new housing construction could be expected.

The population increase under this reuse scenario would create a need for additional law enforcement personnel and equipment in Seneca and Ontario Counties. The loss of the federal SEDA fire protection services and the increase in activities at the property under this scenario could also create a need for additional fire protection services at the property, which could come from surrounding communities. Area hospitals have the capacity to absorb any new demand as a result of the population increase.

Reuse of the SEDLRA areas would not create disproportionately high or adverse human health or environmental impacts on minority or low-income populations of the surrounding community. Unemployed individuals could benefit from any creation of low-skill and unskilled jobs associated with implementation of this scenario.

The proposed action does not involve activities that would pose any disproportionate environmental health risks or safety risks to children. Future risks to children potentially present at the site would be addressed by remedial measures used in cleanup sites contaminated by hazardous substances.

Medium Intensity, Indirect. No impacts would be expected. Assuming 38 percent of employees could relocate from outside the two-county ROI, total population (direct plus indirect) could increase by a projected 5,005 people, a change of almost 4 percent (Table 5-4). This increase would exceed the RTVs for the two-county ROI; however, this increase would be spread out over a number of years, resulting in no long-term impacts.

In the Seneca County ROI, total population (direct plus indirect) could increase by a projected 4,871 people, a change of 14.5 percent. This increase would also significantly exceed the RTV; however, the effects would be spread out over a number of years.

In the long term, public support services could adapt to the demands of the enlarged population base, funded by new property tax revenue and sales taxes.

Reuse could require building construction and infrastructure development in the ROIs such as roads, utilities, schools, and the like. Short-term construction jobs could increase the population in the local area. Given the present rural character of the ROIs, the increase in population, and the creation of

supporting infrastructure of the magnitude projected under the MIR scenario, a variety of long-term adverse social and environmental impacts would be expected.

No adverse impacts on housing, environmental justice, or homeless and other special programs would be expected.

Medium-Low Intensity, Direct. No impacts would be expected.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected.

Low Intensity, Indirect. No impacts would be expected.

5.4.16 Quality of Life

Medium Intensity, Direct. Short-term adverse impacts would be expected. The impact on the ROIs' school systems could exceed historical fluctuations, possibly resulting in overcrowding or the need for new construction. More than 830 students could enter the school systems, an increase of approximately 3.6 percent in the two-county ROI (Table 5-5) and almost 16 percent in Seneca County alone (Table 5-4). New school construction in Seneca County could be required. The increase in population could cause an increase in the demand for family support services. However, services could be expanded and funded by increased tax revenue from the increased population.

No impacts on shops and services, recreation, or visual and aesthetic values would be expected.

Medium Intensity, Indirect. Long-term minor adverse impacts would be expected. Given the rural nature of the ROIs, visual and aesthetic values could be adversely affected by construction and infrastructure development.

No impacts on family support services, shops and services, or recreation would be expected.

Medium-Low Intensity, Direct. No impacts would be expected.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected.

Low Intensity, Indirect. No impacts would be expected.

5.4.17 Installation Agreements

Medium Intensity, Direct. No impacts would be expected. The installation agreements between the Army and local agencies for the provision of various services would continue only until disposal of the installation is complete. Services presently provided would continue to be provided by the same local entities. The agreements for water and sewer service to the hamlet of Romulus would be assumed by the owner(s) of the affected SEDA property.

Medium Intensity, Indirect. No impacts would be expected.

Medium-Low Intensity, Direct. No impacts would be expected. Conditions affecting the MLIR scenario would be similar to, but less severe than, those affecting the MIR scenario.

Medium-Low Intensity, Indirect. No impacts would be expected.

Low Intensity, Direct. No impacts would be expected. Conditions affecting the LIR scenario would be similar to, but less severe than, those affecting the MIR and MLIR scenarios.

Low Intensity, Indirect. No impacts would be expected.

5.4.18 Cumulative Effects

Medium Intensity Reuse. Long-term minor beneficial cumulative impacts would be expected. Achievement of an MIR of SEDA would indicate successful marketing of SEDA assets by SCIDA. Such a result would prove the existence of a substantial economic recovery at SEDA and would positively affect other economic activity in the ROI. The level of economic growth associated with MIR would create demand for support throughout the ROI. For instance, upgrades to the Finger Lakes Regional Airport in Seneca County would be justified to enhance access to the SEDA property.

Medium-Low Intensity Reuse. Long-term minor beneficial cumulative impacts under the MLIR scenario would be expected to be similar to those under the MIR scenario, but on a lesser scale.

Low Intensity Reuse. No cumulative effects are expected under the LIR scenario. Implementation of this scenario would resemble the activity levels, economic conditions, and environmental conditions of baseline operations.

5.5 MITIGATION SUMMARY

No Action Alternative. As discussed in Section 5.2, the no action alternative could, or in some areas would be expected to, create impacts adversely affecting land use, infrastructure, installation agreements, and economic development.

The longer SEDA were to remain in caretaker status, the greater would be the potential for the predicted adverse impacts to affect various resources. The Army would implement the following mitigation measures to reduce or avoid adverse impacts associated with caretaker status as they might occur:

- Conduct installation security and maintenance operations to the extent provided by Army policies and regulations for the duration of the caretaker period, and transfer responsibilities for these functions to non-Army entities as soon as practicable to minimize disruption of service.
- Identify clean or remediated portions of the installation for disposal and reuse and prioritize restoration and cleanup activities to ensure timely disposal and reuse of remaining portions. Recycle solid wastes and debris where practicable.

- Maintain necessary natural resources management measures, including continued close coordination with other federal agencies such as the USFWS and state agencies such as the NYSDEC.
- Maintain perimeter fence and continue the controlled hunt of the deer herd, including white deer.
- Actively support interim leasing arrangements, where environmental restoration efforts permit, to provide for job creation, habitation and maintenance of structures, and rapid reuse of the installation.

Disposal. To avoid, reduce, or compensate for adverse impacts that might occur as a result of disposal, the Army would:

- Continue to work with the SCIDA (or with Seneca County) to ensure that, to the maximum extent feasible, encumbered disposal transactions are consistent with the adopted community reuse plan and implementation strategy.
- Before final disposal, conduct complete cultural resources surveys of SEDA property to the maximum extent possible so as to ensure no adverse effects on the resources that might be present.
- Until final disposal, maintain installation buildings, infrastructure, and natural resources in caretaker status to the extent provided by Army policy and regulations.

Conveyance documents would notify future owners of the property of particular obligations concerning natural and cultural resources that would be imposed as a result of the Army's determination of the applicability of an encumbrance. Conveyance documents would also identify past hazardous substance activities at each site, as required by CERCLA and CERFA.

Reuse. The Army does not propose the implementation of specific mitigation actions for intensity-based reuse scenarios. This is appropriate because reuse planning and execution of redevelopment actions are a responsibility of non-Army entities. The following are general mitigation actions that could be implemented by other parties for the reduction, avoidance, or compensation of impacts resulting from their actions. Potential mitigation actions are suggested for those resource areas most likely to be affected by adverse impacts as a result of reuse.

- **Land use.** Adverse impacts associated with development of SEDA to a level of intensity equal to an MIR could be at least partially reduced through sound site planning and design and creation of appropriate buffer zones. County and town officials could also evaluate the desirability of establishing land use zoning mechanisms to provide for orderly growth throughout the ROI.
- **Air quality.** The permit process established in the CAA provides effective controls over potential stationary air emission sources. Adherence to the State Implementation Plan's provisions for mobile sources could address that source category. Additional mechanisms, such as application of best management practices to control fugitive dust during construction, could be used to control airborne contaminants.

- *Water resources.* Application of best management practices to reduce sediment loading to surface waters could aid in reducing impacts on water quality. Construction of stormwater detention/retention systems could help mitigate impacts associated with stormwater runoff from impervious surfaces.
- *Geology.* Disturbance of highly erodible soils should be avoided wherever possible. Should these or other soil types be disturbed, desilting basins, sediment traps, silt fences, straw barriers, and other erosion control measures could be constructed.
- *Biological resources.* Adverse impacts on biological resources would occur primarily as a result of construction. Two principal measures for conservation of significant biological resources are ensuring consultation with natural resources experts and regulatory agencies before initiating actions and implementing best management practices in association with approved construction projects, particularly with respect to protecting wetlands and other sensitive habitats. Operational controls could also be applied to minimize any adverse effects of noise and light on sensitive biological resources. Preservation of the herd of white deer could be achieved by future landowners' maintenance of the fence around the present ammunition storage area and by application of best management practices such as periodically conducting controlled hunts in a manner similar to that practiced by the Army during its stewardship of the property. If active management measures are not continued, it is expected that the herd would likely cease to exist as a viable population.

5.6 CUMULATIVE EFFECTS SUMMARY

As defined in Section 5.1.1, cumulative impacts are considered those which result from the incremental effects of an action when considering past, present, or reasonably foreseeable near-term future actions, regardless of the agencies or parties involved. In other words, cumulative impacts can result from individually minor, but collectively significant, factors taking place over time as they may relate to the entire installation and region.

Expected cumulative effects for no action, disposal, and reuse are presented at Sections 5.2.18, 5.3.18, and 5.4.18, respectively.

Cumulative effects of caretaker status, disposal, and reuse following cessation of mission activities at the installation could become blurred. There is considerable potential for caretaking activities of the Mixed Use Area to occur simultaneously with disposal and reuse of other parcels.

The SCIDA is marketing Seneca County's positive attributes—plentiful land, good labor force, proximity to the New York Thruway, and rail service and air freight resources. The SCIDA would be expected to continue to promote the Seneca Falls Industrial Park, a complex of more than one-half million square feet suitable for industrial and office use that is located northeast of Seneca Falls. Even so, current and proposed development activities within the ROI are limited. Viewed in the context of Seneca County development activities, SEDA assets represent a capacity for development that might not be easily used to its full potential.

Land use trends in Seneca County reflect population centers and commerce in the north and predominantly rural, agricultural uses in the south. Redevelopment at the installation would not be

expected to influence land uses in the region because SEDA would represent a rather remote pocket of development within an otherwise rural portion of Seneca County.

Economic growth would be expected to induce cumulative effects on the local transportation network and infrastructure systems, especially those related to energy distribution. Achievement of medium intensity reuse could justify provision of natural gas service to SEDA and nearby potential customers such as the prison in Willard. The most visible of the changes would occur with respect to land use, especially in the immediate vicinity of SEDA. While creation and management of a conservation area would stabilize use of a relatively large area, lands to the east of the installation could undergo development. Increased demolition, construction, and traffic would result in increases in air emissions and particulates. Commencement of operations in 1998 at a new glass factory in Geneva would contribute to regional air emission loading. It is not probable, however, that the region would be classified as nonattainment for criteria pollutants as a result of ongoing activities and the amounts of air emissions that might occur at SEDA. Long-term minor adverse cumulative impacts on regional surface water quantity and wetlands might occur as a result of increases in impervious surfaces at SEDA and elsewhere.

The Special Resource study to evaluate the potential for New York's canals to receive National Heritage Corridor designation could lead to national attention for the region and could increase opportunities for federal and state funding, tourism, conservation, and technical assistance. Seneca County and the city of Geneva would benefit from National Heritage Corridor designation because of the connectivity of the Cayuga-Seneca Canal with navigable portions of the Erie Canal. A fully developed National Heritage Corridor would present a new gateway for tourism to the Finger Lakes region. Such an effect would be supportive of development at SEDA and other sites within the region.

Long-term beneficial cumulative changes brought about by economic development and an increase in tax base would occur with respect to quality of life, availability of public services, schools, housing, and infrastructure.

5.7 ENVIRONMENTAL JUSTICE SUMMARY

On February 11, 1994, the President issued Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*. The order requires that federal agencies conduct their programs, policies, and activities that substantially affect human health or the environment so that there are not disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

The Army's proposed action is not designed to create a benefit for any group or individual. As part of the screening process, entities may express interest in installation assets to provide assistance to homeless persons. Upon completion of the screening process, there may be expression of interest by individual(s) or group(s) to purchase by competitive bid or negotiated sale of parts or all of the installation. In either of these cases, the disposal method itself would not create disproportional environmental impacts on any group.

Disposal of SEDA, therefore, would not create disproportionately high or adverse human health or environmental impacts on minority or low-income populations of the surrounding community.

5.8 CLEAN AIR ACT CONFORMITY

Section 176(c) of the CAA requires that no federal agency may engage in, support, or provide financial assistance for license or permit, or approve any activity that does not conform to an approved or promulgated state implementation plan. Conformity to an implementation plan means conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. It further refers to conducting activities so that they will not cause or contribute to any new violation of any standard in any area, increase the frequency or severity of an existing violation of any standard in any area, or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area. These requirements apply regardless of an area's attainment status.

Under CAA regulations at 40 CFR Part 93, Subpart B, conformity determinations must be made for actions occurring in nonattainment areas and maintenance areas for NAAQS for sulfur dioxide, carbon monoxide, ozone, nitrogen oxides, lead, and particulates (matter less than 10 microns in diameter). The proposed action occurs in an attainment area for all of these pollutants; a conformity determination is not required. Moreover, no information has come to light indicating that the proposed action would cause classification of the local air quality as in a nonattainment status or otherwise constitute a violation of Section 176(c) of the CAA as set out in the preceding paragraph.

5.9 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The following paragraphs identify major adverse environmental impacts that cannot be avoided in connection with the no action, encumbered disposal, and unencumbered disposal alternatives.

No Action. Notwithstanding Army efforts to maintain the installation's assets, deterioration of SEDA facilities would occur as a function of age. Loss of jobs and attendant adverse impacts on socioeconomics in the ROI would occur as a result of congressional approval of the BRAC Commission's recommendation for closure of the installation.

Encumbered Disposal. Implementation of the encumbered disposal alternative at SEDA would be expected to result in minor adverse impacts on land use, air quality, noise, economic development, and installation agreements. The impacts discussed in Section 5.3 (and depicted in Table 5-10) would be unavoidable. In light of the BRAC Commission recommendation for SEDA and the general requirements of the Federal Property Management Regulations, the Army is obligated to move forward with disposal of the SEDA property. As discussed in Section 3.3.1, the Army would recognize encumbrances in order to satisfy several objectives. The environmental consequences of the encumbrances are reasonably predictable, though in some instances the point in time at which they would be most noticeable might vary. For instance, the remedial activities encumbrance would be accompanied by on-site remediation efforts that, at various times and places, would result in generation of noise.

Unencumbered Disposal. Implementation of the unencumbered disposal alternative at SEDA would be expected to result in minor adverse impacts on land use, air quality, noise, geology, water resources, infrastructure, biological resources, cultural resources, economic development, sociological environment, and installation agreements. Unencumbered disposal of the property would be free of

**Table 5-10
Impacts Summary**

Resource Areas	No Action			Disposal			Reuse								
	Caretaker - Direct	Caretaker - Indirect	Cumulative Impacts	Encumbered Direct	Encumbered Indirect	Unencumbered Direct	Unencumbered Indirect	Cumulative Impacts	Medium Intensity Direct	Medium Intensity Indirect	Medium-Low Intensity Direct	Medium-Low Intensity Indirect	Low Intensity Direct	Low Intensity Indirect	Cumulative Impacts
Land Use	⊕	⊖		⊖	⊕	⊖	⊖	⊕	●	⊖					⊕
Climate															
Air Quality	⊕	⊕		⊕				⊖	⊖	⊖	⊖				
Noise	⊕	⊕		⊖		⊖		⊖	⊖	⊖	⊖				
Geology		⊕		⊕	⊕	⊖	⊕		⊖	⊖	⊖	⊖	⊖	⊖	
Water Resources		⊕		⊕	⊕	⊖			⊖	⊖	⊖	⊖	⊖	⊖	
Infrastructure	⊖	⊖	⊖	⊕	⊕	⊖	⊖	⊖	⊖	⊖	⊖				
Hazardous & Toxic Subs.	⊕			⊕		⊖	⊖								
Permits & Reg. Auths.								⊖							
Biological Resources	⊕	⊖	⊖	⊕	⊕	⊖	⊖		⊖	⊖	⊖	⊖	⊖	⊖	
Cultural Resources	⊕	⊖		⊖	⊖	⊖	⊖	⊕							
Legacy Resources															
Economic Development	⊖	⊖	⊖	⊖	⊕	⊖	⊖	⊕	⊕	⊕	⊕	⊕	⊕	⊕	
Sociological Environment	⊖			⊕		⊖			⊖						
Quality of Life	⊖			⊕		⊖		⊖	⊖						
Installation Agreements	⊖														

Impacts Legend

Long-term Minor Beneficial Impact	Short-term Minor Adverse Impact	Long-term Significant Adverse Impact
Short-term Minor Beneficial Impact	Long-term Significant Beneficial Impact	Short-term Significant Adverse Impact
Long-term Minor Adverse Impact	Short-term Significant Beneficial Impact	No Impacts Expected
E - Encumbered Disposal	U - Unencumbered Disposal	

deed-recorded limitations. The adverse impacts discussed in Section 5.3 in relation to unencumbered disposal (and depicted in Table 5-10) would, for the most part, be unavoidable.

5.10 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that use of these resources will have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable time frame (e.g., energy and minerals). Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species).

Caretaker status of SEDA would not be expected to result in any irreversible or irretrievable commitments of resources. Reuse of the property would result in irreversible resource commitments of energy and materials consumption. These commitments, though, would not be at unusual or unacceptable levels.

5.11 SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Short-term uses of the biophysical components of man's environment include direct construction-related disturbances and direct impacts associated with an increase in population and activity that occurs over a period of less than 5 years. Long-term uses of man's environment include those impacts occurring over a period of more than 5 years, including permanent resource loss.

Several kinds of activities could result in short-term resource uses that compromise long-term productivity. Filling of wetlands or loss of other especially important habitats and consumptive use of high-quality water at nonrenewable rates are examples of actions that affect long-term productivity.

Table 5-10 provides a graphic summary of impacts on each resource area associated with implementation of each disposal and reuse alternative.

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**SECTION 9.0:
PERSONS CONSULTED**

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APPENDIX A

**PUBLIC COMMENTS ON THE DRAFT EIS
AND ARMY RESPONSES**

The Army held a Public Meeting on January 6, 1998, in Waterloo, New York, to receive comments on the Draft Environmental Impact Statement. No verbal comments were received at the meeting (a verbatim transcript of the meeting is included in this appendix). Written comments were received from 5 different entities. These comments and the Army responses are included in this appendix.

Draft Environmental Impact Statement
On Disposal and Reuse of
Seneca Army Depot Activity

Public Meeting held at the Seneca County Office Building, Dipronia Drive, Waterloo, New York, on the 6th day of January, 1998.

APPEARANCES: MR. PAUL WILBER
Tetra Tech, Inc.

MR. HUGH MC CLELLAN
U.S. Army Corps of Engineers,
Mobile District

REPORTED BY: MARY F. GRASEK

1 MR. WILBER: Good evening. My name is Paul
2 Wilber and I'm here on behalf of Mobile District
3 Corps of Engineers and Seneca Army Depot. On
4 behalf of Colonel Olsen, the Commander, I'd like
5 to welcome you to this evening's meeting, which is
6 to take comments on the environmental impact
7 statement for disposal and reuse of the
8 installation.

9 I apologize. I have a little laryngitis. So
10 if you can't quite hear me in the back of the
11 room, just waive at me and I'll repeat what I
12 said.

13 We are here for two things tonight. First,
14 is to take comments on the adequacy of the
15 environmental impact statement, the draft that has
16 been prepared. Second, to take comments on the
17 merits of the alternatives that are evaluated in
18 the document.

19 There is a dynamics here that I need to
20 express to you; that is, that this is not a public
21 information meeting. It's not a dialogue type
22 meeting. Rather, this is an opportunity under the
23 environmental regulations for us, the preparers of
24 the document, to listen to the public and get your
25 input on the draft EIS.

1 Let me take one moment to review the National
2 Environmental Policy Act, which is the statute
3 under which this document has been prepared. NEPA
4 is the Federal Law that requires the
5 identification and analysis of potential
6 environmental effects of certain proposed
7 environment actions and alternatives before those
8 actions take place. It's a full disclosure law
9 with provisions for public access to and public
10 participation in the federal decision making
11 process.

12 Let me here review for you the steps for the
13 preparation of an EIS. Back in September of '96,
14 we had a meeting right here to scope the issues
15 that would be addressed by the document. Over the
16 next 13 or 14 months, we assembled data, analyzed
17 potential impact of disposal and reuse and we have
18 considered mitigation.

19 Last November 28th, we prepared and released
20 the draft EIS and we put that out to the public.
21 In a few months, we will prepare and promulgate a
22 final EIS and about a month after that, the Army
23 expects to prepare and promulgate its records of
24 decision, and at that point, begin to take its
25 action.

1 What about what's in the EIS? Well, we have
2 two things going on. First, we have the proposed
3 action, which is the disposal of property, which
4 has been made available because of the BRAC
5 commission. And with respect to that disposal
6 action, there are three things that we look at;
7 encumbered disposal, unencumbered disposal and no
8 action.

9 Now, encumbered disposal means that, if the
10 property is transferred, there will be something
11 in the deed that is an encumbrance which prevents
12 a full use of the property. For example, if there
13 asbestos in a building, the army will notify the
14 recipient of that building of the presence of
15 asbestos. So that's what an encumbrance is.

16 The second importance of our effort is to
17 analyze reuse. Those are the secondary actions
18 that flow from disposal of the property and we
19 look at reuse intensity. In the case of Seneca,
20 we looked at medium, medium-low, and low intensity
21 reuse scenarios. With respect to its primary
22 action disposal, the army has a preference and
23 that is after looking at all the environmental
24 affects, the army preferred to dispose the
25 property as an encumbrance.

1 With respect to reuse, the Army doesn't
2 state a preference. That is the community's role.
3 The community has a reuse plan and that reflects
4 how they want to reuse the property.

5 What we analyze in the document, we analyze
6 no action; that is, the caretaker status from the
7 time the installation is closed. It may not be
8 immediate that the disposal will occur while the
9 army still has to maintain the property. We call
10 that no action. We will look at direct, indirect,
11 and cumulative effects.

12 What would happen in that situation, we also
13 look at encumbered and unencumbered disposal with
14 respect to the direct, indirect, and cumulative
15 effects. Then we look at reuse again, direct,
16 indirect and cumulative effects.

17 What, specifically, does the document take a
18 look at here? I have a list of the resource areas
19 that have been developed and analyzed in this
20 document. Back in September of 1995, the Army
21 issued a manual on how to do NEPA documentation
22 with respect to BRAC. That manual was coordinated
23 with the other federal agencies and it was
24 coordinated throughout the Army. And these
25 resource areas were developed as those which would

1 be relevant to disposal and reuse of an
2 installation.

3 Our document here follows this format. There
4 is one area that I ought to mention to you because
5 people ask questions about it from time to time.
6 That's hazardous and toxic substances. Our
7 document identifies what the condition of the
8 property is, but we don't solve the cleanup
9 process at the installation, not in this
10 document. There is an entirely separate decision
11 making process for the cleanup of the property
12 and our NEPA process does not get into that
13 cleanup decision making process. That's separate
14 and apart, but we do describe it because it is
15 important for reuse. Where there might be
16 contamination or the status of cleanup that's
17 relevant to reuse.

18 This slide is a little busy. This is a
19 summary of impacts copied from the EIS that we put
20 in the draft. And you can see, in our opinion,
21 there is one significant impact potential. I'm
22 pointing now to you land use, if reuse, which
23 would be a medium intensity level, we would
24 believe that would be a significant impact. The
25 reason for that is the way we calculate low,

1 medium-low and medium intensity reuse.

2 Under medium intensity reuse, there would be
3 about six million square feet of built space at
4 the Depot. That's by far much more than there is
5 today and that kind of change in the land would be
6 significant; especially, in comparison to adjacent
7 properties. So we think that's significant.

8 The other reuse areas, with respect to no
9 action, or disposal or reuse, they are a
10 combination of a variety of positive and negative
11 effects that would occur in short term and
12 continue long term. If you have read the
13 document, you have a copy of this, in the
14 executive summary, as well as at the end of
15 chapter five, you can take a look at it in more
16 detail.

17 What we want to do tonight is have you
18 comment. That's why we are here. We do have a
19 couple of procedures. What we will do, in just a
20 minute, we will take a break. If you want to sign
21 up for comments, that's fine. So we have a
22 sign-up roster. We are not going to use the
23 microphone this evening. We have a small room.
24 We are pretty cozy here.

25 If you have comments, keep it to five

1 minutes; a little bit more, a little bit less.
2 I'm not going to time you. I don't have a wrist
3 watch. Just don't keep us here until 12:00 with a
4 four-hour comment.

5 An alternative, you can submit written
6 comments to Mr. McClellan. He is our point of
7 contact down at the Mobile District. Raise your
8 hand. Thank you. He is here this evening. This
9 is the address and if you want to submit comments
10 to him, please use that address. We would like to
11 have those comments by January 16th, if we could.
12 We do have a schedule with respect to the
13 remaining NEPA, the preparation of EIS and if you
14 are going to submit written comments, we really do
15 need them by January 16th.

16 At this time, what I'd like to do is, we will
17 take a recess. I'm going to reset the room just a
18 little bit, put the podium on one side so if
19 someone does want to make comments, they can come
20 up, introduce themselves, make their comments. We
21 have a court reporter taking down verbatim notes.
22 We will go into all the comments. Are there any
23 questions?

24 MR. SCOTT: I thought it was January 12th.
25 I'm just trying to schedule my work.

1 MR. WILBER: We have extended the period at
2 the request of one of the federal agencies who
3 needed a few more days. So there is additional
4 grace time in there. All right. Let's take a
5 recess.

6 (Whereupon a recess was taken.)

7 (Back on the record.)

8 MR WILBER: Okay. Let's resume. We have a
9 sheet for signing up for comments at the front
10 door and we have no one signed up for comments.
11 That's the end. Therefore, this is your last
12 chance. I'm making last call. Now, is there
13 anyone who would like to make comments on our
14 draft EIS? Let the record reflect no response.

15 Mr. McClellan, with your permission, we will
16 close the meeting.

17 MR. MC CLELLAN: Yes.

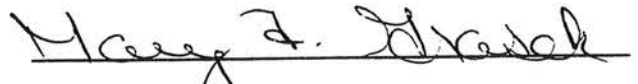
18 MR. WILBER: This meeting is closed. Thank
19 you very much.

20 * * * * *

REPORTER'S CERTIFICATION

I, Mary F. Grasek, do hereby certify that I reported in stenotype shorthand the Public Meeting held on the 6th day of January, 1998 in the matter of Draft Environmental Impact Statement on Disposal and Reuse of Seneca Army Depot Activity; and

That the transcript herewith numbered pages 1 through 9 is a true, accurate and correct transcript of those stenotype shorthand notes.


MARY F. GRASEK

DATED AT: Rochester, New York
this 20th day of January, 1998.



Seneca County Industrial
Development Agency
Seneca Army Depot
Bldg. 101
Romulus, NY 14541
607-869-1373
Fax: 607-869-1356

January 7, 1998

Mr. Jim Collins
Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, VA 22030

Fax'd: (703)385-6007
Original - Mailed

Dear Mr. Collins:

The draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of the Seneca Army Depot has been reviewed. I realize Amendment #1 to the Reuse Plan was not completed in sufficient time for the text to be changed; therefore, the following general comments are furnished for your information for future editing:

[1] The acreage of the fed to fed transfer for the Loran-C parcel is actually 292 acres. The amendment figure (180 acres) was in error and the correction will be made at some future date.

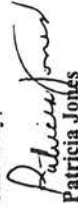
[2] The majority of the acreage taken to accommodate a prison is from the Conservation Area, not the Warehouse area.

[3] The Training Range area will be conveyed with the Airfield Parcel from the Army to the IDA.

[4] The Seneca County IDA will be selling both Lake Housing Area and Elliot Acres Housing and will use the proceeds of this transaction to fund operating and maintenance expenses for development of IDA acquired depot property.

If you have any questions, please feel free to contact me at (607)869-1373.

Sincerely,


Patricia Jones

Project Coordinator
Seneca County Industrial Development Agency

Copy Furnished:
Mr. Glenn Cooke, Exec Dir SCIDA

- 1 The size of the parcel subject to federal transfer for the Loran-C Station is identified in the document as being "approximately 292 acres."
- 2 Changes reflecting comment made in text discussions in Executive Summary and Section 3.
- 3 Changes reflecting comment made to text throughout document.
- 4 Changes made to reflect comment in Section 2.

U.S. ENVIRONMENTAL PROTECTION AGENCY - REGION II

290 BROADWAY
NEW YORK, NEW YORK 10007-1866

January 12, 1988

Dr. Susan I. Rees
U.S. Army Corps of Engineers
Mobile District (ATTN: CESAM-PD-EC)
109 St. Joseph Street
P.O. Box 2288
Mobile, Alabama 36628-0001

Class: EC-2

Dear Dr. Rees:

The Environmental Protection Agency (EPA) has reviewed the draft environmental impact statement (EIS) for the Disposal and Reuse of the Seneca Army Depot Activity (SEDA), New York. This review was conducted in accordance with Section 309 of the Clean Air Act as amended (42 U.S.C. 7609, PL 91-604 12(a), 84 Stat. 1709), and the National Environmental Policy Act.

Pursuant to the 1995 round of actions under the Defense Base Closure and Realignment Act (BRAC 95), the SEDA property is scheduled for closure on or before July 13, 2001. The draft EIS evaluates the environmental impacts associated with disposal and reuse of the SEDA property. Specifically, the draft EIS evaluates two action alternatives for the disposal and reuse of the property: encumbered disposal (involving the use of deed restrictions to restrict uses of portions of the property) and unencumbered disposal; as well as no action. Both disposal alternatives are evaluated under three possible reuse intensities (low, medium-low, and medium); greater intensities of reuse were rejected as unrealistic. The draft EIS, however, does not indicate which alternative and reuse intensity the Army prefers. Based upon the analyses presented in the draft EIS, we offer the following comments.

① Ground Water

The discussion of ground water contamination and encumbrances needs to be expanded, as it is presently limited to only trichloroethylene. It should mention that dichloroethylene, vinyl chloride, metals, and radionuclides have also been detected at the site at levels in excess of state/federal standards. In addition, it should discuss the results of the Ash Landfill ground water modeling, and indicate that necessary Remedial Investigations have not yet begun for 8 of the 12 operable units.

The document should also indicate that the ground water at SEDA is classified by New York State as Class GA, protected as a potential drinking water source.

② Wetlands

The draft EIS states that approximately 496 acres of wetlands are present on the SEDA property, and indicates that these could be preserved and protected through notification of prospective property owners of their obligations under Section

Investigations of hazardous waste contamination at SEDA are proceeding in accordance with the Federal Facilities Agreement (FFA) entered into by the Army, U.S. EPA, and State. Thus far, trichloroethylene contamination has been confirmed in a plume in the vicinity of the Ash Landfill, and the Army has determined that an encumbrance as described in Section 3.3.1 of the EIS is appropriate.

Other contaminants that have been detected in groundwater at the Ash Landfill include dichloroethylene and vinyl chloride (decay products of trichloroethylene). In light of the potential for contaminants other than trichloroethylene, the groundwater use prohibition recited in Section 3.3.1 has been modified slightly.

The Army has used two EPA-approved test protocols to evaluate groundwater for the presence of metals. One test procedure shows the presence of metals, and the other procedure shows no metals are present. The Army and EPA are working to resolve which appropriate test procedure should apply.

One radionuclide isotope (radium²²⁶) has been found in groundwater at levels in excess of state and federal standards at the northern extremity of the installation. The presence of that isotope is known to be due to burials of a variety of equipment dials and gauges that were painted with luminescent paints.

There are 13 operable units at SEDA, consistent with the information contained in Schedule 5 of the FFA. To date, remedial investigations at 6 of the 13 operable units identified in the FFA are underway, with the 7 remaining operable units pending initiation of their investigation. As matters proceed, the public can obtain further information on the current status of investigations into potential hazardous waste contamination from the BRAC Environmental Coordinator at the installation.

Investigatory actions by the Army have been consistent with the State's classification of groundwater as Class GA.

Text changed in Section 3.3.1, in the groundwater use prohibition encumbrance, prior to the final sentence in the paragraph insert: "Ongoing and future investigations of groundwater may result in the identification of other contaminants which would cause similar groundwater use prohibitions." In Section 4.7.2, text has been added to reflect the presence of trichloroethylene decay products in the groundwater and the classification of the groundwater as GA.

2 Wetlands have been encumbered as described in Section 3.3.1. This

encumbrance includes a provision that the Army will notify prospective transferees of areas that have been identified as wetlands. After disposal, transferees will have the responsibility to comply with CWA Section 404 and any applicable state or local regulations pertaining to wetlands. The best management practices identified in items 2, 3, and 4 of the comment are typical mitigation practices that might be part of a permit or site development plan. The discussion under *Biological resources*, in the Mitigation Summary (Section 5.5) has been changed to include: "... particularly with respect to protecting wetlands or other sensitive habitats."

In response to the editorial note about the size threshold for jurisdictional wetlands, the second sentence under *Unencumbered Disposal, Indirect*, (Section 5.3.11; page 5-15, line 28) has been eliminated. With respect to the suggestion that the EIS clarify that the C.A. has no minimum jurisdictional acreage threshold, the Army notes the distinction between *protection* of wetlands under EO 11990 (as accomplished under the proposed wetlands encumbrance) and the *regulation* of wetlands under CWA Section 404.

3

The Army recognizes that the historic property inventory for SEDA is only partially complete at this time. However, in support of this NEPA analysis and in accordance with the requirements of the National Historic Preservation Act (NHPA), the Army has initiated consultations with the NYSHPO concerning the steps that will be necessary to complete the SEDA historic property inventory. The Army has also taken into consideration, as a part of this NEPA analysis, the steps that will be taken to either protect or mitigate for the loss of any SEDA properties which may be found to be eligible for the National Register of Historic Places (NRHP). Studies to complete the SEDA historic property inventory have been initiated.

A draft report documenting the inventory of historic architectural resources has been completed and is being reviewed by the Army prior to submission to the New York State Historic Preservation Officer (NYSHPO). The Army has also initiated consultations with the NYSHPO to determine: 1) the adequacy of past archeological surveys

2

404 of the Clean Water Act. We do not believe that a one-time notification, by itself, will provide sufficient long-term protection to these lands. Instead, we would favor "encumbered disposal" as part of any preferred alternative.

Specifically, property deeds would be encumbered to: 1) require that future buyers/transferees be informed of the possible presence of U.S. jurisdictional wetlands and the need for wetlands permits from the U.S. Army Corps of Engineers and/or the New York State Department of Environmental Conservation for certain development activities; 2) stipulate the use of best management practices in construction and development design to minimize sedimentation and erosion impacts on wetlands; 3) require assessing the hydrologic impacts of increased run-off to wetlands from proposed developments areas and mitigation for these impacts; and 4) require inclusion of upland buffer zones in development plans to minimize degradation of wetland habitat and water quality from such factors as storm water run-off and noise/light/activity encroachment.

As an editorial note, on page 5-15, the discussion on lines 21-27 implies that not all on-site wetlands are under U.S. jurisdiction, leaving wetlands of less than 12.4 acres unregulated. The final EIS should clarify that, while this is the case under New York State law, the wetlands jurisdiction of the federal Clean Water Act has no minimum acreage threshold.

③ Historic and Cultural Resources

The document indicates that the studies and consultations to ensure proper mitigation of potential impacts to historic and cultural resources are presently ongoing. It further indicates that, if any significant resources are determined to be present, mitigation measures will be included as conditions of transfer or as deed restrictions on particular properties in accordance with the examples of deed restrictions provided. However, without sufficient information concerning the types and extent of cultural resources on the site, the acceptability of this approach cannot be determined. Accordingly, we recommend that the final EIS include the results of the ongoing investigations and indicate that a Memorandum of Agreement (MOA) will be executed between the U.S. Army and the State Historic Preservation Office concerning compliance with the National Historic Preservation Act for this BRAC site. The provisions of the MOA should be discussed in the final EIS; and the MOA should be executed before issuing the project's record of decision and prior to transfer of any property.

④ Air Quality

SEDA is located in an attainment area for both ozone and carbon monoxide. In addition, the draft EIS indicates that the disposal of SEDA is exempt from general conformity requirements under the provisions of 40 CFR Part 51. We concur with this determination. Furthermore, based on our review of the light to medium intensity reuse scenarios discussed in the draft EIS, we do not believe that

conducted for SEDA and 2) the level of survey required to complete the inventory of SEDA archeological properties. As a result of these consultations, a draft report has been prepared which develops an archeological field survey methodology for completing the SEDA archeological inventory. This draft report is under review by the Army and will be forwarded to the NYSHPO shortly. Following receipt of comments from the NYSHPO, the Army will undertake the necessary field studies to complete the archeological inventory for SEDA.

No historic properties at SEDA will be disposed of to non-federal entities until the NHPA Section 106 consultation process is complete. If historic properties are found at SEDA, the Army, in accordance with 36 CFR Part 800: Protection of Historic Properties, will enter into consultations with the NYSHPO, the Advisory Council on Historic Preservation (ACHP), and other interested parties to determine the effect the disposal action will have on these historic properties. If the disposal action is found to adversely affect SEDA historic properties, the consulting parties will seek means to either avoid or mitigate for these adverse effects. Agreements reached by the consulting parties will be incorporated into an agreement document that will be signed by the consulting parties.

As noted in the EA, there are two basic means for the Army to dispose of historic properties to non-federal entities, either with or without an encumbrance. If an encumbrance is used, the agreement document to be negotiated between the Army, NYSHPO, ACHP, and other interested parties will specify the type and wording of the encumbrance/deed restriction to be passed on to the new owner of the historic property. In most instances, deed restrictions require the new owner to either preserve the historic property in accordance with specified standards or to consult with the SHPO to arrive at mutually agreeable and appropriate measures for mitigating the adverse effects of a proposed undertaking.

If the unencumbered alternative is used to dispose of historic properties, the Army, NYSHPO, ACHP, and other interested parties will consult to determine the measures that will be employed to mitigate for the loss or alteration of the historic properties. These mitigation measures can be completed by either the Army or other parties, depending on agreements reached as part of the NHPA Section 106 consultations.

implementation of any of the disposal alternatives would adversely impact air quality in the region.

Miscellaneous Editorial Comments

- ⑤ Figure 2-3, showing the proposed reuses, is out of date. In October 1997, the reuse plan was updated to include a proposed prison location at SEDA. In addition, the future use of the airfield was modified, and the training ranges deleted. The final EIS should reflect these changes throughout and address their effects on the impact analyses.
- ⑥ Lead-based paint hazards - the discussion on pp. 3-5 and 3-6 of the draft EIS is not consistent with the "Lead Based Paint Warning and Covenant" that the Army is currently proposing to utilize in leasing the North End property for use as a correctional facility/school containing residential dormitories. The final EIS should reflect the Army's actual current policy in this regard.
- ⑦ Table 4-4 and Figure 4-4 - It should be noted that EPA has not concurred with the total number of acres which the Army is considers to be eligible for listing as Category 1 areas (Areas where no release or disposal ... has occurred).
- ⑧ The draft EIS indicates there are only "six small, relatively discrete" unexploded ordnance (UXO) sites at SEDA, while the Environmental Baseline Survey identified 19 such known or suspected parcels, some of which are as large as 45 acres. The final EIS should explain and resolve this apparent discrepancy.
- ⑨ Section 4.17 Installation Agreements - It would be appropriate to reference and discuss existing Federal Facility Agreement signed by the Army, EPA, and NYSDEC. In conclusion, and in accordance with EPA policy, we have rated this draft EIS as EC-2, indicating that we have environmental concerns (EC) about ground water contaminant remediation, and impacts to wetlands and cultural resources, and that additional information (2) must be presented in the final EIS to address these concerns.
- If you have any questions concerning these comments, please contact William Lawler, P.E., of my staff at (212) 637-3728.
- Sincerely yours,

Robert W. Hargrove, Chief
Strategic Planning and Multi-Media Programs Branch

4 Air quality would be adversely affected to a minor degree under the Medium and Medium-low intensity reuse scenarios based on the air modeling conducted during this analysis. The Army agrees with the view raised by the comment about no regional affects because the mobile-source impacts would occur over a wide area resulting in less than detectable pollutant concentrations throughout the ROI.

5 The most recent version of the amended reuse plan will be reflected in the FEIS.

6 The warning and covenant referenced in the comment has been developed specifically for a pending lease of the institutional area. For disposal (conveyance) of property which is the subject of this EIS, the lead based paint covenant included at Appendix C and described in Section 3.3.1 is a typical covenant developed for use by the Army.

7 The Army acknowledges that EPA has not concurred with the characterization of property identified as Category 1.

Text added to Section 4.9.4: Concurrence by regulatory agencies on environmental conditions codes is only required with regard to parcels which the Army desires to transfer under the authority of CERCLA Section 120(h)(4).

8 Information on the number of UXO sites was taken from Table 4-2 ("Potential Contamination Areas") of the EBS. The Table reflects six locations where UXO may be present. Section 5.1.8 ("Qualified Parcels") of the EBS more fully reports the extent of potential UXO. That Section indicates there are 11 parcels that may contain UXO. Text of the EIS has been amended accordingly.

9 The agreement will be noted in Section 4.17 and also in Section 4.9 (Hazardous and Toxic Substances).



John P. Cahill
Commissioner
John T. Hicks
Regional Director

New York State Department of Environmental Conservation

Region 8 Division of Environmental Permits
6274 East Avon-Lima Road, Avon, New York 14414-9519
Telephone: (716) 226-2466, Fax: (716) 226-2830

January 9, 1998

Mr. Jim Collins
Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, VA 22030

Dear Mr. Collins:

RE: Draft Environmental Impact Statement (dEIS) for BRAC 95 Disposal and Reuse of Property at Seneca Army Depot Activity
Romulus (T)/Varick (T), Seneca (C), NY

The New York State Department of Environmental Conservation (NYSDEC) as a cooperating agency offers the following comments on the December 1997 dEIS. Attachment 1 indicates that there is no commitment from NYSDEC at this time in reference to the 8,500 acre conservation/recreation area. There are additional references in the dEIS to NYSDEC ownership/management of SEDA lands and the entire document needs to be proofed so that it is consistent with the position that there is no commitment from NYSDEC at this time.

[1] Page 2-11 Table 2-1 lists the facility caretaker maintenance procedures. It is suggested that the caretaker checklist include an item to check impoundments and control structures for damages which could result in an uncontrolled release of water.

[2] Page 3-6, line 24-29 This section relates to Section 404 of the Clean Water Act and wetlands. It should be indicated at NYSDEC implements the 401 Water Quality Certification Program with coordination with the US Army Corps of Engineers (COE) 404 permit program. Since wetlands are to be encumbered and may affect the planning for future reuse project, the dEIS should indicate whether the wetlands presented on maps are from the National Wetlands Inventory (NWI) maps which were prepared primarily from high altitude aerial photographs. There is a margin of error in NWI maps and small wetlands might not appear on the map. If the Army is not undertaking a wetland delineation program for Seneca, then consideration should be given to the encumbrance language to point out the need for jurisdictional boundary determinations for reuse projects in or near wetlands.

[3] Page 4-29, line 5 In reference to the section on storage and handling areas, note that accumulation areas do not have interim status. They are designated by the facility and operated as specified in a New York State regulation 6NYCRR Part 372. For line 15 on this page, note that no violations were found as a result of the NYSDEC October 1997 inspection.

1 Table 2-1 has been amended to include periodic checks of man-made impoundments.

2 The Army's use of the wetlands encumbrance, based on Executive Order 11990, is founded on an interest in appropriate planning and practices related to dredge and fill activities. Section 401, relevant to certification of actions meeting water quality standards, is not directly contemplated by the Executive Order.

The final paragraph of Section 4.1.1.4 notes the limitations often inherent in National Wetland Inventory mapping and recites the requirement for jurisdictional boundary determinations prior to land disturbance activities.

3 Text has been amended as suggested.

Mr. Jim Collins
January 9, 1998
Page 2

[4] On page 4-29 under Uses, note that oils, greases and antifreeze are not typically hazardous wastes. [5] On page 4-30 the title of the table 4-3 could be changed to Qualities of Regulated Wastes. In reference to this same table, note that used motor oil is not usually considered hazardous. Also note that if used batteries were lead acid type batteries destined for reclamation, they are not hazardous waste.

[6] Page 4-34, line 27-31 Note that a one foot UXO sweep for livestock grazing and wildlife preserve may not be an adequate depth considering that a wildlife preserve could involve quite a few impoundments and that grazing could involve drainage improvements and placement of fence posts at a depth greater than one foot.

[7] Page 4-37, line 11-16 The Department raised the issue of potential for exotic plant species at the Depot as a result of the review of a preliminary dEIS and James Davidsons November 5, 1997 letter provided a response. There is the potential that Army activities have introduced exotic plants to the Depot. An exotic plant species assessment by qualified experts is recommended. Dr. Bernd Blossy at Cornell University (607-255-5314) would be knowledgeable of assessment methods and is available to discuss this with Army officials. The presence of exotic plants could affect management by any party of lands in the conservation/recreation area.

[8] The location of flood plains should be recognized in the dEIS and that a development permit for work in designated flood hazard zones could be required from the Town of Varick or the Town of Romulus.

Please contact me if you have any question about the items in this letter.

Sincerely,



Robert K. Scott
Deputy Regional Permit Administrator

attach.

cc w/attach: Carla Struble, EPA
Hugh McClennan, US Army
Steve Absolon, Seneca Army Depot
Tom Jaskoff, Montezuma National Wildlife Refuge
Dr. Bernd Blossy, Cornell
Pat Jones
Marsden Chen, ATTN: Jim Quinn
F. Ricotta
D. Rollins
D. O'dell
USFWS-Cortland office

4 Used oils, greases, and antifreeze are not typically classified as hazardous waste. At SEDA, testing applied to waste oils, greases, and antifreeze often result in their classification as hazardous waste due to contamination by other pollutants. When such other contaminants are present in these materials, SEDA officials dispose of them in accordance with the relevant hazardous waste regulations.

5 Table 4-3 is presented to reflect the quantities, rather than the qualities, of hazardous wastes generated at SEDA. The table reports the quantities of used oil treated as hazardous waste due to the presence of contaminants regulated as hazardous waste (see preceding response). The table's reference to batteries pertains to lithium, Ni-Cad, and other batteries which currently require disposal in accordance with hazardous waste regulations in addition to the historic disposal of lead acid batteries.

6 Consistent with policy applicable to property intended for public access, the Army intends to assess and decontaminate areas identified as potentially contaminated with UXO to a depth of 4 feet. As the majority of the installation is not suspected of UXO contamination, there would be no limitation on future use. Thus, there would be no constraints with respect to terrain disruption over the vast majority of the area which might be used as a wildlife preserve.

7 The Army does not believe any exotic plants have been introduced by the mission at SEDA and intends to dispose of the property in "as is" condition, but would be willing to allow limited site access for research or an assessment conducted by others and at their expense.

Attachment I

[9] Page ES-2, lines 22 - 24, revise the sentence "Expressions of interest in areas available to the SEDLRA have been received from the following: the New York State Department of Environmental Conservation's Division of Fish and Wildlife, interested in using the Ammunition Storage Area as a managed conservation and recreation area..." so that it reads "*there have been discussions with New York State Department of Environmental Conservation's (NYSDEC) Division of Fish and Wildlife about possible interest in using the Ammunition Storage Area as a managed conservation and recreational area - there is no commitment from NYSDEC at this time.*"

[10] Page 5-1, Section 5.1.1, lines 17-18, revise the sentence to read "*The majority of the SEDA property (more than 8,000 acres) is proposed for use as a conservation area.*" Delete any reference to NYSDEC.

[11] Page 5-2, Section 5.1.4, line 31, delete reference to NYSDEC in the sentence "For their respective areas, praponecy obligations will fall on ~~NYSDEC~~ and the SCIDA."

[12] Page 5-2, Section 5.1.4, lines 32-34, delete the entire sentence "NYSDEC will be responsible for determining the appropriate level of environmental impact analysis for proposed actions occurring on the property transferred to its Division of Fish and Wildlife."

[13] Page 5-3, line 24-26, delete the reference to NYSDEC in this sentence as a minimum. For readability, it is better to delete the entire sentence "The NYSDEC has expressed interest in the use of about 8,300 acres as a wildlife management area, and the SEDLRA reuse plan recommends conveyance to Seneca County of only the Administrative and Lake Housing Areas."

[14] Page 5-3, lines 28-31, revise the sentence to read, "As a result of consultation among the Army, NYSDEC, and Seneca County, this EIS is intended also to support decision making by ~~NYSDEC and Seneca County State and local governments~~ to fulfill those entities' obligation under SEQR. Delete the next sentence (lines 31-32) because it is not accurate."

[15] Page 5-50, Section 5.10, lines 38-39, delete reference to NYSDEC in the sentence "Such losses would be minimized upon ~~NYSDEC~~ management of the majority of the installation as a conservation area."

8 FEMA maps have been prepared on Seneca for both Romulus and Varick. The 100 year floodplain was determined for Romulus, but the 100 year floodplain elevation was not. Boundaries and elevations were determined for Varick. There is an area mapped as 100 year floodplain (Zone A) in the lake shore housing area adjacent to Seneca Lake (Romulus). All other areas in the Romulus township are mapped as Zone C. Zone C includes areas that are outside of the 500 year floodplain. Varick (within the boundaries of Seneca) is mapped entirely as Zone X. Zone X in Varick includes areas that are outside of the 500 year floodplain (note: Zone C and Zone X are synonymous between Varick and Romulus). Based on a review of the FEMA maps for the two towns, the Seneca County Department of Economic Development and Planning advises that, outside the area adjacent to the lake housing area, there are no 100 year floodplains on Seneca (Hayes, personal communication, 1998). If new construction is proposed within the 100 year floodplain in the lake housing area, a building permit from Romulus would be required. The building permit considers encroachment into the 100 year floodplain and, if construction were approved, would require base floor levels to be above the 100 year flood level.

9 Changes made to text to reflect comment.

10 Changes made to text to reflect comment.

11 Changes made to text to reflect comment.

12 Changes made to text to reflect comment.

13 Changes made to text to reflect comment.

14 Changes made to text to reflect comment.

15 Changes made to text to reflect comment.





United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
408 A Union Avenue - Room 142
Boston, Massachusetts 02210-3334

January 26, 1998

ER# 97/0707

Mr. Hugh McClellan
U.S. Army Corps of Engineers
Mobile District
ATTN: SAMPD
P.O. Box 2288
Mobile, AL 36628-0001

Dear Mr. McClellan:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement for BRAC 95 Disposal and Reuse of Property at the Seneca Army Depot Activity, New York. This document addresses actions directed by the Defense Base Closure and Realignment Commission: disposal of approximately 10,594 acres of property made available by the closure of Seneca Army Depot Activity and no longer needed.

Draft Environmental Assessment Comments

The encumbered disposal of the property to protect the environment is favored by the Department. This includes easements on existing wetlands, contaminated areas, and the designation of 8,300 acres for conservation. The easements on the wetland areas should include language for the management of the sewage treatment systems to ensure protection of wetlands receiving effluent in the designated conservation area.

The document gives the impression that because of the designation as a conservation area, that there will be no activity on this area. In order to maximize the potential use of the site for fish and wildlife, the managing agency or group will most likely restore or create additional habitat. Therefore, there needs to be some evaluation of the potential restrictions for restoration or creation of wetlands and grasslands, and the control of exotic species in the conservation area. These activities could include plugging ditches, restoring hydrology to drained hydric soil areas, or excavation of upland areas to a maximum depth of approximately 6 feet with potential flooding and the use of heavy equipment.

There has been no consideration for recreational/vacation homes in the evaluation for potential increased use in the Lake Housing Area. This needs to be considered for an accurate evaluation of future impacts to the environment because of private ownership. This evaluation should consider the potential for an increase in the number of dwellings along the shoreline with associated docks.

Specific projects which may result from the adoption of the disposal and reuse of Seneca Army Depot Activity will require site specific environmental reviews to evaluate the effects activities may have on fish and wildlife resources. Accordingly, these comments do

1 The DEIS identifies the proposed encumbrance related to wetlands in section 3.3.1, which indicates the Army will notify prospective transferees of the areas identified as wetlands. The Army created the wetlands at Sewage Treatment Plant #4 to support the efficient operation of that facility. Compliance with STP #4's effluent discharge permit relies on appropriate management of those wetlands. Any change to the management requirements of these wetlands would be addressed through the modification or renewal process for the STP #4 discharge permit. It is not necessary or appropriate for the Army to create additional management measures, in the form of easements, for future wetlands management at that site.

2 The Army is committed to transferring the land consistent with the SEDLRA reuse plan, and the DEIS evaluated potential reuse consequences in relation to the approved reuse plan. If the 8,300 acres is transferred for conservation uses, as envisioned by the reuse plan, the Army is confident that the recipient agency will continue to provide adequate conservation stewardship of the property. In the event the central property is not transferred for use as a conservation area, the Army will evaluate, in consultation with federal and state conservation agencies, whether restrictions or limitations on its use are appropriate to preserve conservation resources.

3 Under the community's reuse plan, lakefront housing would be transferred to the community under an Economic Development Conveyance. The community would then seek sale of that property to a private sector real estate developer, with the proceeds to be used for economic redevelopment of the administrative area. In turn, the real estate developer could redevelop the lakefront area on a centralized basis or could sell lots to individuals. There is insufficient information to determine whether a real estate developer would clear the property of the older, smaller homes along the shoreline in order to enhance the value of other homes (that are on higher elevation). The real estate developer could provide for a marina and could impose covenants on future owners not to construct docks along the shoreline. Other potential effects on that parcel equally elude reasonable forecast. Future development and the nature of such development in the lake front area will be subject to local and state land use controls and local, state, and federal environmental review requirements.

4 Comment noted. Future projects may very well require site specific environmental reviews to evaluate the effects activities may have on fish and wildlife resources.

5 Section 4.12.1 specifically informs the public of two ongoing studies to determine the extent of archeological and architectural historic resources at SEDA. Upon completion of those studies, the Army will continue to execute its obligations under the National Historic Preservation Act.

6 The Army has diligently undertaken its obligations to consult with appropriate authorities to assure protection of historical resources. The Army expects this diligence to allow sufficient time for specific actions, as appropriate, prior to disposal of the property. Consistent with the encumbrance approach employed by the Army (see Section 3.3.1), the standard preservation covenants included in the EIS will be applied to those properties found eligible for listing on the National Register.

not preclude separate evaluation and comments by the U.S. Fish and Wildlife Service (Service) which may be necessary pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), if implementation requires a permit from the U.S. Army Corps of Engineers, pursuant to Section 404 of the Clean Water Act of 1972, as amended (P.L. 92-500). Nor does it preclude additional Service comments under the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), or other legislation on any Federal permits that may be required.

Cultural Resources Preservation--National Park Service

Considerations given to this aspect of the human environment in Sections and Subsections 4.12 and 5.2, and Appendix "C", while being of a reasonable beginning, are somewhat confusing or at least incomplete and thus inadequate. Certainly the matter of compliance with Section 106 of the National Historic Preservation Act of 1996 (NHPA), as reported in Subsection 4.12.2 (page 4-47), remains incomplete for want of specifically required resource survey work. Such work and possible resultant findings are critical, not only for adequate compliance with NHPA, but are essentially correlated with the proper determination and evaluation of resource impacts, as well as the formulation of and commitment to accomplishment of mitigation measures under the National Environmental Policy Act (NEPA), hence the present incompleteness of this Draft Environmental Impact Statement (DEIS). [5]

It seems apparent by the brief content of "Standard Preservation Covenant[s] for Conveyance of Property" (Appendix "C"), and reference elsewhere in this DEIS, that once the Department of the Army has completed its responsibility to determine the presence of cultural resource values subject to procedural requirements, obtain any necessary determinations of eligibility for inclusion in the Register of National Historic Places, and fulfill applicable requirements of NHPA, then the physical accomplishment and/or follow-through of committed cultural resource preservation would be passed on to the new property owner as a routine part of this Seneca Army Depot (BRAC 95) Activity. While such a conveyance standard may be routine, much more detail of resource preservation [6] work should be understood by the Federal agency responsible for NEPA and NHPA before commitment and conveyance are made.

Therefore, the National Park Service (NPS) feels that regarding cultural resources protection considerations, this DEIS is incomplete and inadequate. However, given adequate time and effort, these deficiencies could be rectified in the Final Environmental Impact Statement (FEIS) for this undertaking.

Summary Comments

Issued raised by the Service and the NPS should be addressed in, and/or prior to, the FEIS for this proposal.

For technical assistance on fish and wildlife matters, please contact the Field Supervisor, U.S. Fish and Wildlife Service, 3817 Luker Road, Cortland, NY 13045 (telephone: [607] 753-9334). For assistance regarding cultural resources, please contact the National Park Service, New England System Support Office, 15 State Street, Boston, MA 02109 (telephone: [617] 223-02109).

Sincerely,



Andrew L. Raddant
Regional Environmental Officer





New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

December 22, 1997

Mr. Jim Collins
Tera Tech, Inc.
10306 Eaton Pl., Suite 340
Fairfax, VA 22030

Dear Mr. Collins:

RE: ARMY
Seneca Army Depot Closure
Romulus/Variick, Seneca County
95PR2176

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the draft Environmental Impact Statement (DEIS) in accordance with Section 106 of the National Historic Preservation Act of 1966.

We have two concerns with the content of the DEIS. First, the DEIS does not include our letter of June 9, 1997. A copy of this letter is attached. Second, it does not accurately reflect the comments and issues raised by our office in that letter. Additional archeological survey is necessary prior to closure of the base.

Furthermore, I would like to emphasize that you are correct in stating that SHPO staff are still awaiting the submission of an historic building inventory from the Fort Worth District of the USACE.

If you have any questions, feel free to contact Ellen Cesarski at (518) 237-8643 ext. 281. Please be sure to refer to the SHPO Project Review (PR) number noted above.

Sincerely,

Ruth A. Pierpont

Ruth L. Pierpont
Director, Historic Preservation
Field Services Bureau

RLP:cm

The Army recognizes that the historic property inventory for SEDA is only partially complete at this time. However, in support of this NEPA analysis and in accordance with the requirements of the National Historic Preservation Act (NHPA), the Army has initiated consultations with the NYSHPO concerning the steps that will be necessary to complete the SEDA historic property inventory. The Army has also taken into consideration, as a part of this NEPA analysis, the steps that will be taken to either protect or mitigate for the loss of any SEDA properties which may be found to be eligible for the National Register of Historic Places (NRHP). Studies to complete the SEDA historic property inventory have been initiated.

A draft report documenting the inventory of historic architectural resources has been completed and is being reviewed by the Army prior to submission to the New York State Historic Preservation Officer (NYSHPO). The Army has also initiated consultations with the NYSHPO to determine: 1) the adequacy of past archeological surveys conducted for SEDA and 2) the level of survey required to complete the inventory of SEDA archeological properties. As a result of these consultations, a draft report has been prepared which develops an archeological field survey methodology for completing the SEDA archeological inventory. This draft report is under review by the Army and will be forwarded to the NYSHPO shortly. Following receipt of comments from the NYSHPO, the Army will undertake the necessary field studies to complete the archeological inventory for SEDA.

No historic properties at SEDA will be disposed of to non-federal entities until the NHPA Section 106 consultation process is complete. If historic properties are found at SEDA, the Army, in accordance with 36 CFR Part 800: Protection of Historic Properties, will enter into consultations with the NYSHPO, the Advisory Council on Historic Preservation (ACHP), and other interested parties to determine the effect the disposal action will have on these historic properties. If the disposal action is found to adversely affect SEDA historic properties, the consulting parties will seek means to either avoid or mitigate for these adverse effects. Agreements reached by the consulting parties will be incorporated into an agreement document that will be signed by the consulting parties.



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peoples Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

June 9, 1997

Stephen Absolom
Dept. of The Army
Seneca Army Depot Activity
5786 State Route 96
Romulus, NY 14541-5001

Dear Mr. Absolom:

Re: ARMY
Removal of Contaminated Soil
Seneca Army Depot
Romulus, Seneca County
94PR1893

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We are reviewing the four reports that you submitted for the Seneca Army Depot Activity in accordance with Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations. Comments on specific reports as well as our recommendations regarding future work are given below.

Final Report-Archaeological Investigations Ash Landfill Site (Oberon).

We agree with the recommendation given in the report regarding additional testing at the prehistoric site. With regard to the five historic resources that were located, we do not believe that their lack of significance has been sufficiently demonstrated. We understand that these resources are not in an area of planned impact and, therefore, we recommend that they be assessed during the survey conducted prior to the closure of the base. We have requested site forms from Oberon and will complete our review when the forms are submitted.

Draft Report-Phase I Cultural Resource Survey of the Seneca Army Airfield and Adjacent Areas Southeast (Panamerican). We have also requested site forms for the three sites reported in this survey. It was unclear in the report whether or not an attempt was made to locate all of the map documented structures that were previously listed for this portion of the project area in the earlier report by Klein (1986). We have been assured by Michael Cinquino of Panamerican Consultants that, in fact, all of these locations were inspected in the field. We request that a statement to this effect be included in the final report. We concur with the assessment that site PCI/SADA 1 is potentially eligible for the National Register and that additional testing is necessary to determine its eligibility and that sites PCI/SADA 2 and 3 are not eligible and do not require additional testing.

As noted in the EA, there are two basic means for the Army to dispose of historic properties to non-federal entities, either with or without an encumbrance. If an encumbrance is used, the agreement document to be negotiated between the Army, NYSHPO, ACHP, and other interested parties will specify the type and wording of the encumbrance/deed restriction to be passed on to the new owner of the historic property. In most instances, deed restrictions require the new owner to either preserve the historic property in accordance with specified standards or to consult with the SHPO to arrive at mutually agreeable and appropriate measures for mitigating the adverse effects of a proposed undertaking.

If the unencumbered alternative is used to dispose of historic properties, the Army, NYSHPO, ACHP, and other interested parties will consult to determine the measures that will be employed to mitigate for the loss or alteration of the historic properties. These mitigation measures can be completed by either the Army or other parties, depending on agreements reached as part of the NHPA Section 106 consultations.

Phase I Archeological Survey of Five Previously Reported Sites (Fiedel).
Although these sites are not in areas of planned development, our office would like to state that we disagree with the reports assessment that these sites, for one reason or another, cannot be relocated. We do not feel that the extent of testing conducted is sufficient to support this statement. Our office is aware that you have contracted another consulting firm and plan to conduct additional testing.

Documentary Research, Seneca Army Depot Activities, Romulus, Seneca County, New York (McVarnish and Cook). From an archeological perspective, the SHPO accepts this report and considers it, along with the Klein 1986 report, to provide a suitable background for the additional archeological studies needed prior to the closure of the base. Our National Register staff will evaluate the above ground resources and will provide additional comments at a later time.

When responding, please refer to the SHPO project review (PR) number noted above. If you have any questions, please contact Ellen Cesarski at (518) 237-8643 ext. 281.

Sincerely,



Ruth L. Pierpont
Director, Historic Preservation
Field Service Bureau

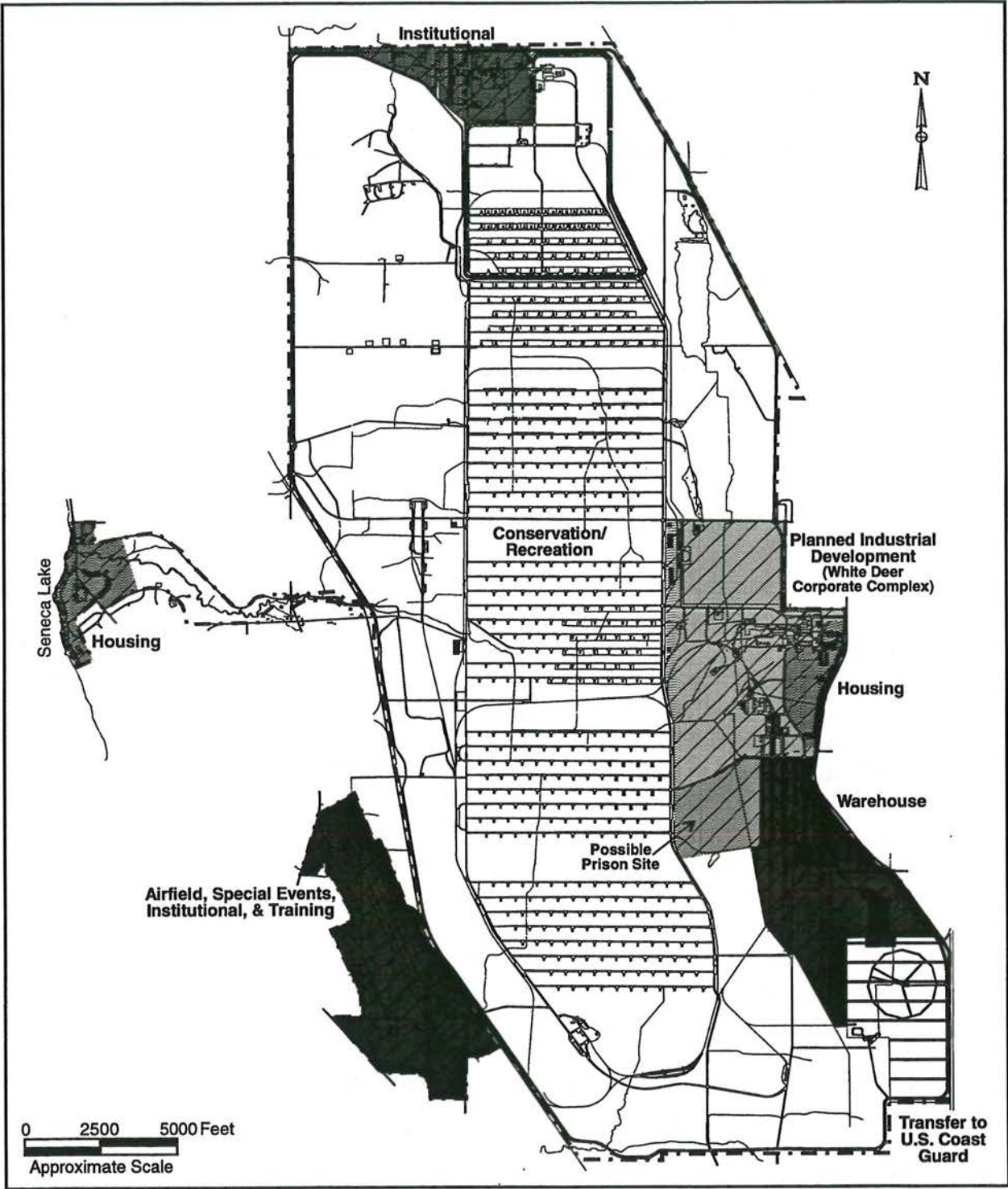


APPENDIX B

**SENECA ARMY DEPOT LOCAL
REDEVELOPMENT ADVISORY
COMMITTEE SUMMARY OF PREFERRED
REUSE PLAN**

The Seneca Army Depot Local Redevelopment Advisory Committee (formerly known as the Seneca Army Depot Local Redevelopment Authority) prepared a report, *Reuse Plan and Implementation Strategy for the Seneca Army Depot*. The following excerpt is from Chapter 21, Preferred Land Use Plan.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
530 SOUTH EAST ASIAN AVENUE
CHICAGO, ILLINOIS 60607



LEGEND

Conservation	Planned Industrial Development (PID)
Housing	Transfer to U.S. Coast Guard
Institutional	Airfield, Special Events, Institutional, & Training
Warehouse	SEDA Enclave Sites
	Transfer to the SCIDA

Source: RKG Associates, 1997.

Proposed Reuses
Seneca Army Depot Activity
Romulus, New York
Figure B-1

Note: Figure 2-3 is a colorized version of this map.

A. INTRODUCTION

This chapter describes the preferred land use plan for the Seneca Army Depot. The land use plan is based on an extensive evaluation of site factors, existing market conditions and the financial implications of various development options. Direction provided by the Local Redevelopment Authority (LRA), as well as comments made during numerous public meetings, also influenced the development of the land use plan. A major consideration in the preparation of the land use plan was the desire of local residents and officials to limit the financial exposure and risk for municipal governments during the redevelopment of the Depot.

It is important to understand that this land use plan has been prepared to maintain flexibility during the redevelopment process. This flexibility will permit the LRA and other local officials to respond to changes in the market and to better meet the needs of potential tenants at the Depot as the redevelopment process unfolds.

B. SUMMARY OF MAJOR FINDINGS AND CONCLUSIONS

- It is recommended that a major portion of the site, approximately 8,300 acres, be designated for conservation/recreation uses.
- Two portions of the site, the Lake Housing area and the Planned Office/Industrial Development (PID) should be acquired by the LRA, or its successor organization, under an Economic Development Conveyance. Income from the development of the Lake Housing area should be used to support the development of the PID portion of the site.
- The existing Elliot Acres housing site should be developed for housing purposes by a private or public organization. The LRA should not get directly involved in this redevelopment effort.
- A 550 acre portion of the site is designated for Warehouse and Distribution. The Department of the Army should be responsible for the transfer of structures in this area directly to potential private and public users.
- The existing LORAN C antenna station site, which contains an estimated 170 acres, will be retained by the U.S. Coast Guard.
- The existing Airfield portion of the site (450 acres) is designated for special outdoor related events. However, the Finger Lakes Law Enforcement Academy has expressed an interest in the entire site for training purposes.

- The firearms Training Ranges should continue to be used for this purpose. Two governmental organizations have expressed an interest in acquiring this site.
- The North End of the Depot is proposed for Institutional type uses. This 200 acre parcel, which contains over 300,000 square feet of buildings, could be used for education/training, recreation, corrections or as a limited retirement facility.

C. LAND USE PLAN

The land use plan recommends a variety of different development options for the site. **Although the size of the Depot is large enough to accommodate the diverse land uses recommended for the site, specific site plans should be prepared for each land use parcel.** These site plans should address such issues as buffers between adjoining parcels, easements for utility services, and corridors for rail lines and roadways. It must also be recognized that as a military installation the Depot has limited access points for connecting the property to the existing regional roadway network. Consequently, new access points will be required for some parcels in order to provide safe and reasonable connections to local roadways.

It should be emphasized that the closure of the Seneca Army Depot will not take place for several years. In fact, the estimated mission closure date is September 2000 while the Depot closure date is July 2001. During the next four years, a number of activities relating to the transfer of property at the site will have to be completed (See Chapter 24). **The LRA should endeavor to work with the Department of the Army as well as other organizations interested in land parcels to ensure that when closure does occur, viable tenants and new owners are available and ready to take title to the property.**

The remainder of this section identifies the various land uses proposed for the Depot. Map 21-1, at the end of the chapter, indicates the boundaries of each land use. It should be noted that the boundaries indicated on the Map are subject to change during the implementation process. Each of the land uses outlined on the Map is discussed separately in the next several pages. Possible organizations interested in the use of the various land parcels, based on outreach efforts conducted by the LRA to identify public organizations interested in acquiring property at the Depot, are also identified.

1. Conservation/Recreation Land

A major asset at the Seneca Army Depot is the abundance of wildlife, especially the unique white deer herd, that are located within the existing fence line at the Depot. The preservation of a large conservation area, designed to protect this wildlife, could provide opportunities for a variety of public uses such as self-guided tours, nature trails, controlled hunting and fishing.

This parcel, which contains approximately 8,300 acres, would represent the largest use of land at the

Depot. It would include all of the ammunition storage igloos, various office and support buildings in the North End "Q" area and other structures at various scattered locations. This site also contains a significant amount of internal roadways and a portion of the existing rail line. Other utilities (e.g. water, electric, telephone) also transverse this land parcel.

At the conclusion of the LRA outreach effort, the Division of Fish and Wildlife of the New York State Department of Environmental Conservation (DEC) indicated an interest in acquiring ownership of this portion of the property and managing it for conservation purposes. Another private organization also indicated an interest in this land area for similar types of activities.

It is recommended that this site be designated for the purpose of wildlife conservation. However, in developing a specific site plan for the reuse of the site, opportunities for other forms of active recreation, that would be compatible with conservation, should also be examined. In addition, the LRA should ensure that site planning efforts examine the need for buffers, especially near adjacent parcels that involve different types of land uses, as well as the need to provide easements for utilities, roadways and rail lines.

It is anticipated that the organization that eventually acquires the property, under a Public Benefit Conveyance, would be responsible for preparing a site plan for the land. However, the LRA should work closely with this organization in the development of plans for the site, as well as provide assistance in negotiations regarding the transfer of the property from the Department of the Army to another user

2. Lake Housing Area

This 120 acre site contains four distinct housing areas:

- Flack Drive - 30 single-family dwelling units constructed in the 1980's and 1990's;
- Colonel Drive - 5 older single-family dwelling units that were relocated to this site in the 1940's;
- Lake Front Cottages - 21 single family homes along the shore line of Seneca Lake;
- Travel Park - 21 mobile homes.

In addition to the dwelling units there are five buildings that were used to support recreation activities at the site and the Officers' Club, now being used as a restaurant/bar. The restaurant is a 1942 wooden framed building adjacent to the Seneca Lake shoreline. There are also facilities for docking boats at the site.

This area is a prime location for the development of year round residential dwelling units, seasonal housing or a combination of both types. Some of the dwelling units could be sold quickly (e.g. Flack Drive) while other units may require some rehabilitation (Lake Front Cottages). The mobile homes could also be removed and the existing land developed for single family homes, garden apartments or condominiums.

It is recommended that this site be acquired as part of an Economic Development Conveyance, and then sold to a private firm for redevelopment as housing. The LRA could issue a Request for Proposals (RFP) and then negotiate a purchase/sale agreement with the firm that offers the most beneficial financial and development package. The money obtained from the sale of this property would then be used to provide funding for redevelopment efforts on another portion of the Depot site.

It should be noted that an area, designated conservation/recreation, abuts the Lake Housing Area. This approximately 110 acre site is designated conservation due to existing steep slopes and other environmental limitations. This portion of the Depot could be included with the development package for the Lake House area or transferred to another organization for conservation purposes.

3. Planned Office/Industrial Development (PID)

This approximately 620 acre site represents the main administrative area of the Depot. The Planned Office/Industrial Development (PID) area contains approximately 30 major buildings with an estimated 300,000 square feet of floor space. The site also contains more than 150 acres of developable land which could be used for the construction of new facilities in the future.

The primary reason for recommending that the area be redeveloped as a PID is that it allows the LRA, or its successor entity, to influence the redevelopment of the site through the creation of flexible regulations that encourage development. The PID designation could allow a variety of uses including office, warehouse, light manufacturing, research and development and/or commercial uses. Certain performance standards, such as lot coverage, architectural features, or building height, can be required for any entity seeking to reuse or redevelop the facilities in this area. However, in order to encourage development some regulations, based on the need of the user, may need to be waived or modified.

It is recommended that this site be acquired under an Economic Development Conveyance in conjunction with the Lake Housing area. Funds obtained from the sale of the Lake Housing site would then be used to finance the operations, management and development of this parcel.

This site contains enough land to provide a buffer along the adjacent conservation/recreational parcel. One of the two waste water treatment plants at the Depot is also located on this parcel.

4. Elliot Acres Housing

The Elliot Acres housing area is approximately an 80 acre parcel that is adjacent to the PID site. The site contains 45 buildings with 124 residential units ranging from 1,300 to 1,900 square feet each, on average. There are 10 single family houses, 13 duplex buildings and 22 four-plex town house buildings. In total, the site contains approximately 184,000 square feet of residential space.

It is recommended that this site be developed for the purpose of providing housing to local residents.

It is also recommended that the LRA work with the Department of the Army in transferring this site directly to a private or public sector organization for the purpose of redevelopment. It is estimated that due to a variety of structural related issues, \$3,000 to \$5,000 per dwelling unit may be required to prepare the units for reuse. Additional funds may also be required to deal with asbestos and lead-based paint removal.

If the property is transferred to another organization for redevelopment as housing, local officials need to prepare zoning, subdivision and other land use regulations. In addition, restrictions should be placed on the site to limit any new housing development as well any type of development on portions of the property adjacent to the PID site. Also, new access to the site, off Rt. 96, should be developed.

5. Warehouse and Distribution

This 550 acre portion of the Depot contains approximately 2.3 million square feet of warehouse space. There are 21 warehouses of 90,000 square feet and two additional warehouses that each contain over 200,000 square feet. In total, this portion of the site contains almost 90 percent of the warehouse inventory at the Depot. The parcel is also serviced by rail and many of the warehouses have rail siding.

Due to the type of facilities on this portion of the Depot, it is recommended that this area be designated for warehouse and distribution related activities. However, because of the age of the facilities it is recommended that this site be transferred directly by the Department of the Army to private and public organizations through negotiated sales and/or public auctions. The LRA, or its successor organization should not be directly involved in owning or managing this site. However, the LRA or its successor organization, should be involved in marketing facilities within this area. In addition, zoning and other land use regulations should be prepared to manage the redevelopment of this site.

The public outreach effort conducted by the LRA indicated that the New York State Army National Guard had an interest in acquiring three warehouses and that a private corporation was interested in acquiring warehouse space and the use of rail facilities at the site.

6. Coast Guard Parcel

It is the consultant's understanding that the Coast Guard plans to retain the LORAN C antenna station in the southeast area of the Depot. The exact configuration of this portion of the site has changed several times in the past few months. The current parcel represents about 170 acres. The LRA should consider asking that title to the Coast Guard parcel be transferred to the LRA, or its successor organization, under a Lease-Back conveyance, with a long-term, no-cost lease to the Coast Guard during the remaining term of its need for the station. Thus, if the Coast Guard ever abandons the station, the LRA will automatically acquire title, presumably at no cost, and be able to incorporate the parcel into the community's redevelopment plans. It should be noted however, that

there are several sites within the Coast Guard site that have some environmental concerns. However, if the only probable ownership interest by the LRA would be through a Lease-Back arrangement, it is likely that environmental issues would be resolved before the LRA assumes possession of the parcel.

7. Special Events

It is recommended that the Airfield portion of the site, which contains approximately 450 acres, be targeted as a site for Special Events. The area could host a number of one time and/or limited event activities relating to agriculture, recreation and sporting activities. Agricultural events could include a farmer's market, the regional wine festival and livestock exhibitions. Recreational events might include concerts, club gatherings, auto shows or trailer shows, while sporting events could include drag races, regional competitions, cross country skiing or snowmobiling. The common thread among all of these potential uses is the goal of increasing tourism in the region.

Through the LRA outreach effort the Finger Lakes Law Enforcement Academy (representing Ontario, Seneca, Wayne and Yates Counties) indicated an interest in acquiring the entire parcel including most of the structures on the site (approximately 31,000 square feet). They would use the airstrip for the training of police and emergency service personnel. The buildings would be used for training, classrooms and administrative space.

It is unknown if special events, as outlined above, and the use proposed by the Law Enforcement Academy are compatible. However, under either type of use, or a combination of uses, the LRA should not attempt to acquire this property. Once again the LRA, or its successor organization, should work with the Department of the Army in the transfer of this property to a public or private organization. Also, if appropriate, land use regulations should be prepared to manage the future development of this site.

8. Training Ranges

The Training Ranges, which are located southwest of the Airfield, contain approximately 50 acres of land. Both the New York State Office of Parks, Recreation and Historic Preservation (Finger Lakes Region) and the Finger Lakes Law Enforcement Academy have expressed an interest in acquiring this property.

It is recommended that this site continue to be used for firearms training purposes. If the property is used for this purpose, it is recommended that the LRA allow the property to be transferred directly from the Department of the Army to the State or local agency most suited for operating the facility.

9. Institutional

This North End portion of the site contains approximately 200 acres of land, as well as over 300,000 square feet of buildings, including barracks, recreation/athletic facilities, shops, dining facilities,

warehouses and miscellaneous structures. The site also contains a waste water treatment plant and is connected to the Depot's water supply system.

Due to the extensive array of structures and support facilities on this portion of the Depot, it is recommended that the site be used for institutional purposes. Possible use could include education/training, recreation or corrections. A limited retirement facility could also be developed on the site.

Through the LRA outreach effort a regional youth soccer organization indicated an interest in the entire site. They would use the land area and buildings for training of coaches and referees, summer soccer camps, administrative purposes and tournaments.

As noted above, another alternative for this parcel would involve the construction of a correctional facility. Currently the State of New York is looking for possible sites for a new maximum security prison. Although the State has not expressed an interest in land parcels at the Depot, the Division of Facilities Planning at the NYS Department of Corrections was contacted in order to determine the type of criteria used by the State in determining the feasibility of potential prison sites. Outlined below are the criteria used by the State and the consultants' assessment of how this portion of the Depot could be evaluated.

a. Location and Lot Size

State criteria indicated that, at a minimum, a 100 acre site is preferred that is remote from residential areas and schools. This portion of the Depot is large enough to accommodate the 100 minimum acre parcel size and there are few residents that live near the North End portion of the Depot. In addition, there are no schools within four to five miles of this portion of the Depot.

b. Topography

The State criteria requires that the site be flat and contain favorable earth and soil conditions with no rocks. As noted in Chapter 4, the entire Depot site is relatively flat, particularly in the North End. The immediate soils have been identified as being poorly drain, however standard engineering design and construction practices alleviate this issue. The underlying soils are generally trending series of rock terraces mantled by glacial till. These types of soils are very favorable for building construction.

c. Environmental

The State criteria requires that a proposed site not contain any wetlands. Although there are many acres of wetlands within the Depot, very few are located within the Institutional area. As a result, the location of a 100 acre parcel should not conflict with any presently identified wetlands.

d. Accessibility

Under this criteria the State is looking for a site that has an adequate transportation system. The Seneca Army Depot is located just 15 miles south of the New York State Thruway. The site is bordered by major state routes 96, 96A, and 336. All of these roadways are in good condition with ample reserve capacity to handle additional traffic.

e. Utilities

This criteria, which is based on a minimum of 1,500 inmates, establishes standards for water and sewer (300,000 gallons per day), electrical power (1,000 kw/month) and steam (50,000 mm BTU's/year). All of the existing water, sewer, electric, and telephone services within this area of the Depot can adequately handle estimated demands. However, the existing sanitary sewer treatment plant would need minor improvements, to handle peak flow, such as equalization tanks. In addition, the treatment plant will be at its maximum capacity and no additional development could occur without expansion of this facility. In addition, it has been assumed that a new and separate steam heating system will have to be built with their associated oil tanks.

It is recommended that the LRA work with various institutional users about acquiring this portion of the Depot. However, the LRA should not become involved in acquiring this site. This property should be transferred directly from the Department of the Army to end users under either a Public Benefit Conveyance or a Negotiated Sale.

1. Background:

a. After a seven-month comprehensive planning process, initiated in March 1996, a Reuse Plan and Implementation Strategy for the Seneca Army Depot was completed and adopted by the LRA on October 8, 1996. The Reuse Plan was subsequently approved by the Seneca County Board of Supervisors on October 22, 1996.

b. On May 27, 1997, the Seneca County Board of Supervisors approved the Seneca County Industrial Development Agency (IDA) to be the Implementing Local Redevelopment Authority (LRA). On August 5, 1997, the Office of Economic Adjustment, Office of the Under Secretary of Defense, recognized the IDA as the LRA for the purposes of implementing the local redevelopment plan at Seneca Army Depot.

c. The implementation strategy outlined in the Reuse Plan called for the acquisition of the Lake Housing Area and the Planned Industrial Development (PID) area via a no-cost Economic Development Conveyance (EDC), with the sale of the Lake Housing area to financially support the development of the PID portion of the site. All other property at the Depot would be transferred directly by the Department of the Army to other public and private sector organizations. The Plan further stated that if the acquisition of the Lake Housing and PID areas could be accomplished through a no-cost rural EDC, the community must be prepared to walk away from any property acquisition at the Seneca Army Depot.

2. Changes to the Reuse Plan follow:

a. The IDA will be forwarding their EDC application to Department of Army in the November/December 1997 time frame. A rural no-cost EDC is being requested for the following parcels:

(1) Lake Housing and Elliot Acres Housing Areas: The IDA has added the Elliot Acres parcel and will package both housing areas together for sale to a developer. The proceeds for the sale of the housing areas will continue to be used to financially support the development of IDA acquired depot property.

(2) Institutional Area: The IDA will be taking conveyance of this approximate 170 acre parcel and plan to lease this property for institutional purposes.

(3) Airfield/Special Events/Institutional/Training Area: The IDA will be taking conveyance of this approximate 500 acre parcel. Current plans call for some type of law enforcement training presence at this location.

**Amendment #1
Seneca Army Depot Reuse Plan and Implement Strategy**

November 6, 1997

(4) Planned Industrial Development (PID) Area: This approximate 750 acre parcel, which will be known as White Deer Corporate Complex, will continue to be developed for a variety of uses including office, warehouse, light manufacturing, research and development and/or commercial uses. Warehouses 323 and 332 and the undeveloped land east to and including Gate #14 have been added to the PID Area. In addition, acreage is being designated for construction of a State Prison. The IDA feels it is prudent to include a proposed prison site in the EIS process; thereby positioning this location for a possible prison designation in the New York State budget process.

(5) Warehouse Area: The IDA will be aggressively marketing this parcel with the intent to lease or convey as soon as the necessary environmental documentation can be developed. If the IDA is unsuccessful in their marketing efforts, a team approach with the Army for disposition of this area will be considered.

b. Property to be Retained by Federal Government: The Coast Guard will be taking conveyance of this approximate 180 acre parcel via a Fed to Fed Transfer. Please note the correction in the acreage on the Amended Land Use Plan.

c. Utilities: The IDA is seriously considering acquiring the depot utilities. Utility systems will be included in the EDC application.

d. Master Lease: The IDA is currently in the process of drafting a Master Lease. As discussed with the Army at the Pre-EDC Meeting on September 29, 1997, the IDA will be requesting the Institutional Area to be the initial property to be leased; time frame being requested for the lease of the Institutional Area is early 1998. Other depot properties will be added to the Master Lease as requested by the IDA.

3. As a matter of information, Department of Housing and Urban Development (HUD) approved the Reuse Plan under the Base Closure Community Redevelopment and Homeless Assistance Act of 1996 on March 26, 1997.

4. This amendment is being forwarded to HUD, OEA and appropriate DOD agencies.

APPENDIX C

**LEAD-BASED PAINT AND ASBESTOS
PROVISIONS FOR BRAC
LEASES AND DEEDS**

**Appendix C:
LEAD-BASED PAINT AND ASBESTOS PROVISIONS FOR BRAC LEASES
AND DEEDS**

I. BRAC LEASE PROVISIONS

(1) WHERE LEASED PREMISES INCLUDE NO RESIDENTIAL HOUSING:

Lead-based Paint Warning and Covenant:

1. The Leased Premises do not contain residential dwellings and are not being leased for residential purposes. The Lessee is notified that the Leased Premises contains buildings built prior to 1978 that contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. A risk assessment or inspection for possible lead-based paint hazards is recommended prior to lease.

2. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Survey, which has been provided to the Lessee. Additionally, the following reports pertaining to lead-based paint and/or lead-based paint hazards have been provided to the Lessee: Additionally, the Lessee has been provided with a copy of the federally-approved pamphlet on lead poisoning prevention. The Lessee hereby acknowledges receipt of all of the information described in this subparagraph.

3. The Lessee acknowledges that it has received the opportunity to conduct a risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this Lease.

4. The Lessee shall not permit use of any buildings or structures on the Leased Premises for residential habitation without first obtaining the written consent of the Army. As a condition of its consent, the Army may require the Lessee to: (i) inspect for the presence of lead-based paint and/or lead-based paint hazards; (ii) abate and eliminate lead-based paint hazards by treating any defective lead-based paint surface in accordance with all applicable laws and regulations; and (iii) comply with the notice and disclosure requirements under applicable Federal and state law. The Lessee agrees to be responsible for any future remediation of lead-based paint found to be necessary on the Leased Premises.

5. The Army assumes no liability for remediation or damages for personal injury, illness, disability, or death, to the Lessee, its successors or assigns, sublessees or to any other person, including members of the general public, arising from or incident to possession and/or use of any portion of the Leased Premises containing lead-based paint as residential housing. The Lessee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorneys' fees arising out of, or in any manner predicated upon, personal injury, death or property damage resulting from, related to, caused by or arising out of the possession and/or use of any portion of the Leased Premises containing lead-based paint as residential housing. This section and the obligation of the Lessee hereunder shall survive the expiration or termination of this Lease and any conveyance of the Leased Premises to the Lessee. The Lessee's obligation hereunder shall apply whenever the United

States of America incurs costs or liabilities for actions giving rise to liability under this section.

(2) BRAC MOA AND DEED PROVISIONS

Notice of the Presence of Lead Based Paint and the Covenant Against the Use of the Property for Residential Purposes.

a. The Grantee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any know lead-based paint hazards. A risk assessment or inspection for possible lead-based paint hazards is recommended prior to purchase. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at a the time of initial occupancy) or persons with disabilities (unless any child who is less that 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

b. Available information concerning known lead based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Survey, which has been provided to the Grantee. Additionally, the following reports pertaining to lead-based paint and/or lead-based paint hazards have been provided to the Grantee:

All purchasers must also receive the federally-approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

c. The Grantee acknowledges that it has received the opportunity to conduct a risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this deed.

d. The Grantee covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on the Property as Residential Real Property without complying with this section and all applicable federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X). The Grantee shall, after consultation with the appropriate state environmental agency: (1) inspect for the presence of lead-based paint and/or lead-based paint hazards; (2) abate and eliminate lead-based paint hazards; and (3) comply with all applicable notice and disclosure requirements under Title X and applicable state law. In complying with these requirements, the Grantee covenants and agrees to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the property for residential purposes.

e. The Grantee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorney's fees arising out of, or in any manner predicated upon, personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint or lead-based paint hazards on the Property if used for residential purposes. [In the MOA add: This section and the obligations of the Grantee hereunder shall survive the expiration or termination of this MOA, and any conveyance of the Property to the Grantee. The Grantee's obligation hereunder shall apply whenever the United States of America incurs costs or liabilities for actions giving rise to the liability under this section.]

(3) ASBESTOS PROVISION

Notice of the Presence of Asbestos and Covenant:

a. The Transferee/Lessee is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing materials ("ACM") has been found on the Premises, as described in the final base-wide EBS. Except as provided for in c. Below, the ACM on the Premises does not currently pose a threat to human health or the environment. All friable asbestos that posed a risk to human health has either been removed or encapsulated.

b. The Transferee/Lessee covenants agrees that its use and occupancy of the Premises will be in compliance with all applicable laws relating to asbestos and that the Transferor/Lessor assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Transferee/Lessee, its successors or assigns, sublessees, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Premises described in this Transfer/Lease, whether the Transferee/Lessee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Transferee/Lessee agrees to be responsible for any future remediation of asbestos found to be necessary on the Premises.

c. The buildings listed in Exhibit ___ to this Deed/Lease contain asbestos which may pose an unacceptable risk to human health. The Transferee/Lessee agrees not to use or occupy said buildings without identifying and remediating any asbestos hazards therein in accordance with all applicable legal requirements, at Transferee/Lessee's sole expense. This deed is granted based upon the Transferee/Lessee's representation that it will comply with this subparagraph c.

d. The Transferee/Lessee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgements, costs and attorneys' fees arising out of, or in any manner predicted upon, personal injury, death or property damage resulting from, related to, caused by or arising out of the possession and/or use of any portion of the Premises containing asbestos.

APPENDIX D

**STANDARD PRESERVATION COVENANT
FOR CONVEYANCE OF PROPERTY THAT
CONTAINS HISTORIC BUILDINGS AND
STRUCTURES**

Appendix D:
Standard Preservation Covenant for Conveyance of Property that Contains Historic Buildings and Structures

1. In consideration of the conveyance of certain real property hereinafter referred to as (name of property), located in the (name of county), (name of state), which is more fully described as: (insert legal description), (name of property recipient) hereby covenants on behalf of (himself/herself/itself), (his/her/its) heirs, successors, and assigns at all times to the (name of SHPO parent organization) to preserve and maintain (name of property) in accordance with the recommended approaches in the *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior, National Park Service 1992) in order to preserve and enhance those qualities that make (name of historic property) eligible for inclusion in/or resulted in the inclusion of the property in the National Register of Historic Places. If (name of property recipient) desires to deviate from these maintenance standards, (name of property recipient) will notify and consult with the (name of state) Historic Preservation Officer in accordance with paragraphs 2, 3, and 4 of this covenant.

2. (Name of property recipient) will notify the appropriate (name of state) Historic Preservation Officer in writing prior to undertaking any construction, alteration, remodeling, demolition, or other modification to structures or setting that would affect the integrity or appearance of (name of historic property). Such notice shall describe in reasonable detail the proposed undertaking and its expected effect on the integrity or appearance of (name of historic property).

3. Within thirty (30) calendar days of the appropriate (name of state) Historic Preservation Officer's receipt of notification provided by (name of property recipient) pursuant to paragraph 2 of this covenant, the SHPO will respond to (name of property recipient) in writing as follows:

- (a) That (name of property recipient) may proceed with the proposed undertaking without further consultation; *or*
- (b) That (name of property recipient) must initiate and complete consultation with the (name of state) Historic Preservation Office before (he/she/it) can proceed with the proposed undertaking.

If the SHPO fails to respond to the (name of property recipient)'s written notice, as described in paragraph 2, within thirty (30) calendar days of the SHPO's receipt of the same, then (name of property recipient) may proceed with the proposed undertaking without further consultation with the SHPO.

4. If the response provided to (name of property recipient) by the SHPO pursuant to paragraph 3 of this covenant requires consultation with the SHPO, then both parties will so consult in good faith to arrive at mutually agreeable and appropriate measures that (name of property recipient) will implement to mitigate any adverse effects associated with the proposed undertaking. If the parties are unable to arrive at such mutually agreeable mitigation measures, then (name of property recipient) shall, at a minimum, undertake recordation for the concerned property—in accordance with the Secretary of Interior's standards for recordation and any applicable state standards for recordation, or in accordance with such other standards to which the parties may mutually agree—prior to proceeding with the proposed undertaking. Pursuant to this covenant, any mitigation measures to which (name of property recipient) and the SHPO mutually agree, or any recordation that may be required, shall be carried out solely at the expense of (name of property recipient).

5. The (name of SHPO parent organization) shall be permitted at all reasonable times to inspect (name of historic property) in order to ascertain its condition and to fulfill its responsibilities hereunder.
6. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, the (name of SHPO parent organization) may, following reasonable notice to (name of recipient), institute suit to enjoin said violation or to require the restoration of (name of historic property). The successful party shall be entitled to recover all costs or expenses incurred in connection with such a suit, including all court costs and attorneys' fees.
7. In the event that the (name of historic property) (i) is substantially destroyed by fire or other casualty, or (ii) is not totally destroyed by fire or other casualty, but damage thereto is so serious that restoration would be financially impractical in the reasonable judgment of the Owner, this covenant shall terminate on the date of such destruction or casualty. Upon such termination, the Owner shall deliver a duly executed and acknowledged notice of such termination to the (name of SHPO parent organization), and record a duplicate original of said notice in the (name of county) Deed Records. Such notice shall be conclusive evidence in favor of every person dealing with the (name of historic property) as to the facts set forth therein.
8. (Name of recipient) agrees that the (name of SHPO parent organization) may at its discretion, without prior notice to (name of recipient), convey and assign all or part of its rights and responsibilities contained herein to a third party.
9. This covenant is binding on (name of recipient), (his/her/its) heirs, successors, and assigns in perpetuity, unless explicitly waived by the (name of SHPO parent organization). Restrictions, stipulations, and covenants contained herein shall be inserted by (name of recipient) verbatim or by express reference in any deed or other legal instrument by which (he/she/it) divests (himself/herself/itself) of either the fee simple title or any other lesser estate in (name of property) or any part thereof.
10. The failure of the (name of SHPO parent organization) to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any other right or remedy or the use of such right or remedy at any other time.
11. The covenant shall be a binding servitude upon (name of historic property) and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that (name of recipient) agrees to be bound by the foregoing conditions and restrictions and to perform the obligations herein set forth.

APPENDIX E

**STANDARD PRESERVATION COVENANT
FOR CONVEYANCE OF PROPERTY THAT
CONTAINS ARCHEOLOGICAL SITES**

**Appendix E:
Standard Preservation Covenant for Conveyance of Property that Includes
Archeological Sites**

1. In consideration of the conveyance of the real property that includes the [official number(s) designation of archeological site(s)] located in the County of [name of county], [name of state], which is more fully described as [insert legal description], [name of property recipient] hereby covenants on behalf of [himself/herself/itself], [his/her/its] heirs, successors, and assigns at all times to the [name of SHPO parent organization], to maintain and preserve [official number(s) designation of archeological site(s)], in accordance with the provisions of paragraphs 2 through 11 of this covenant.

2. [Name of property recipient] will notify the [name of state] Historic Preservation Officer in writing prior to undertaking any disturbance of the ground surface or any other action on [official number(s) designation of archeological site(s)] that would affect the physical integrity of this/these site(s). Such notice shall describe in reasonable detail the proposed undertaking and its expected effect on the physical integrity of [official number(s) designation of archeological site(s)].

3. Within thirty (30) calendar days of the appropriate [name of state] Historic Preservation Officer's receipt of notification provided by [name of property recipient] pursuant to paragraph 2 of this covenant, the SHPO will respond to [name of property recipient] in writing as follows:

(a) That [name of property recipient] may proceed with the proposed undertaking without further consultation; or

(b) That [name of property recipient] must initiate and complete consultation with the [name of state] Historic Preservation Office before [he/she/it] can proceed with the proposed undertaking.

If the SHPO fails to respond to the [name of property recipient's] written notice within thirty (30) calendar days of the SHPO's receipt of the same, then [name of property recipient] may proceed with the proposed undertaking without further consultation with the SHPO.

4. If the response provided to [name of property recipient] by the SHPO pursuant to paragraph 3 of this covenant requires consultation with the SHPO, then both parties will so consult in good faith to arrive at mutually-agreeable and appropriate measures that [name of property recipient] will employ to mitigate any adverse effects associated with the proposed undertaking. If the parties are unable to arrive at such mutually-agreeable mitigation measures, then [name of property recipient] shall, at a minimum, undertake recordation for the concerned property—in accordance with the Secretary of Interior's standards for recordation and any applicable state standards for recordation, or in accordance with such other standards to which the parties may mutually agree—prior to proceeding with the proposed undertaking. Pursuant to this covenant, any mitigation measures to which [name of property recipient] and the SHPO mutually agree, or any recordation that may be required, shall be carried out solely at the expense of [name of property recipient].

5. [Name of recipient] shall make every reasonable effort to prohibit any person from vandalizing or otherwise disturbing any archeological site determined by the [name of SHPO parent origination] to be eligible for inclusion in the National Register of Historic Places. Any such vandalization or disturbance shall be reported to the [name of SHPO parent organization] promptly.

6. The [name of SHPO parent organization] shall be permitted at all reasonable time to inspect [parcel designation] in order to ascertain its condition and to fulfill its responsibilities hereunder.
7. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, the [name of SHPO parent organization] may, following reasonable notice to [name of recipient], institute suit to enjoin said violation or to require the restoration of any archeological site affected by such violation. The successful party shall be entitled to recover all costs or expenses incurred in connection with any such suit, including all court costs and attorney's fees.
8. [Name of recipient] agrees that the [name of SHPO parent organization] may, at its discretion and without prior notice to [name of recipient], convey and assign all or part of its rights and responsibilities contained in this covenant to a third party.
9. This covenant is binding on [name of recipient], [his/he/its] heirs, successors, and assigns in perpetuity. Restrictions, stipulations, and covenants contained herein shall be inserted by [name of recipient] verbatim or by express reference in any deed or other legal instrument by which [he/she/it] divests [himself/herself/itself] of either the fee simple title or any other lesser estate in [parcel designation] or any part thereof.
10. The failure of the [name of SHPO parent organization] to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any other right or remedy or the use of such right or remedy at any other time.
11. The covenant shall be a binding servitude upon the real property that includes [official number(s) designation of archeological site(s)] and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that [name of recipient] agrees to be bound by the foregoing conditions and restrictions and to perform the obligations herein set forth.

APPENDIX F
AGENCY CORRESPONDENCE

UNIVERSITY OF CALIFORNIA

LIBRARY

1968



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, New York 13045

September 26, 1996

Ms. Wendy Brown
Environmental Scientist
Tetra Tech, Inc.
10306 Eaton Place, Suite 340
Fairfax, VA 22030

Dear Ms. Brown:

This responds to your letter of September 3, 1996, requesting information on the presence of Federally listed or proposed endangered or threatened species in the vicinity of the Seneca Army Depot in the Town of Romulus, Seneca County, New York. The information will be used in the preparation of the Disposal and Reuse Environmental Impact Statement for the depot.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the U.S. Fish and Wildlife Service (Service). Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of Federally listed and proposed endangered and threatened species in New York is enclosed for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under the Fish and Wildlife Coordination Act or other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact:

New York State Department of
Environmental Conservation
Region 8
6274 East Avon-Lima Road
Avon, NY 14414
(716) 226-2466

New York State Department of
Environmental Conservation
Wildlife Resources Center - Information Serv.
New York Natural Heritage Program
700 Troy-Schenectady Road
Latham, NY 12110-2400
(518) 783-3932

The draft National Wetlands Inventory (NWI) maps of the Dresden, Geneva South, Ovid, and Romulus Quadrangles are available and may show wetlands in the project vicinity. However, while the NWI maps are reasonably accurate, they should not be used in lieu of

field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes.

Work in certain waters and wetlands of the United States may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without stipulations, or recommend denial of the permit depending upon the potential adverse impacts on fish and wildlife resources associated with project implementation. The need for a Corps permit may be determined by contacting Mr. Joseph Seebode, Chief, Regulatory Branch, U.S. Army Corps of Engineers, 26 Federal Plaza, New York, NY 10278 (telephone: [212] 264-3996).

If you require additional information please contact Michael Stoll at (607) 753-9334.

Sincerely,


ACTING FOR

Sherry W. Morgan
Field Supervisor

Enclosure

cc: NYSDEC, Avon, NY (Compliance Services)
NYSDEC, Latham, NY
COE, New York, NY

**FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES
IN NEW YORK**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>	<u>Distribution</u>
<u>FISHES</u>			
Sturgeon, shortnose*	<i>Acipenser brevirostrum</i>	E	Hudson River & other Atlantic coastal rivers
<u>REPTILES</u>			
Turtle, green*	<i>Chelonia mydas</i>	T	Oceanic summer visitor coastal waters
Turtle, hawksbill*	<i>Eretmochelys imbricata</i>	E	Oceanic summer visitor coastal waters
Turtle, leatherback*	<i>Dermochelys coriacea</i>	E	Oceanic summer resident coastal waters
Turtle, loggerhead*	<i>Caretta caretta</i>	T	Oceanic summer resident coastal waters
Turtle, Atlantic ridley*	<i>Lepidochelys kempii</i>	E	Oceanic summer resident coastal waters
<u>BIRDS</u>			
Eagle, bald	<i>Haliaeetus leucocephalus</i>	T	Entire state
Falcon, peregrine	<i>Falco peregrinus</i>	E	Entire state - re-establishment to former breeding range in progress
Plover, piping	<i>Charadrius melodus</i>	E T	Great Lakes Watershed Remainder of coastal New York
Tern, roseate	<i>Sterna dougallii dougallii</i>	E	Southeastern coastal portions of state
<u>MAMMALS</u>			
Bat, Indiana	<i>Myotis sodalis</i>	E	Entire state
Cougar, eastern	<i>Felis concolor couguar</i>	E	Entire state - probably extinct
Whale, blue*	<i>Balaenoptera musculus</i>	E	Oceanic
Whale, finback*	<i>Balaenoptera physalus</i>	E	Oceanic
Whale, humpback*	<i>Megaptera novaeangliae</i>	E	Oceanic
Whale, right*	<i>Eubalaena glacialis</i>	E	Oceanic
Whale, sei*	<i>Balaenoptera borealis</i>	E	Oceanic
Whale, sperm*	<i>Physeter catodon</i>	E	Oceanic
<u>MOLLUSKS</u>			
Snail, Chittenango ovate amber	<i>Succinea chittenangoensis</i>	T	Madison County
Mussel, dwarf wedge	<i>Alasmidonta heterodon</i>	E	Orange County - lower Neversink River

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

**FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES
IN NEW YORK (Cont'd)**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>	<u>Distribution</u>
<u>BUTTERFLIES</u>			
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	E	Albany, Saratoga, Warren, and Schenectady Counties
<u>PLANTS</u>			
Monkshood, northern wild	<i>Aconitum noveboracense</i>	T	Ulster, Sullivan, and Delaware Counties
Pogonia, small whorled Swamp pink	<i>Isotria medeoloides</i> <i>Helonias bullata</i>	T T	Entire state Staten Island - presumed extirpated
Gerardia, sandplain	<i>Agalinis acuta</i>	E	Nassau and Suffolk Counties
Fern, American hart's-tongue	<i>Asplenium scolopendrium</i> var. <i>americana</i>	T	Onondaga and Madison Counties
Orchid, eastern prairie fringed	<i>Platanthera leucophea</i>	T	Not relocated in New York
Bulrush, northeastern	<i>Scirpus ancistrochaetus</i>	E	Not relocated in New York
Roseroot, Leedy's	<i>Sedum integrifolium</i> ssp. <i>Leedyi</i>	T	West shore of Seneca Lake
Amaranth, seabeach	<i>Amaranthus pumilus</i>	T	Atlantic coastal plain beaches
Goldenrod, Houghton's	<i>Solidago houghtonii</i>	T	Genesee County

E=endangered T=threatened P=proposed

New York State Department of Environmental Conservation

Region 8 Office - Compliance Services

6274 East Avon-Lima Road, Avon, NY 14414-9519

Telephone: 716-226-2466 Fax: 716-226-2830



Michael D. Zagata
Commissioner

Renée Forgens Davison
Regional Director

October 1, 1996

Ms. Wendy Brown
Environmental Specialist
Tetra Tech, Inc.
10306 Eaton Pl., Suite 340
Fairfax, VA 22030

Dear Ms. Brown:

RE: Endangered, Threatened, and Special Concern Species at Seneca Army Depot

In reference to your September 5, 1996 letter, please note the enclosure which relates to your request. If you have further questions concerning the enclosed list, then please contact David Woodruff, a Senior Wildlife Biologist at this office.

Sincerely,

A handwritten signature in cursive script that reads "Robert K. Scott".

Robert K. Scott
Deputy Regional Permit Administrator

RKS:v

encl.



New York State
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233



ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES
OF NEW YORK STATE

1. ENDANGERED

**Chittenango Ovate Amber Snail
Karner Blue Butterfly
*Shortnose Sturgeon
Round Whitefish
Pugnose Shiner
Eastern Sand Darter
Bluebreast Darter
Gilt Darter
Spoonhead Sculpin
Deepwater Sculpin
Tiger Salamander
Bog Turtle
*Leatherback Sea Turtle
*Hawksbill Sea Turtle
*Atlantic Ridley Sea Turtle
Massasauga Rattlesnake
Golden Eagle
*Bald Eagle
*Peregrine Falcon
*Eskimo Curlew
*Piping Plover
Least Tern
Roseate Tern
Loggerhead Shrike
*Indiana Bat
*Sperm Whale
*Sei Whale
*Blue Whale
*Finback Whale
*Humpback Whale
*Right Whale
*Gray Wolf
*Cougar
Eastern Woodrat

Succinea chittenangoensis
Lycaeides melissa
Acipenser brevirostrum
Prosopium cylindraceum
Notropis anogenus
Ammocrypta pellucida
Etheostoma camurum
Percina evides
Cottus ricei
Myoxocephalus thompsoni
Ambystoma tigrinum
Clemmys mühlenbergi
Dermodochelys coriacea
Eretmodochelys imbricata
Lepidochelys kempi
Sistrurus catenatus
Aquila chrysaetos
Haliaeetus leucocephalus
Falco peregrinus
Numenius borealis
Charadrius melodus
Sterna antillarum
Sterna dougallii
Lanius ludovicianus
Myotis sodalis
Physeter catodon
Balaenoptera borealis
Balaenoptera musculus
Balaenoptera physalus
Megaptera novaeangliae
Balaena glacialis
Canis lupus
Felis concolor
Neotoma floridana

II. THREATENED

Lake Sturgeon
Mooneye
Lake Chubsucker
Mud Sunfish
Longear Sunfish
Cricket Frog
Mud Turtle

Acipenser fulvescens
Hiodon tergisus
Erimyzon sucetta
Acantharchus pomotis
Lepomis megalotis
Acris crepitans
Kinosternon subrubrum

Blanding's Turtle
 **Loggerhead Sea Turtle
 **Green Sea Turtle
 Timber Rattlesnake
 - Osprey
 Red-shouldered Hawk
 - Northern Harrier
 Spruce Grouse
 Common Tern

KNOWN

Potential

Emydoidea blandingii
 Caretta caretta
 Chelonia mydas
 Crotalus horridus
 Pandion haliaetus
 Buteo lineatus
 Circus cyaneus
 Dendragapus canadensis
 Sterna hirundo

III. SPECIAL CONCERN

Buckmoth
 Silver Chub
 Gravel Chub
 Blackchin Shiner
 Black Redhorse
 Banded Sunfish
 Longhead Darter
 Southern Leopard Frog
 Hellbender
 Jefferson Salamander
 Blue-spotted Salamander
 Spotted Salamander
 Spotted Turtle
 Wood Turtle
 Diamondback Terrapin
 Worm Snake
 Eastern Hognose Snake
 Common Loon
 Least Bittern
 - Cooper's Hawk
 Black Rail
 Upland Sandpiper
 Black Tern
 Common Barn-Owl
 - Short-eared Owl
 Common Nighthawk
 Common Raven
 Sedge Wren
 - Eastern Bluebird
 Henslow's Sparrow
 - Grasshopper Sparrow
 - Vesper Sparrow
 Small-footed Bat
 New England Cottontail
 Harbor Porpoise

Potential

Potential

KNOWN

Potential

Hemileuca maia
 Hybopsis storeiana
 Hybopsis x-punctata
 Notropis heterdon
 Moxostoma duquesnei
 Enneacanthus obesus
 Percina macrocephala
 Rana sphenoccephala
 Cryptobranchus alleganiensis
 Ambystoma jeffersonianum
 Ambystoma laterale
 Ambystoma maculatum
 Clemmys guttata
 Clemmys insculpta
 Malaclemys terrapin
 Carphophis amoenus
 Heterdon platyrhinos
 Gavia immer
 Ixobrychus exilis
 Accipiter cooperii
 Laterallus jamaicensis
 Bartramia longicauda
 Chlidonias niger
 Tyto alba
 Asio flammeus
 Chordeiles minor
 Corvus corax
 Cistothorus platensis
 Sialia sialis
 Ammodramus henslowii
 Ammodramus savannarum
 Poocetes gramineus
 Myotis leibii
 Sylvilagus transitionalis
 Phocoena phocoena

* Indicates that the species is currently listed as "endangered" by the U.S. Department of the Interior.
 ** Indicates that the species is currently listed as "threatened" by the U.S. Department of the Interior.

Express Terms

6 NYCRR Part 193.3 is repealed.

A new Part 193.3 is adopted to read as follows: 193.3 Protected native plants.

(a) All plants enumerated on the lists of endangered species in subdivision (b) of this section, threatened species in subdivision (c) of this section, exploitably vulnerable species in subdivision (d) of this section, or rare species in subdivision (e) of this section are protected native plants pursuant to section 9-1503 of the Environmental Conservation Law. The common names contained on these lists are included for information purposes only; the scientific name shall be used for the purpose of determining any violation. Site means a colony or colonies of plants separated from other colonies by at least one-half mile.

(b) The following are **endangered** native plants in danger of extinction throughout all or a significant portion of their ranges within the state and requiring remedial action to prevent such extinction. Listed plants are those with 5 or fewer extant sites, or fewer than 1,000 individuals, or restricted to fewer than 4 U.S.G.S. 7½ minute series maps, or species listed as endangered by the United States Department of Interior in the Code of Federal Regulations.

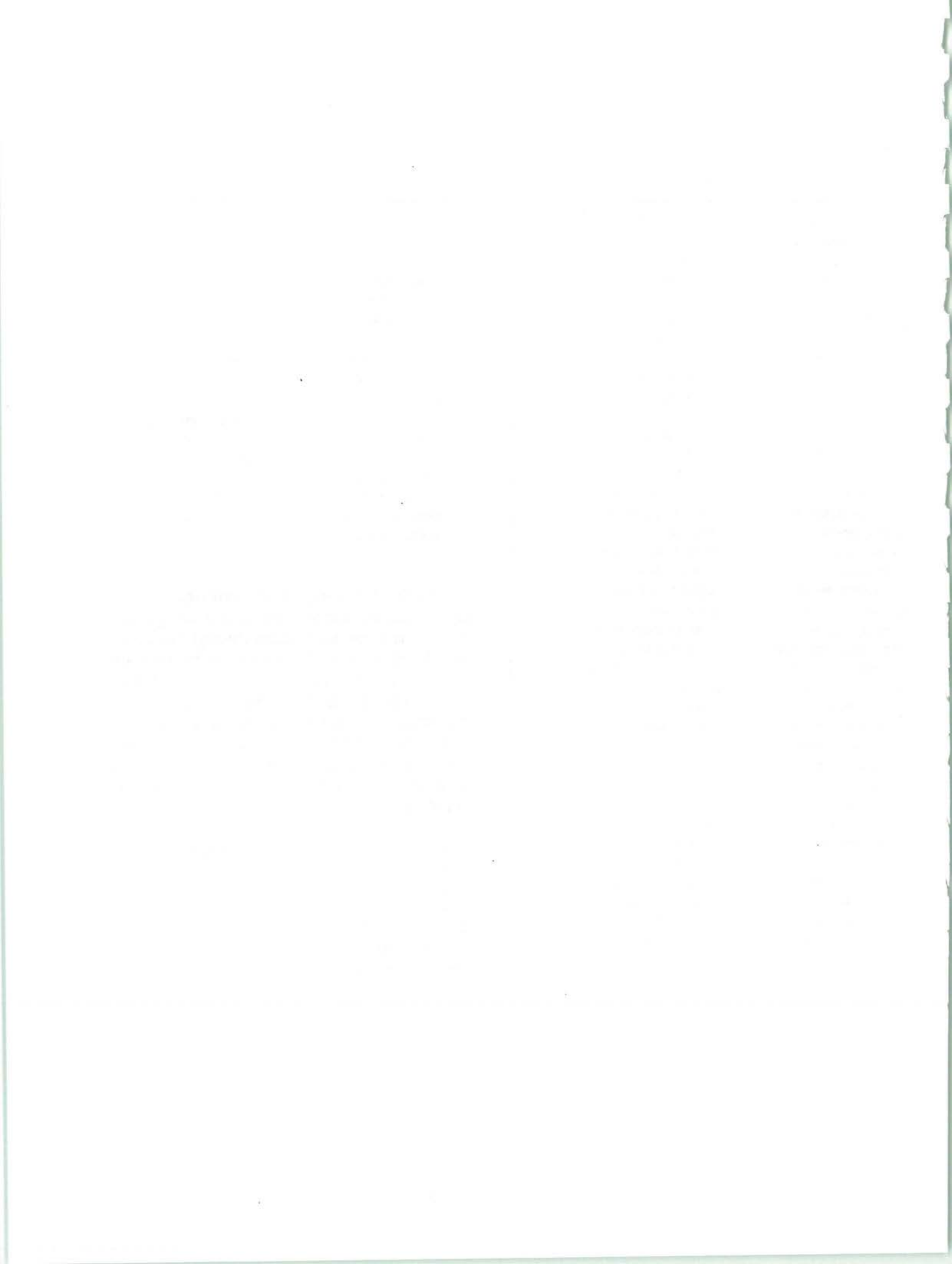
Species	Common name
<i>Agalinis acuta</i>	Sandplain Gerardia
<i>Amelanchier x nantucketensis</i>	Nantucket Juneberry
<i>Angelica lucida</i>	Angelica
<i>Arnica lanceolata</i>	Arnica
<i>Asplenium viride</i>	Green Spleenwort
<i>Aster concolor</i>	Silvery Aster
<i>Betula glandulosa</i>	Tundra Dwarf Birch
<i>Betula minor</i>	Dwarf White Birch
<i>Botrychium lunaria</i>	Moonwort
<i>Botrychium minganense</i>	Mingan Moonwort
<i>Botrychium rugulosum</i>	Rugulose Grape Fern
<i>Bouteloua curtipendula</i>	Side-oats Grama
<i>Calamagrostis porteri</i> ssp. <i>perplexa</i>	Wood Reedgrass
<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Northern Reedgrass
<i>Carex atratiformis</i>	Black Sedge
<i>Carex barratui</i>	Barratt's Sedge
<i>Carex hyalinolepis</i>	Shore-line Sedge
<i>Carex mitchelliana</i>	Mitchell Sedge
<i>Carex wiegandii</i>	Wiegand Sedge
<i>Corallorhiza striata</i>	Striped Coralroot
<i>Corema conradii</i>	Broom Crowberry
<i>Cyperus ovularis</i>	Globose Flatsedge
<i>Cypripedium candidum</i>	Small White Ladyslipper
<i>Cystopteris protrusa</i>	Lowland Fragile Fern
<i>Dicentra eximia</i>	Bleeding-heart
<i>Draba glabella</i>	Rock-cress
<i>Eleocharis engelmannii</i>	Engelmann Spikerush
<i>Epilobium hornemannii</i>	Alpine Willow-herb

<i>Eupatorium leucolepis</i>	White Boneset
<i>Genianopsis procera</i>	Fringed Gentian
<i>Geum triflorum</i>	Prairie-smoke
<i>Hydrocotyle verticillata</i>	Water-pennywort
<i>Hypericum adpressum</i>	Creeping St. John's-wort
<i>Hypericum densiflorum</i>	Bushy St. John's-wort
<i>Hypencum denticulatum</i>	Coppery St. John's-wort
<i>Hypencum hyperoides</i> ssp. <i>mulicaule</i>	St. Andrew's Cross
<i>Juniperus horizontalis</i>	Prostrate Juniper
<i>Ligusticum scoticum</i>	Scotch Lovage
<i>Lilium michiganense</i>	Michigan Lily
<i>Listera auriculata</i>	Auricled Twayblade
<i>Loiseleuria procumbens</i>	Alpine Azalea
<i>Lycopodium carolinianum</i>	Carolina Clubmoss
<i>Lycopodium sitchense</i>	Sitka Clubmoss
<i>Lygodium palmatum</i>	Climbing Fern
<i>Lythrum lineare</i>	Saltmarsh Loosestrife
<i>Oryzopsis canadensis</i>	Canada Ricegrass
<i>Phyllitis scolopendrium</i>	Hart's-tongue Fern
<i>Pinus virginiana</i>	Virginia Pine
<i>Poa paludigena</i>	Slender Marsh Bluegrass
<i>Polygala lutea</i>	Yellow Milkwort
<i>Potamogeton ogdenii</i>	Ogden's Pondweed
<i>Potentilla paradoxa</i>	Bushy Cinquefoil
<i>Prenanthes bootlii</i>	Boott's Rattlesnake-root
<i>Pterospora andromedea</i>	Giant Pine-drops
<i>Pycnanthemum torrei</i>	Torrey's Mountain-mint
<i>Pyxidanthera barbulate</i>	Pixies
<i>Quercus phellos</i>	Willow Oak
<i>Ranunculus cymbalaria</i>	Seaside Crowfoot
<i>Rhynchospora inundata</i>	Drowned Horned Rush
<i>Sabaua angularis</i>	Rose-pink
<i>Sabaua campanulata</i>	Slender Marsh-pink
<i>Sagittaria teres</i>	Quill-leaf Arrowhead
<i>Salix herbacea</i>	Dwarf Willow
<i>Schizaea pusilla</i>	Curlygrass
<i>Scirpus clintonii</i>	Clinton's Clubrush
<i>Scirpus cylindricus</i>	Saltmarsh Bulrush
<i>Scleria minor</i>	Slender Nutrush
<i>Scleria verticillata</i>	Low Nutrush
<i>Sedum integrifolium</i> ssp. <i>leedyi</i>	Rose Sedum

<i>Sedum rosea</i>	Roseroot
<i>Sesuvium maritimum</i>	Sea Purslane
<i>Smilax pseudo china</i>	False China-root
<i>Smilax pulverulenta</i>	Jacob's-ladder
<i>Solidago houghtonii</i>	Houghton's Goldenrod
<i>Thalictrum venulosum</i>	Veiny Meadow-rue
<i>Tillaea aquatica</i>	Pigmyweed
<i>Tofieldia glutinosa</i>	Sticky False Asphodel
<i>Trillium sessile</i>	Toad-shade
<i>Trisetum melicoides</i>	Melic-oats
<i>Uvularia puberula</i>	Mountain Bellwort
<i>Vaccinium cespitosum</i>	Dwarf Blueberry
<i>Viola brittoniana</i> var. <i>brittoniana</i>	Coastal Violet
<i>Viola novae-angliae</i>	New England Violet
<i>Viola stoncana</i>	Stone's Violet
<i>Vittaria</i> spp.	Appalachian Vittaria
<i>Wolffia brazilensis</i>	Watermeal
<i>Woodsia alpina</i>	Alpine Woodsia
<i>Woodsia cathcartiana</i>	Cathcart's Woodsia
<i>Woodsia glabella</i>	Smooth Woodsia

(c) The following are **threatened** native plants that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the state. Listed plants are those with 6 to fewer than 20 extant sites, or 1,000 to fewer than 3,000 individuals, or restricted to not less than 4 or more than 7 U.S.G.S. 7½ minute series maps, or species listed as threatened by the United State Department of Interior in the Code of Federal Regulations.

Species	Common name
<i>Aconitum noveboracense</i>	Northern Monk's-hood
<i>Adoxa moschatellina</i>	Moschatel
<i>Agrostis mertensii</i>	Northern Bentgrass
<i>Asclepias purpurascens</i>	Purple Milkweed
<i>Asclepias variegata</i>	White Milkweed
<i>Asplenium montanum</i>	Mountain Splenwort





New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

Bernadette Castro
Commissioner

11 October 1996

Mr. Jim Collins, Environmental Scientist
Tetra Tech
10306 Eaton Pl., Suite 340
Fairfax, VA 22030

Re: Seneca Army Depot, Romulus & Varick, Seneca County
96 PR 2176

Dear Mr. Collins:

Thank you for your letter of September 18, 1996. As per our several subsequent phone conversations, staff at the Seneca Army Depot (Tom Enroth), with assistance from staff from the Army Corps of Engineers (Stephen Austin, Forth Worth Office), have begun to prepare archeological reports and are planning to begin a survey of the buildings/structures located at the 11,000-acre facility.

Please refer to my letter of December 8, 1995 (attached) to Mr. Enroth for a more detailed summary of my informal, unofficial impressions of the Depot. Perhaps this will assist you in your endeavors. I'm sorry that I cannot be more definitive, but this is all I am able to do based upon the currently available information on file at the State Historic Preservation Office.

Please feel free to contact me with any questions or comments at 518-237-8643 x 262 at any time.

Sincerely,

Nancy L. Todd

Nancy L. Todd
Program Analyst
Historic Preservation Field Services

1914

Dear Sir,

I have the honor to acknowledge the receipt of your letter of the 10th inst.

and in reply to inform you that the same has been forwarded to the proper authorities.

Yours faithfully,

J. H. [Name]

Enclosed for you are the documents referred to in your letter.



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

Bernadette Castro
Commissioner

8 December 1995

Mr. Tom Enroth, Environmental Engineer
Department of the Army
Seneca Army Depot
5786 State Rte 96
Romulus, New York 14541-5001

FILE COPY

RE: Seneca Army Depot
Romulus, Seneca County

Dear Tom:

Thanks for the preliminary, "windshield" tour of the Seneca Army Depot on November 28, 1995. As per our informal discussions, I look forward to receiving a comprehensive, intensive level survey of all the buildings located on the depot. SHPO staff cannot make any official eligibility determinations until we have received such a survey.

I have enclosed copies of sections of the survey prepared for Plattsburgh Air Force Base for your review, and to serve as a possible model for beginning your survey. However, please note that a fundamental problem with the Plattsburgh survey was that they zeroed in on a few "possible" key buildings to be studied for INDIVIDUAL eligibility, but dismissed virtually all others because, individually at least, they didn't merit detailed analysis. I suspect the surveyors of Seneca might fall into a similar trap - i.e, overlooking the "forest for the trees." My informal reaction is that entire 11,000 acres of the depot COULD be found eligible as an HISTORIC DISTRICT - with most of the individual buildings and structures simply being "contributing components" of the district. Despite the loss of integrity of some of the individual buildings (especially the World War II buildings [1942]), the overall GROUP or COMPLEX of buildings appears to retain a relatively high degree of integrity of location (especially in terms of orientation, inter-relationships, etc.), design (albeit very plain and utilitarian), craftsmanship and materials (again, very plain, but essentially intact) and feeling and association. However, I am a little troubled by the loss of integrity of the 1942 housing units, as well as the 1920s lakeside cottages (and, of course, the trailers and 1990s housing down by the lake) and the five nineteenth century houses overlooking the lake.

The Cold War Era facilities and the "Q" all seem to be eligible, too - either as a small district or as a component of the larger district; again, however, additional documentation and assessment of integrity will need to be conducted before an official determination can be issued by SHPO staff.

By the way, I received a call from Inez Hoffman of Pan American consultants - I advised her that it was a big mistake to "survey" the various components of the depot in a piecemeal fashion; without an understanding of the depot as a WHOLE (including pieces that belong to other contexts - e.g., the Samson air strip or the mid-nineteenth century farmhouse), it will not be possible to draw any meaningful conclusions.

Feel free to call me at 518-237-8643 (x 262) if you have any questions.

Sincerely,

Nancy L. Todd
Program Analyst
Historic Preservation Field Services



Michael D. Zagata
Commissioner (518) 783-3932

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Wildlife Resources Center
700 Troy-Schenectady Road
Latham, NY 12110-2400



John Major
Director

September 23, 1996

Wendy Brown
Tetra Tech, Inc.
10306 Eaton Pl., Suite 340
Fairfax, VA 22030

Dear Ms. Brown:

We reviewed the New York Natural Heritage Program files with respect to your recent request for biological information concerning the Environmental Impact Statement for the closure of the Seneca Army Depot at Romulus, site as indicated on your enclosed map, located in the County of Seneca, New York State.

Enclosed is a computer printout covering the area you requested to be reviewed by our staff. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

Our files are continually growing as new habitats and occurrences of rare species and communities are discovered. In most cases, site-specific or comprehensive surveys for plant and animal occurrences have not been conducted. For these reasons, we can only provide data which have been assembled from our files. We cannot provide a definitive statement on the presence or absence of species, habitats or natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

This response applies only to known occurrences of rare animals, plants and natural communities and/or significant wildlife habitats. You should contact our regional office, Division of Regulatory Affairs, at the address enclosed for information regarding any regulated areas or permits that may be required (e.g., regulated wetlands) under State Law.

If this proposed project is still active one year from now we recommend that you contact us again so that we can update this response.

Sincerely,

Nicholas Conrad

Nicholas B. Conrad
Information Services
NY Natural Heritage Program

Enc.

cc: Reg. 8, Wildlife Mgr.

IR2 page 1
 BIOLOGICAL AND CONSERVATION DATA SYSTEM - ELEMENT OCCURRENCE REPORT, 20 SEP 1996
 Prepared by N.Y.S.D.E.C. Natural Heritage Program, Latham New York

(This report contains sensitive information which should be treated in a sensitive manner. Refer to the users guide for explanation of codes and ranks.)

* COUNTY & TOWN	USGS TOPO MAP/ LAT. & LONG.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC AND COMMON NAME	ELEMENT TYPE	NY STATUS	US STATUS	HERITAGE RANKS	OFFICE USE	OFFICE USE
* YATES, SENECA, SCHUYLER, ONTARIO											
TORREY BENTON	DRESDEN 424118 765650	S	1994	A	WATERFOHL CONCENTRATION AREA WATERFOHL CONCENTRATION AREA	OTHER	U		S3S4		4207668 1
MILO											
STARKEY											
VARICK											
FAYETTE											
ROMULUS											
OVID											
LODI											
READING											
HECTOR											
GENEVA											

*L2 and all
of Seneca Lake*

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGULATORY AFFAIRS REGIONAL OFFICES**

<u>REGION</u>	<u>COUNTIES</u>	<u>NAME</u>	<u>ADDRESS AND PHONE NO.</u>
Region 1	Nassau Suffolk	Robert Greene Permit Administrator	Loop Road, Bldg. 40 SUNY Stony Brook, NY 11790-2356 (516) 444-0365
Region 2	New York City	George Danskin Permit Administrator	Hunters Point Plaza 4740 21st Street Long Island City, NY 11101-5407 (718) 482-4997
Region 3	Dutchess Orange Putnam Rockland, Sullivan Ulster, Westchester	Margaret Duke Permit Administrator	21 South Putt Corners Road New Paltz, NY 12561-1696 (914) 256-3059
Region 4	Albany Columbia Delaware Greene, Montgomery, Otsego Rensselaer, Schenectady, Schoharie	William J. Clarke Permit Administrator	1150 N. Westcott Road Schenectady, NY 12306-2014 (518) 357-2234
Region 5	Clinton Essex Franklin Fulton, Hamilton Saratoga, Warren, Washington	Richard Wild Permit Administrator	Route 86 Ray Brook, NY 12977 (518) 897-1234
Region 6	Herkimer Jefferson Lewis Oneida, St. Lawrence	Randy Vaas Permit Administrator	State Office Building 317 Washington Street Watertown, NY 13601 (315) 785-2246
Region 7	Broome Cayuga Chenango Cortland, Madison, Onondaga Oswego, Tioga, Tompkins	Ralph Manna, Jr. Permit Administrator	615 Erie Blvd. West Syracuse, NY 13204-2400 (315) 426-7439
Region 8	Chemung Genesee Livingston Monroe, Ontario, Orleans Schuyler, Seneca, Steuben Wayne, Yates	Albert Butkas Permit Administrator	6274 East Avon-Lima Road Avon, NY 14414 (716) 226-2466
Region 9	Allegany Cattaraugus Chautauqua Erie, Niagara, Wyoming	Steven Doleski Permit Administrator	270 Michigan Avenue Buffalo, NY 14203-2999 (716) 851-7165

USERS GUIDE TO NY NATURAL HERITAGE DATA

New York Natural Heritage Program, 700 Troy-Schenectady Road, Latham NY 12110-2400 phone: (518) 783-3932

NATURAL HERITAGE PROGRAM: The Natural Heritage Program is an ongoing, systematic, scientific inventory whose goal is to compile and maintain data on the rare plants and animals native to New York State, and significant ecological communities. The data provided in the report facilitate sound planning conservation, and natural resource management and help to conserve the plants, animals and ecological communities that represent New York's natural heritage.

DATA SENSITIVITY: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should not be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

NATURAL HERITAGE REPORTS (may contain any of the following types of data):

COUNTY NAME - County where the occurrence of a rare species or significant ecological community is located.

TOWN NAME - Town where the occurrence of a rare species or significant ecological community is located.

USGS 7½' TOPOGRAPHIC MAP - Name of a 7.5 minute US Geological Survey (USGS) quadrangle map (scale 1:24,000).

LAT - Centum latitude coordinate of the location of the occurrence. Caution: latitude & longitude must be used with **PRECISION** (e.g. the location of an occurrence with M (minute) precision is not precisely known & is thought to occur within a 1.5 mile radius of the latitude/longitude coordinates).

LONG - Centum longitude coordinate of the location of the occurrence. See also LAT above.

PRECISION:

S - seconds: location known precisely. (Within a 300' or 1-second radius of the latitude and longitude given).

M - minutes: location known only to within a 1.5 mile (1 minute) radius of the latitude and longitude given.

G - general: location known to within a 5 mile radius of the latitude and longitude given.

SIZE (acres) - Approximate acres occupied by the rare species or significant ecological community at this location.

SCIENTIFIC NAME - Scientific name of the occurrence of a rare species or significant ecological community.

COMMON NAME - Common name of the occurrence of a rare species or significant ecological community.

ELEMENT TYPE - Type of element (i.e. plant, animal, significant ecological community, other, etc.)

LAST SEEN - Year rare species or significant ecological community last observed extant at this location.

EO RANK - Comparative evaluation summarizing the quality, condition, viability and defensibility of this occurrence. Use with **LAST SEEN** and **PRECISION**.

A-E - Extant: A=excellent, B=good, C=marginal, D=poor, E=extant but with insufficient data to assign a rank of A-D.

F - Failed to find. Did not locate species, but habitat is still there and further field work is justified.

H - Historical. Historical occurrence without any recent field information.

X - Extirpated. Field/other data indicated element/habitat is destroyed and the element no longer exists at this location.

? - Unknown.

Blank - Not assigned.

NEW YORK STATE LEGAL STATUS - ANIMALS: Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

E - Endangered Species: any species which meet one of the following criteria:

- 1) Any native species in imminent danger of extirpation or extinction in New York.
- 2) Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Fed. Regulations 50 CFR 17.11.

T - Threatened Species: any species which meet one of the following criteria:

- 1) Any native species likely to become an endangered species within the foreseeable future in NY.
- 2) Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of

the Federal Regulations 50 CFR 17.11.

SC - Special Concern Species: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).

P - Protected Wildlife (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.

U - Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.

G - Game (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

blank - No state status assigned.

NEW YORK STATE LEGAL STATUS - PLANTS: The following categories are defined in regulation 6NYCRR part 193.3 and apply to New York State Environmental Conservation Law section 9-1503.

E - Endangered Species: listed species are those with:

- 1) 5 or fewer extant sites, or
- 2) fewer than 1,000 individuals, or
- 3) restricted to fewer than 4 USGS 7½ minute topographical maps, or
- 4) species listed as endangered by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

T - Threatened: listed species are those with:

- 1) 6 to fewer than 20 extant sites, or
- 2) 1,000 to fewer than 3,000 individuals, or
- 3) restricted to not less than 4 or more than 7 U.S.G.S. 7 and ½ minute topographical maps, or
- 4) listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

R - Rare: listed species have:

- 1) 20 to 35 extant sites, or
- 2) 3,000 to 5,000 individuals statewide.

U - Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.

V - Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked. (The attached list does not contain a complete listed of the species in this category.)

blank - No state status assigned.

FEDERAL STATUS (PLANTS and ANIMALS): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527.

LE - The taxon is formally listed as endangered.

LT - The taxon is formally listed as threatened.

LELT - The taxon is formally listed as endangered in part of its range and threatened in other parts.

PE - The taxon is proposed as endangered.

PT - The taxon is proposed as threatened.

C1 - Candidate, category 1 - There is sufficient information to list the taxon as endangered or threatened.

C2 - Candidate, category 2 - The taxon may be appropriate for listing but more data are needed.

3A - The taxon considered extinct by the U. S. Fish and Wildlife Service.

3B - The taxon is no longer considered taxonomically distinct by the U.S. Fish and Wildlife Service and thus not appropriate for listing.

3C - The taxon has been shown to be more abundant, widespread, or better protected than previously thought and

therefore not in need of official listing.

* The taxon is possibly extinct.

** The taxon is thought to be extinct in the wild but extant in cultivation.

(C2NL) - Heritage code indicating that the taxon is a candidate in some areas, not listed in other areas.

(E/SA) - Heritage code indicating that the taxon is endangered because of similarity of appearance to other endangered species or subspecies.

(blank) - No Federal Endangered Species Act status.

NATURAL HERITAGE PROGRAM GLOBAL AND STATE RANKS: Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Intraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world.

GLOBAL RANK:

G1 - Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 - Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 - Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 - Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 - Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GH - Historically known, with the expectation that it might be rediscovered.

GX - Species believed to be extinct.

GU - Status unknown.

STATE RANK:

S1 - Extremely rare; typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York.

S2 - Very rare; typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York.

S3 - Rare to uncommon; typically 21 to 100 occurrences, limited acreage, or miles of stream in New York. May have fewer occurrences, but with a large number of individuals in some populations.

S4 - Common, apparently secure in New York State; typically 100 or more estimated occurrences. May be fewer occurrences with many large populations.

S5 - Very common, demonstrably secure in New York.

SH - Historically known from New York, but not seen in the past 15 years.

SX - Apparently extirpated from New York.

SA - Accidental or casual in New York.

SE - Exotic, not native to New York.

SN - see SZ.

SP - Element potentially occurs in New York but there are no occurrences reported.

SR - Reported in New York but without persuasive documentation.

SU - Status uncertain, often because of low search effort; uncertainty spans a range of 4 or 5 ranks between S1 through S5. There are three possible ranges: S1-S5, S1-S4 or S2-S5.

SZ (formerly SN) - This rank applies to long-distance migratory animal species which occur in an irregular, dispersed or transitory manner; not of conservation concern in New York for a reason other than being exotic or accidental.

B and N QUALIFIERS - Species which are long distance migrants will normally receive two ranks, one for the breeding season (B) and one for the non-breeding season (N). Example: S2B,S2N

TAXON (T) RANK - The T-ranks (T1 - T5) are defined the same way the Global ranks (G1 - G5) are but the T-rank only refers to the rarity of the subspecific taxon of the species as a whole.

T1 - T5 - See Global Rank definitions above.

Q - Indicates a question exists whether or not the taxon is a good taxonomic entity.

? - Indicates a question exists about the rank.

OFFICE USE: Information for use by the Natural Heritage Program.

SIGNIFICANT HABITAT DATABASE REPORTS (Use of this database is slowly being discontinued as the data is integrated into Heritage databases).

REPORT ID - Significant habitat file code.

NAME OF AREA - Site name where the significant habitat is located.

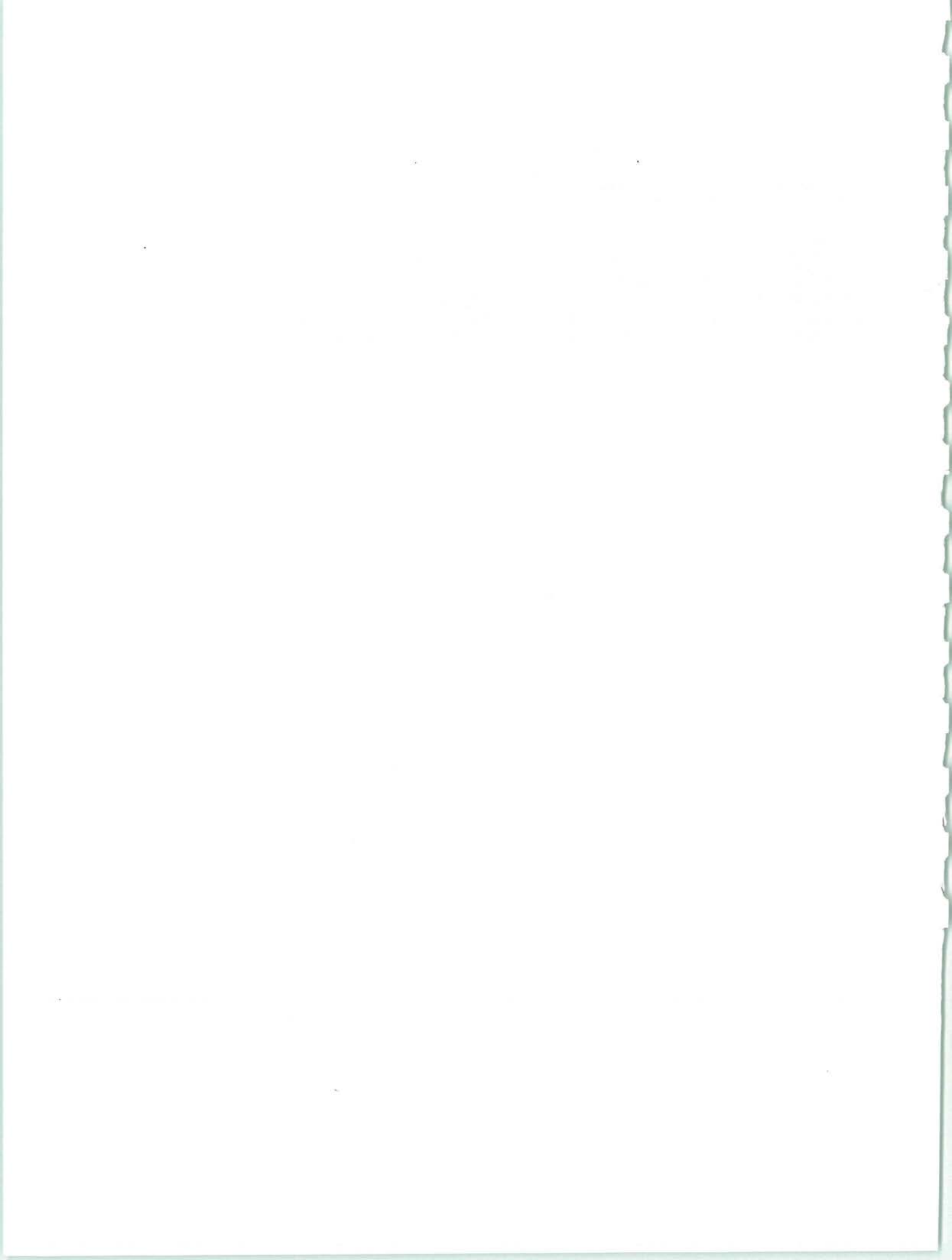
TYPE OF AREA - Type of significant habitat.

COUNTY/TOWN OR CITY - County and town where the significant habitat is located.

QUADRANGLE - Name of the USGS 7½ minute topographic map where the significant habitat is located.

LATITUDE - Latitude coordinate (degrees, minutes, seconds) for the location of the significant habitat.

LONGITUDE - Longitude coordinate for the location of the significant habitat.



APPENDIX G

**ECONOMIC IMPACT FORECAST SYSTEM
(EIFS) MODEL AND OUTPUTS**

1911

THE UNIVERSITY OF CHICAGO
LIBRARY

Appendix G: Economic Impact Forecast System (EIFS) Model and Outputs

Socioeconomic Impact Assessment

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls and local procurement contribute to the economic base for the region of influence (ROI). In this regard, the reuse of the SEDA BRAC parcel will have a multiplier effect on the local and regional economy. With reuse, direct jobs will be created, generating new income and increasing personal spending. This spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services. However, potential in-migration can reduce available housing. In contrast, if reuse is not implemented, jobs will not be created, and any negative economic effects from the realignment of SEDA would remain. This situation could lead to indirect effects, such as reduced income generation, reduced business volume, reduced housing demand, out-migration, and less funding for schools and other social services.

The Economic Impact Forecast System

The US Army, with the assistance of many academic and professional economists and regional scientists, developed the Economic Impact Forecast System (EIFS) to address the economic impacts of NEPA-requiring actions and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS is mandated by ASA (IL&E) for use in NEPA assessment for Base Closure and Realignment. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS is included as one of the tools of the Environmental Technical Information System (ETIS) and is implemented as an on-line system supported by USACERL through the University of Illinois. The system is available to anyone with an approved login and password. It is available at all times through toll-free numbers, Telenet, and other commonly used communications. The ETIS Support Center at the university and the staff of USACERL are available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to "define" an economic ROI by simply identifying the counties to be analyzed. Once the ROI is defined, the system aggregates the data, calculates "multipliers" and other variables used in the various models in EIFS, and prompts the user for input data.

The EIFS Impact Models

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures and/or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to "basic" economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future changes in economic activity can be forecast. This

technique is especially appropriate for estimating "aggregate" impacts and makes the economic base model ideal for the EA/EIS process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its basic sector; for example, a dollar increase in local expenditures due to an expansion of its military installation. EIFS estimates its multipliers using a "location quotient" approach based on the concentration of industries within the region relative to the industrial concentrations for the Nation.

The user selects a model to be used from a menu of options. EIFS has models for three basic military activity scenarios: standard, construction, and training. The user inputs into the selected model those data elements which describe the Army action: civilian and military to be moved and their salaries, and the local procurement associated with the activity being relocated. Once these are entered into the system, a projection of changes in the local economy is provided. These are projected changes in sales volume, employment, income, and population. These four "indicator" variables are used to measure and evaluate socioeconomic impacts. It should be noted, however, that the EIFS models were designed as 1-year projection models. The analyst must use the projections given and extrapolate expected changes in the socioeconomic environment over a number of years, allowing time for full build-out of each reuse scenario.

EIFS Input and Output Data for Reuse Scenarios

The Standard EIFS Forecast Model requires that the user input estimated changes in employment, changes in total expenditures for services and supplies, average income of incoming workers, and the percent of workers expected to relocate from outside the ROI.

Change in employment is calculated by subtracting the baseline worker population from the number of workers anticipated under each reuse intensity defined in Section 3.0. The average expenditure per employee is calculated from Bureau of Economic Analysis national inter-industry intermediate expenditures per employee that have been weighted to reflect county employment levels. The change in total expenditures for services and supplies is calculated for each reuse intensity by multiplying the expected change in number of workers by the average expenditure per employee for that reuse scenario.

The average income of workers is the average earnings for the county or counties in which the installation is located. Percent of workers expected to relocate from outside the ROI varies according to indicators such as unemployment, commuting patterns, etc.

The following are the EIFS input and output data for each ROI under each reuse intensity scenario. These data form the basis for the socioeconomic impact analysis presented in Section 5.0.

The Significance of Socioeconomic Impacts

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the "significance" of the impacts. This analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, employment, income, and population. These evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that

provide a basis for comparing an action's impact to the historical fluctuation in a particular area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

		<u>Increase</u>	<u>Decrease</u>
Business volume	x	100%	75%
Personal income	x	100%	67%
Total employment	x	100%	67%
Total population	x	100%	50%

These boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although the zero-growth concept is being accepted by many local planning groups, military base reductions and closures generally are more injurious to local economics than are expansions.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS impact models, in combination with the RTV, have proven successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

STANDARD EIFS FORECAST MODEL

Project name: SEDA Medium Intensity Reuse, Seneca and Ontario Counties

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	= 100.0
output and incomes (ex b.v.) (CPI - 1993)	= 126.3
baseline year (business volume) (PPI - 1987)	= 100.0
local services and supplies (PPI - 1993)	= 115.7
output and incomes (business volume) (PPI - 1993)	= 115.7

Change in expenditures for services and supplies: 263,830,892
 Change in expenditures for local services and supplies: 150,772,560.00 (calculated)
 Change in civilian employment: 5,447
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0) 38
 Change in military employment: 0

***** STANDARD EIFS MODEL FORECAST FOR MIR *****

Export income multiplier:	2.3336	
Change in local		
Sales volume	Direct:	\$245,047,000
	Induced:	\$326,790,000
	Total:	\$571,837,000 (25.886%)
Employment	Direct:	2,439
	Total:	11,137 (18.505%)
Income	Direct:	\$33,691,000
	Total (place of work):	\$206,619,000
	Total (place of residence):	\$206,619,000 (8.830%)
Local population		5,005 (3.938%)
Local off-base population		5,005
Number of school children		838
Demand for housing	Rental:	547
	Owner occupied:	1,523
Government expenditures.....		\$24,935,000
Government revenues		\$21,053,000
Net Government revenues		-\$3,882,000
Civilian employees expected to relocate:		2,070
Military employees expected to relocate:		0

STANDARD EIFS FORECAST MODEL

Project name: SEDA Medium-Low Intensity Reuse, Seneca and Ontario Counties

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	= 100.0
output and incomes (ex b.v.) (CPI - 1993)	= 126.3
baseline year (business volume) (PPI - 1987)	= 100.0
local services and supplies (PPI - 1993)	= 115.7
output and incomes (business volume) (PPI - 1993)	= 115.7

Change in expenditures for services and supplies: 78,611,628
 Change in expenditures for local services and supplies: 44,924,520.00 (calculated)
 Change in civilian employment: 1,623
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0)
 Change in military employment:

***** STANDARD EIFS MODEL FORECAST FOR MLIR *****

Export income multiplier:	2.3336	
Change in local		
Sales volume	Direct: \$73,015,000	
	Induced: \$97,371,000	
	Total: \$170,386,000	(7.713%)
Employment	Direct: 727	
	Total: 3,319	(5.514%)
Income	Direct: \$10,039,000	
	Total (place of work): \$61,565,000	
	Total (place of residence): \$61,565,000	(2.631%)
Local population	0	(0.000%)
Local off-base population	0	
Number of school children	0	
Demand for housing	Rental: 0	
	Owner occupied: 0	
Government expenditures	\$5,126,000	
Government revenues	\$4,835,000	
Net Government revenues	-\$291,000	
Civilian employees expected to relocate:	0	
Military employees expected to relocate:	0	

STANDARD EIFS FORECAST MODEL

Project name: SEDA Low Intensity Reuse, Seneca and Ontario Counties

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	=	100.0
output and incomes (ex b.v.) (CPI - 1993)	=	126.3
baseline year (business volume) (PPI - 1987)	=	100.0
local services and supplies (PPI - 1993)	=	115.7
output and incomes (business volume) (PPI - 1993)	=	115.7

Change in expenditures for services and supplies: 22,716,484
 Change in expenditures for local services and supplies: 12,981,885.00 (calculated)
 Change in civilian employment: 469
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0)
 Change in military employment:

***** STANDARD EIFS MODEL FORECAST FOR LIR *****

Export income multiplier:	2.3336	
Change in local		
Sales volume	Direct:	\$21,099,000
	Induced:	\$28,137,000
	Total:	\$49,237,000 (2.229%)
Employment	Direct:	210
	Total:	959 (1.593%)
Income	Direct:	\$2,901,000
	Total (place of work):	\$17,790,000
	Total (place of residence):	\$17,790,000 (0.760%)
Local population		0 (0.000%)
Local off-base population		0
Number of school children		0
Demand for housing	Rental:	0
	Owner occupied:	0
Government expenditures		\$1,481,000
Government revenues		\$1,397,000
Net Government revenues		-\$84,000
Civilian employees expected to relocate:		0
Military employees expected to relocate:		0

RATIONAL THRESHOLD VALUES

AREA: Seneca and Ontario Counties

All dollar amounts are in thousands of dollars.
Dollar adjustment based on Consumer Price Index (1987=100).

BUSINESS VOLUME (using Non-Farm Income)

YEAR	Non-Farm income	adjusted income	change	deviation	%deviation
1969	245,026	724,929			
1970	266,254	743,726	18,797	2,031	0.280 %
1971	284,712	763,303	19,577	2,811	0.378 %
1972	304,626	789,187	25,884	9,118	1.194 %
1973	333,746	814,015	24,828	8,062	1.022 %
1974	365,468	803,226	-10,788	-27,554	-3.385 %
1975	383,222	771,070	-32,156	-48,922	-6.091 %
1976	415,115	790,695	19,625	2,859	0.371 %
1977	456,709	817,011	26,315	9,550	1.208 %
1978	507,035	842,251	25,240	8,474	1.037 %
1979	562,424	839,439	-2,812	-19,578	-2.324 %
1980	619,251	813,733	-25,706	-42,472	-5.060 %
1981	653,833	779,300	-34,433	-51,199	-6.292 %
1982	693,405	779,983	683	-16,083	-2.064 %
1983	749,010	817,697	37,713	20,947	2.686 %
1984	844,733	891,069	73,372	56,606	6.923 %
1985	889,855	907,090	16,021	-745	-0.084 %
1986	942,797	976,992	69,902	53,136	5.858 %
1987	1,022,486	1,022,486	45,494	28,728	2.940 %
1988	1,109,215	1,066,553	44,067	27,301	2.670 %
1989	1,187,428	1,089,383	22,831	6,065	0.569 %
1990	1,295,587	1,129,544	40,161	23,395	2.148 %
1991	1,358,723	1,137,959	8,415	-8,351	-0.739 %
1992	1,363,751	1,110,546	-27,413	-44,179	-3.882 %

average yearly change:	16,766
maximum historic positive deviation:	56,606
maximum historic negative deviation:	-51,199
maximum historic % positive deviation:	6.923 %
maximum historic % negative deviation:	-6.292 %
positive rtv:	6.923 %
negative rtv:	-4.719 %

PERSONAL INCOME

YEAR	Personal income	adjusted income	change	deviation	%deviation
1969	419,912	1,242,343			
1970	453,198	1,265,916	23,573	-9,888	-0.796 %
1971	491,482	1,317,646	51,730	18,269	1.443 %
1972	526,855	1,364,909	47,263	13,802	1.047 %
1973	586,568	1,430,654	65,744	32,283	2.365 %
1974	648,641	1,425,585	-5,069	-38,530	-2.693 %
1975	700,706	1,409,871	-15,713	-49,175	-3.449 %
1976	756,716	1,441,364	31,493	-1,969	-0.140 %
1977	823,009	1,472,288	30,924	-2,537	-0.176 %
1978	888,443	1,475,819	3,531	-29,930	-2.033 %
1979	995,289	1,485,506	9,687	-23,774	-1.611 %
1980	1,117,197	1,468,064	-17,442	-50,903	-3.427 %
1981	1,240,890	1,479,011	10,946	-22,515	-1.534 %
1982	1,330,156	1,496,238	17,228	-16,234	-1.098 %
1983	1,405,119	1,533,973	37,734	4,273	0.286 %
1984	1,546,672	1,631,510	97,538	64,076	4.177 %
1985	1,644,641	1,676,494	44,984	11,523	0.706 %
1986	1,757,024	1,820,750	144,256	110,794	6.609 %
1987	1,852,680	1,852,680	31,930	-1,532	-0.084 %
1988	1,990,280	1,913,731	61,051	27,589	1.489 %
1989	2,167,403	1,988,443	74,712	41,251	2.156 %
1990	2,310,961	2,014,787	26,344	-7,117	-0.358 %
1991	2,399,359	2,009,513	-5,274	-38,735	-1.923 %
1992	2,470,681	2,011,955	2,442	-31,020	-1.544 %

average yearly change:	33,461
maximum historic positive deviation:	110,794
maximum historic negative deviation:	-50,903
maximum historic % positive deviation:	6.609 %
maximum historic % negative deviation:	-3.449 %
positive rtv:	6.609 %
negative rtv:	-2.311 %

EMPLOYMENT

YEAR	Employment	change	deviation	%deviation
1969	40,844			
1970	41,450	606	-396	-0.970 %
1971	42,175	725	-277	-0.669 %
1972	43,417	1,242	240	0.569 %
1973	44,834	1,417	415	0.955 %
1974	46,360	1,526	524	1.168 %
1975	45,752	-608	-1,610	-3.473 %
1976	46,000	248	-754	-1.648 %
1977	47,909	1,909	907	1.971 %
1978	49,437	1,528	526	1.097 %
1979	51,143	1,706	704	1.424 %
1980	51,185	42	-960	-1.878 %
1981	51,013	-172	-1,174	-2.294 %
1982	51,000	-13	-1,015	-1.990 %
1983	52,151	1,151	149	0.292 %
1984	55,494	3,343	2,341	4.488 %
1985	56,698	1,204	202	0.364 %
1986	57,411	713	-289	-0.510 %
1987	60,186	2,775	1,773	3.088 %
1988	60,681	495	-507	-0.843 %
1989	62,657	1,976	974	1.605 %
1990	64,155	1,498	496	0.791 %
1991	63,843	-312	-1,314	-2.049 %
1992	63,895	52	-950	-1.488 %

average yearly change:	1,002
maximum historic positive deviation:	2,341
maximum historic negative deviation:	-1,610
maximum historic % positive deviation:	4.488 %
maximum historic % negative deviation:	-3.473 %
positive rtv:	4.488 %
negative rtv:	-2.327 %

POPULATION

YEAR	Population	change	deviation	%deviation
1969	113,500			
1970	114,400	900	135	0.119 %
1971	116,700	2,300	1,535	1.342 %
1972	116,700	0	-765	-0.656 %
1973	117,700	1,000	235	0.201 %
1974	118,800	1,100	335	0.284 %
1975	120,200	1,400	635	0.534 %
1976	121,000	800	35	0.029 %
1977	121,900	900	135	0.111 %
1978	123,700	1,800	1,035	0.849 %
1979	124,400	700	-65	-0.053 %
1980	122,700	-1,700	-2,465	-1.982 %
1981	123,400	700	-65	-0.053 %
1982	123,700	300	-465	-0.377 %
1983	124,600	900	135	0.109 %
1984	125,900	1,300	535	0.429 %
1985	126,600	700	-65	-0.052 %
1986	126,800	200	-565	-0.446 %
1987	127,100	300	-465	-0.367 %
1988	128,200	1,100	335	0.263 %
1989	128,600	400	-365	-0.285 %
1990	129,000	400	-365	-0.284 %
1991	130,200	1,200	435	0.337 %
1992	131,100	900	135	0.104 %

average yearly change:	765
maximum historic positive deviation:	1,535
maximum historic negative deviation:	-2,465
maximum historic % positive deviation:	1.342 %
maximum historic % negative deviation:	-1.982 %
positive rtv:	1.342 %
negative rtv:	-0.991 %

Source: Bureau of Economic Analysis

STANDARD EIFS FORECAST MODEL

Project name: SEDA Medium Intensity Reuse, Seneca County

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	= 100.0
output and incomes (ex b.v.) (CPI - 1993)	= 126.3
baseline year (business volume) (PPI - 1987)	= 100.0
local services and supplies (PPI - 1993)	= 115.7
output and incomes (business volume) (PPI - 1993)	= 115.7

Change in expenditures for services and supplies: 263,830,892
 Change in expenditures for local services and supplies: 95,941,480.00 (calculated)
 Change in civilian employment: 5,447
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0) 38
 Change in military employment: 0

***** STANDARD EIFS MODEL FORECAST FOR MIR *****

Export income multiplier:	1.5715
Change in local	
Sales volume	Direct: \$190,216,000
	Induced: \$108,700,000
	Total: \$298,916,000 (62.508%)
Employment	Direct: 1,578
	Total: 7,927 (53.079%)
Income	Direct: \$23,540,000
	Total (place of work): \$164,992,000
	Total (place of residence): \$164,367,000 (28.894%)
Local population	4,871 (14.539%)
Local off-base population	4,871
Number of school children	839
Demand for housing	Rental: 532
	Owner occupied: 1,538
Government expenditures.....	\$18,024,000
Government revenues	\$16,525,000
Net Government revenues	-\$1,499,000
Civilian employees expected to relocate:	2,070
Military employees expected to relocate:	0

STANDARD EIFS FORECAST MODEL

Project name: SEDA Medium-Low Intensity Reuse, Seneca County

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	=	100.0
output and incomes (ex b.v.) (CPI - 1993)	=	126.3
baseline year (business volume) (PPI - 1987)	=	100.0
local services and supplies (PPI - 1993)	=	115.7
output and incomes (business volume) (PPI - 1993)	=	115.7

Change in expenditures for services and supplies: 78,611,628
 Change in expenditures for local services and supplies: 28,586,934.00 (calculated)
 Change in civilian employment: 1,623
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0)
 Change in military employment:

***** STANDARD EIFS MODEL FORECAST FOR MLIR *****

Export income multiplier:	1.5715	
Change in local		
Sales volume	Direct:	\$56,677,000
	Induced:	\$32,388,000
	Total:	\$89,066,000 (18.625%)
Employment	Direct:	470
	Total:	2,362 (15.815%)
Income	Direct:	\$7,014,000
	Total (place of work):	\$49,161,000
	Total (place of residence):	\$48,975,000 (8.609%)
Local population		0 (0.000%)
Local off-base population		0
Number of school children		0
Demand for housing	Rental:	0
	Owner occupied:	0
Government expenditures.....		\$3,327,000
Government revenues		\$3,594,000
Net Government revenues		\$268,000
Civilian employees expected to relocate:		0
Military employees expected to relocate:		0

Project name: SEDA Low Intensity Reuse, Seneca County

Default price deflators:

baseline year (ex. business volume) (CPI - 1987)	= 100.0
output and incomes (ex b.v.) (CPI - 1993)	= 126.3
baseline year (business volume) (PPI - 1987)	= 100.0
local services and supplies (PPI - 1993)	= 115.7
output and incomes (business volume) (PPI - 1993)	= 115.7

Change in expenditures for services and supplies: 22,716,484
 Change in expenditures for local services and supplies: 8,260,796.00 (calculated)
 Change in civilian employment: 469
 Average income of affected civilian personnel: 23,499
 Percent expected to relocate (enter <cr> to accept default): (0.0)
 Change in military employment:

***** STANDARD EIFS MODEL FORECAST FOR LIR *****

Export income multiplier:	1.5715	
Change in local		
Sales volume	Direct:	
	Induced:	
	Total:	(5.382%)
Employment	Direct:	
	Total:	(4.570%)
Income	Direct:	
	Total (place of work):	
	Total (place of residence):	(2.488%)
Local population		(0.000%)
Local off-base population		
Number of school children		
Demand for housing	Rental:	
	Owner occupied:	
Government expenditures.....	\$961,000	
Government revenues	\$1,039,000	
Net Government revenues	\$77,000	
Civilian employees expected to relocate:	0	
Military employees expected to relocate:	0	

RATIONAL THRESHOLD VALUES

AREA: Seneca County

All dollar amounts are in thousands of dollars.
Dollar adjustment based on Consumer Price Index (1987=100).

BUSINESS VOLUME (using Non-Farm Income)

YEAR	Non-Farm income	adjusted income	change	deviation	%deviation
1969	82,695	244,660			
1970	91,556	255,743	11,083	10,126	4.139 %
1971	99,108	265,705	9,962	9,005	3.521 %
1972	106,195	275,117	9,411	8,454	3.182 %
1973	114,160	278,439	3,322	2,365	0.860 %
1974	121,732	267,543	-10,896	-11,854	-4.257 %
1975	126,705	254,940	-12,603	-13,561	-5.069 %
1976	134,458	256,110	1,171	213	0.084 %
1977	142,959	255,741	-370	-1,327	-0.518 %
1978	159,132	264,339	8,598	7,641	2.988 %
1979	174,613	260,616	-3,722	-4,680	-1.770 %
1980	197,474	259,493	-1,124	-2,081	-0.799 %
1981	206,749	246,423	-13,070	-14,027	-5.406 %
1982	213,323	239,958	-6,465	-7,422	-3.012 %
1983	221,361	241,660	1,702	745	0.310 %
1984	248,426	262,053	20,392	19,435	8.042 %
1985	248,617	253,432	-8,621	-9,578	-3.655 %
1986	251,959	261,097	7,665	6,708	2.647 %
1987	261,237	261,237	140	-818	-0.313 %
1988	283,167	272,276	11,039	10,081	3.859 %
1989	294,996	270,639	-1,637	-2,595	-0.953 %
1990	310,627	270,817	178	-779	-0.288 %
1991	317,555	265,959	-4,858	-5,816	-2.147 %
1992	327,487	266,683	724	-233	-0.088 %

average yearly change:	958
maximum historic positive deviation:	19,435
maximum historic negative deviation:	-14,027
maximum historic % positive deviation:	8.042 %
maximum historic % negative deviation:	-5.406 %
positive rtv:	8.042 %
negative rtv:	-4.054 %

PERSONAL INCOME

YEAR	Personal income	adjusted income	change	deviation	%deviation
1969	116,465	344,571			
1970	128,201	358,103	13,532	8,153	2.366 %
1971	139,619	374,314	16,210	10,831	3.025 %
1972	147,915	383,199	8,886	3,507	0.937 %
1973	163,459	398,680	15,481	10,102	2.636 %
1974	179,073	393,567	-5,113	-10,493	-2.632 %
1975	192,378	387,078	-6,489	-11,868	-3.015 %
1976	204,094	388,750	1,672	-3,707	-0.958 %
1977	217,565	389,204	453	-4,926	-1.267 %
1978	236,088	392,173	2,969	-2,410	-0.619 %
1979	263,492	393,272	1,099	-4,280	-1.091 %
1980	296,488	389,603	-3,668	-9,048	-2.301 %
1981	322,646	384,560	-5,043	-10,422	-2.675 %
1982	338,538	380,808	-3,753	-9,132	-2.375 %
1983	356,721	389,433	8,626	3,247	0.853 %
1984	393,554	415,141	25,708	20,329	5.220 %
1985	408,404	416,314	1,173	-4,207	-1.013 %
1986	433,609	449,336	33,022	27,643	6.640 %
1987	450,405	450,405	1,069	-4,310	-0.959 %
1988	475,733	457,436	7,031	1,651	0.367 %
1989	510,680	468,514	11,078	5,699	1.246 %
1990	537,406	468,532	18	-5,361	-1.144 %
1991	553,716	463,749	-4,783	-10,162	-2.169 %
1992	575,065	468,294	4,545	-834	-0.180 %

average yearly change:	5,379
maximum historic positive deviation:	27,643
maximum historic negative deviation:	-11,868
maximum historic % positive deviation:	6.640 %
maximum historic % negative deviation:	-3.015 %
positive rtv:	6.640 %
negative rtv:	-2.020 %

EMPLOYMENT

YEAR	Employment	change	deviation	%deviation
1969	13,804			
1970	14,070	266	228	1.650 %
1971	14,136	66	28	0.198 %
1972	14,073	-63	-101	-0.716 %
1973	14,072	-1	-39	-0.278 %
1974	14,047	-25	-63	-0.449 %
1975	13,506	-541	-579	-4.123 %
1976	13,482	-24	-62	-0.460 %
1977	13,602	120	82	0.607 %
1978	14,042	440	402	2.954 %
1979	14,498	56	418	2.976 %
1980	14,634	136	98	0.675 %
1981	14,628	-6	-44	-0.302 %
1982	14,224	-404	-442	-3.023 %
1983	14,112	-112	-150	-1.056 %
1984	15,024	912	874	6.192 %
1985	14,727	-297	-335	-2.231 %
1986	14,595	-132	-170	-1.156 %
1987	14,935	340	302	2.068 %
1988	14,451	-484	-522	-3.496 %
1989	14,763	312	274	1.895 %
1990	14,696	-67	-105	-0.712 %
1991	14,505	-191	-229	-1.559 %
1992	14,682	177	139	0.957 %

average yearly change:	38
maximum historic positive deviation:	874
maximum historic negative deviation:	-579
maximum historic % positive deviation:	6.192 %
maximum historic % negative deviation:	-4.123 %
positive rtv:	6.192 %
negative rtv:	-2.762 %

POPULATION

YEAR	Population	change	deviation	%deviation
1969	35,200			
1970	35,100	-100	-26	-0.074 %
1971	35,400	300	374	1.065 %
1972	34,400	-1,000	-926	-2.616 %
1973	34,000	-400	-326	-0.948 %
1974	33,900	-100	-26	-0.077 %
1975	34,200	300	374	1.103 %
1976	34,200	0	74	0.216 %
1977	34,200	0	74	0.216 %
1978	34,500	300	374	1.093 %
1979	34,800	300	374	1.084 %
1980	33,700	-1,100	-1,026	-2.949 %
1981	33,900	200	274	0.813 %
1982	33,400	-500	-426	-1.257 %
1983	33,300	-100	-26	-0.078 %
1984	33,500	200	274	0.823 %
1985	33,500	0	74	0.221 %
1986	33,600	100	174	0.519 %
1987	33,500	-100	-26	-0.078 %
1988	33,600	100	174	0.519 %
1989	33,700	100	174	0.518 %
1990	33,700	0	74	0.219 %
1991	33,800	100	174	0.516 %
1992	33,500	-300	-226	-0.669 %

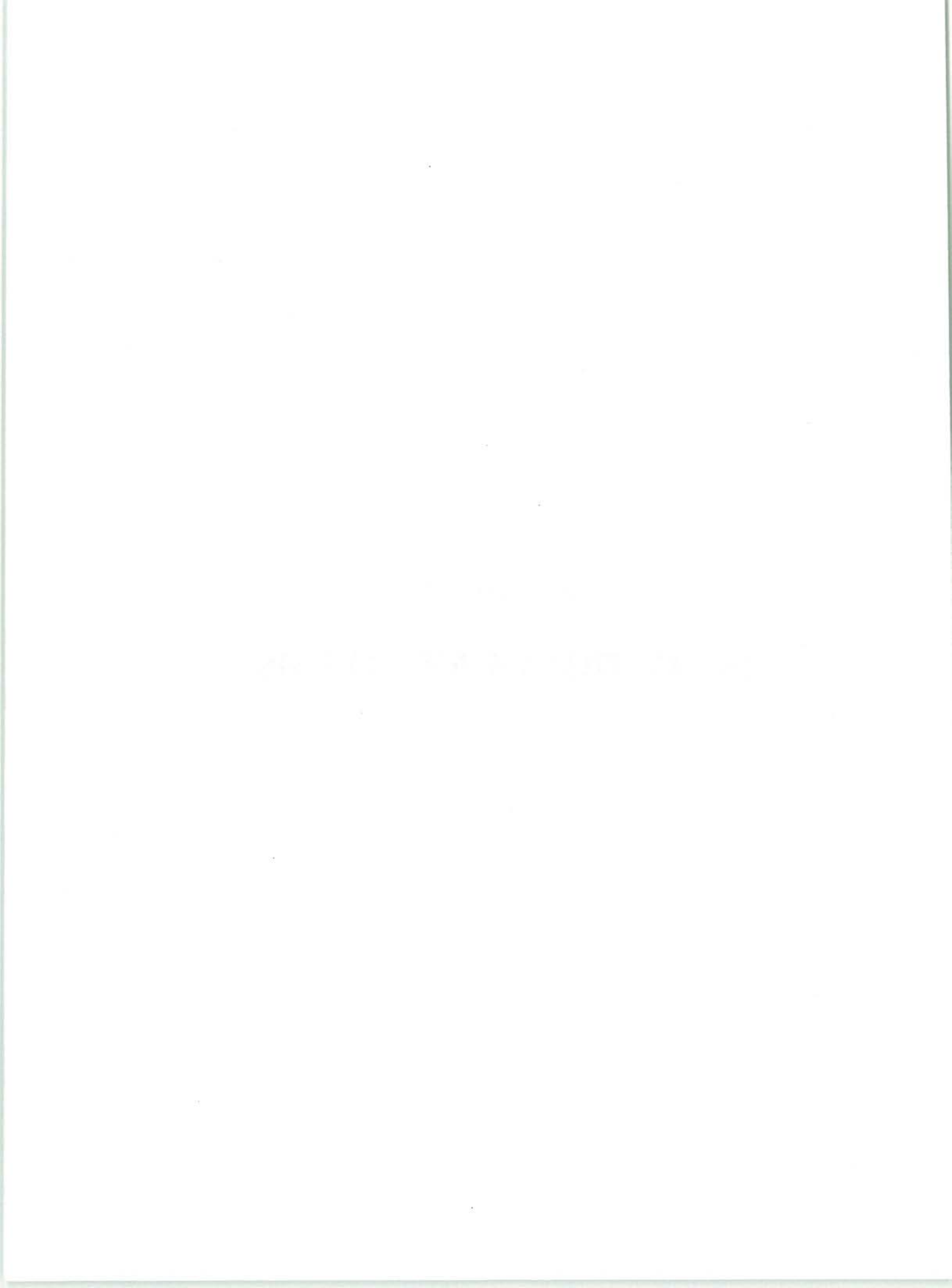
average yearly change:	-74
maximum historic positive deviation:	374
maximum historic negative deviation:	-1,026
maximum historic % positive deviation:	1.103 %
maximum historic % negative deviation:	-2.949 %
positive rtv:	1.103 %
negative rtv:	-1.474 %

Source: Bureau of Economic Analysis



APPENDIX H

DEFINITION OF KEY TERMS



Direct versus Indirect Impacts. The terms *impact* and *effect* are synonymous as used in this EIS. Impacts may be beneficial or adverse and may apply to the full range of natural, aesthetic, historic, cultural, and economic resources of the BRAC property and its surrounding area. Definitions and examples of direct and indirect impacts as used in this document are as follows:

- **Direct Impact.** A direct impact would be caused by implementation of the proposed action and occur at approximately the same time and place.
- **Indirect Impact.** An indirect impact would be caused by implementation of the proposed action and could occur later in time or farther removed in distance but still be a reasonably foreseeable outcome of the action. Indirect impacts may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems.
- **Application of Direct versus Indirect Impacts.** For direct impacts to occur, a resource must be present. For example, if highly erodible soils were disturbed, there could be a direct impact on water quality through stormwater runoff. This runoff could indirectly affect aquatic species through sedimentation downstream from the construction site.

Short-Term versus Long-Term Impacts. In addition to indicating whether impacts are direct or indirect, the impact matrix summary included in this section also distinguishes between short-term and long-term impacts. In this context, short-term and long-term do not refer to any rigid time periods and are determined on a case-by-case basis in terms of the environmental consequences of implementing the proposed action or alternatives.

Cumulative Effects. Cumulative effects are defined in 40 CFR 1508.7 (Council on Environmental Quality Regulations) as the “impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions.”

Mitigation. Where adverse impacts are identified, this document describes measures that could be used to mitigate these effects. Mitigation generally includes the following:

- Avoiding the impact altogether by stopping or modifying an action.
- Minimizing the impact by limiting the degree or magnitude of the action and the activities associated with its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation associated with property disposal may be ensured through restrictive covenants in a deed, transfer document, or other legal agreements between the party implementing an action and the federal, state, or local government agencies.

Mitigation of adverse impacts associated with the reuse of BRAC property is generally the responsibility of the federal, state, and local agencies and private entities that implement reuse plans. Mitigation by non-Army entities that could avoid or reduce adverse impacts caused by reuse, should they be undertaken, are expressed in the conditional (i.e., "could") throughout Section 5.0.

Significance. The term *significance* as used in NEPA requires consideration of both the context and intensity of the effect under consideration. For proposed actions, context may include consideration of effects on a national, regional, or local basis. Both short-term and long-term effects may be relevant.

Effects are also evaluated in terms of their intensity or severity. Factors contributing to an impact's intensity may include the following:

- The degree to which the action affects public health or safety.
- The proximity of the action to resources that are legally protected by various statutes (e.g., wetlands, regulatory floodplains, federally listed threatened or endangered species, or resources listed in the National Register of Historic Places [NRHP]).
- The degree to which the effects of the action on the human environment are likely to be highly uncertain or controversial.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
- Whether the action threatens to violate federal, state, or local laws imposed for the protection of the environment.

The BRAC NEPA impact assessment process assumes that the full effect of the predicted conditions would occur at once. In reality, the projected conditions would likely be less intense than the maximum and would also be likely to happen incrementally rather than all at once. Thus, effects identified may well be less severe than those described here. A brief example of significance criteria for each resource area follows.

- **Land Use.** If an alternative would conflict with adopted plans and goals of the community or if it would result in a substantial alteration of the present or planned land use of an area, it could have a significant effect. If an alternative would result in substantial new development or prevent such development elsewhere, it could have a significant indirect impact.
- **Climate.** If an action would have the effect of substantially altering the weather or climatic parameters of an area, it could be considered significant.
- **Air Quality.** An alternative could have a significant air quality impact if it would result in substantially higher air pollutant emissions or cause air quality standards to be exceeded.
- **Noise.** An alternative could have a significant noise impact if it would generate new sources of substantial noise, increase the intensity or duration of noise levels to sensitive receptors, or result in exposure of more people to high levels of noise.

- **Geology.** If an alternative would result in an increased geologic hazard or a change in the availability of a geologic resource, it could have a significant impact. Such geologic hazards would include, but not be limited to, seismic shaking, land subsidence, and slope instability. Geologic resources would include, but not be limited to, soils, mineral deposits, geothermal resources, and geomorphic features.
- **Water Resources.** If an alternative would result in a reduction in the quantity or quality of water resources for existing or potential future uses, it could have a significant impact. Based on existing water rights, a significant impact would occur if the demand exceeded the capacity of the potable water system. Such uses include, but are not limited to, human consumption, irrigation, recreation, protection of wildlife, and aesthetics.

An alternative could have a significant impact on water resources if it would cause substantial flooding or erosion or subject people or property to flooding or erosion, if it would adversely affect a significant water body such as a stream or lake, or if it would substantially reduce surface water or groundwater quality or quantity. However, under controlled circumstances, flooding can have beneficial environmental impacts on water resources by increasing available wetland habitat for use by wildlife or fishery resources.

- **Infrastructure.** An alternative could have a significant impact on infrastructure if it would increase demand over capacity, requiring a substantial system expansion, or if it would result in substantial system deterioration over the current condition. For instance, an alternative could have a significant impact on traffic if it would increase the volume of traffic beyond the existing road capacity, cause parking availability to fall below minimum local standards, or require new or substantially improved roadways or traffic control systems.
- **Hazardous and Toxic Materials.** An alternative could have a significant impact if it would result in a substantial increase or decrease in the generation of hazardous substances, an increase or decrease in the exposure of persons to hazardous or toxic substances, or an increase or decrease in the possibility of release of hazardous or toxic materials to the environment.
- **Permits and Regulatory Authorizations.** An alternative could have significant impacts on permits and regulatory authorizations if proposed activities or activity levels are not permissible. New permits or regulatory authorizations could be required for any additional activity.
- **Biological Resources and Ecosystems.** The effect of an alternative on biological resources and ecosystems could be significant if it would result in the disruption or removal of any federally listed endangered or threatened species, or its habitat, migration corridors, or breeding areas. The loss of a substantial number of individuals of any plant or animal species (sensitive or nonsensitive species) that could affect the abundance of a species or the biological diversity of an ecosystem beyond normal variability could also be considered significant. The measurable degradation of sensitive habitats, particularly wetlands, could be significant.
- **Cultural Resources.** An alternative could have a significant impact on cultural resources if it would result in unauthorized artifact collecting or vandalism of identified important sites, or modifications to or demolition of a historic building or environmental setting, or if it would promote neglect, resulting in resource deterioration or destruction, audio or visual intrusion, or decreased access to traditional Native American resources. Impact assessment for cultural resources focuses on those properties which are listed in or are considered eligible for the NRHP or that are National Historic Landmarks, and resources that are

considered sensitive by Native American groups.

- **Legacy Resources.** An alternative could have a significant impact on legacy resources if it would impair protection or program efforts designed to maintain those resources.
- **Economic Development.** An alternative could have a significant impact if it would decrease or increase the employment levels in the ROI to a substantial extent.
- **Socioeconomic Environment.** An alternative could have significant impact if it would alter substantially the location and distribution of the population within the geographic region of influence, cause the population to exceed historical growth rates, decrease jobs so as to substantially raise the regional unemployment rates or reduce income generation, or substantially affect the local housing market and vacancy rates. A need for new schools or other public services could be identified as significant due to a lack of funding for new construction or a lack of space.
- **Quality of Life.** An alternative could have a significant impact if it would substantially alter the quality of life in the surrounding area.
- **Installation Agreements.** An alternative could have a significant impact on installation agreements if it required any alterations in the current agreements. Such alterations would require the establishment of new Memoranda of Agreement/Memoranda of Understanding or similar interagency or intergovernmental agreements.

GLOSSARY

GLOSSARY

A-Weighted Decibel (dBA)	A number representing the sound level that is frequency-weighted according to a prescribed frequency response established by the American National Standards Institute (ANSI-S1.4-1971) and accounts for the response of the human ear.
Affected Area(s)	Area(s) that have the potential for radioactive contamination (based on facility operating history) or known radioactive contamination (based on past or preliminary radiological survey/surveillance). These would normally include areas where radioactive materials were used and stored, where records indicate spills or other unusual occurrences that could have resulted in the spread of radioactive contamination, and where radioactive materials were buried. Areas immediately surrounding or adjacent to locations where radioactive materials were used or stored, spilled, or buried are included in this classification because of the potential for the inadvertent spread of radioactive contamination. Affected areas are further divided into those areas of elevated residual radioactivity in excess of the regulatory guideline levels and those in which such areas of elevated radioactivity would <i>not</i> be anticipated. (If there is any doubt, the area should be designated as an affected area.)
Affected/Non-Uniform Area	An affected area that has the potential for a non-uniform or spotty residual radioactivity pattern. Indoor survey units that are classified as affected/non-uniform will generally consist of a single room. NOTE: Any area that has been remediated or decontaminated will be designated as affected/non-uniform. <i>In general, all areas shall be treated as affected/non-uniform until substantial bases are provided to reclassify them as affected/uniform, unaffected, or non-impact area.</i>
Affected/Uniform Area	An affected area with little or no potential for non-uniform or spotty residual radioactivity.
Ambient Air Quality Standards	Standards established on a state or federal level that define the limits for airborne concentrations of designated criteria pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, lead), to protect public health with an adequate margin of safety (primary standards) and public welfare, including plant and animal life, visibility, and materials (secondary standards).
Artifact	Any product of human cultural activity; more specifically, any tools, weapons, artworks, etc., found in archeological contexts.
Asbestos	A carcinogenic substance formerly used widely as an insulation material by the construction industry and often found in older buildings.
Attainment Area	An area that meets the National Ambient Air Quality Standards for a criteria pollutant under the Clean Air Act or meets state air quality standards.
Calcareous	Said of a substance that contains calcium carbonate.
Cantonment Area	That portion of an Army installation having most administrative, troop billeting, maintenance, industrial, supply and storage, medical, family housing, and community facilities. Cantonment areas are typically located so as to maintain geographic separation from training areas, firing ranges, and airfield facilities.

Capacity (Transportation)	The maximum rate of flow at which vehicles can reasonably be expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.
Capacity (Utilities)	The maximum load a system is capable of carrying under existing service conditions.
Council on Environmental Quality (CEQ)	Established by the National Environmental Policy Act (NEPA), the CEQ consists of three members appointed by the President. CEQ regulations (40 CFR Parts 1500-1508, as of July 1, 1986) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements, and timing and extent of public participation.
Cultural History	The archeological sequence of cultural activity through time, within a defined geographic space or relating to a particular group.
Cultural Resource	Prehistoric or historic district sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for a scientific, traditional, religious, or other reason.
Cumulative Effects	Impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions.
Day-Night Average Sound Level (Ldn)	The 24-hour average-energy sound level expressed in decibels, with a 10-decibel penalty added to sound levels between 10.00 p.m. and 7:00 a.m. to account for increased annoyance due to noise during the night.
Decibel (dB)	A unit of measurement on a logarithmic scale that describes the magnitude of a particular quantity of sound pressure or power with respect to a standard reference value.
Developed	Said of land, a lot, a parcel, or an area that has been built upon, or where public services have been installed prior to residential or commercial construction.
Direct Impact	An impact caused by an action and occurring near the same time and place.
Disposal	Legal conveyance of Army property to other ownership.
Encumbrance	Any Army-imposed or legal constraint on the future use or development of property to be disposed of. Encumbrances, whether restrictive or for planning purposes only, may be natural or may result from Army activities or decisions.
Endangered Species	A species that is threatened with extinction throughout all or a significant portion of its range.
Environmental Impact Statement (EIS)	A document required of federal agencies by the National Environmental Policy Act for major projects or legislative proposals significantly affecting the environment. A tool for decision making, the EIS describes the positive and negative effects of the undertaking and lists alternative actions.
Equivalent Noise Levels (Leq)	Noise levels are used to develop single-value descriptions of average noise exposure over various periods of time.

Fissile	Capable of being easily split along closely spaced planes.
Groundwater	Water within the earth that supplies wells and springs.
Hazard Rating System	A system that provides a uniform method of scoring or ranking of the potential risk of a facility site where a hazardous substance has been present. EPA developed the HRS to prioritize its cleanup efforts. EPA evaluates the draft HRS packages and proposes any facilities scoring 28.5 or higher for inclusion on the National Priorities List (NPL). Facilities listed on the NPL receive the highest priority for cleanup.
Hazardous Substance	A substance or mixture of substances that poses a substantial present or potential risk to human health or the environment; any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or otherwise released into the environment.
Hazardous Waste	A waste or combination of wastes that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious irreversible illness, or may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Regulated under the Resource Conservation and Recovery Act.
Hazardous Substance Accumulation Area	An area that may store a hazardous substance for up to 90 days.
Hazardous Substance Storage Area	An area that may store a hazardous substance for up to one year.
Historic	A period of time after the advent of written history dating to the time of first Euro-American contact in an area. Also refers to items primarily of Euro-American manufacture.
Impact Assessment	An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the adverse effects, usually measured using a qualitative and nominally subjective technique.
Indirect Impact	An impact that is caused by an action and may occur later in time or farther removed in distance but still be a reasonably foreseeable outcome of the action.
Infrastructure	The basic installations and facilities on which the continuance and growth of a locale depend (roads, schools, power plants, transportation, and communication systems).
Installation Restoration Program (IRP)	A program established by the Department of Defense to meet requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986 that identifies, assesses, and cleans up or controls contamination from past hazardous waste disposal practices and hazardous material spills.
Land Use Plans and Policies	Guidelines adopted by governments to direct future land use within their jurisdictions.

Long Term Impacts	Impacts that would occur over an extended period of time, whether they start during the construction or operations phase. Most impacts from the operations phase are expected to be long-term since program operations essentially represent a steady-state condition (i.e., impacts resulting from actions that occur repeatedly over a long period of time). However, long-term impacts could also be caused by construction activities if a resource is destroyed or irreparably damaged or if the recovery rate of the resource is very slow.
McKinney Act	The McKinney Act gives recognized providers of assistance to the homeless a high priority in acquiring unneeded land and buildings on federal properties. The property can be used only for the homeless and only for 2 years. The homeless provider must be able to finance upgrades of facilities, pay a proportionate share of municipal service costs, and fund its program operations.
Mitigation	A method or action to avoid, minimize, rectify, reduce, or compensate for program impacts.
National Environmental Policy Act (NEPA)	Public Law 91-190, passed by Congress in 1969, established a national policy designed to encourage consideration of the influence of human activities on the natural environment. NEPA also established the Council on Environmental Quality. NEPA procedures require that environmental information be made available to the public before decisions are made.
National Pollutant Discharge Elimination System (NPDES)	The NPDES is a provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless authorized by a permit issued by EPA or a delegated state.
National Priorities List (NPL)	A list of sites where releases of hazardous materials might have occurred and might pose an unreasonable risk to the health and safety of individuals, property, or the environment.
Native Americans	Used in the collective sense to refer to individuals, bands, or tribes that trace their ancestry to indigenous populations of North America prior to Euro-American contacts.
Non-Impacted Area	Any area that has no potential for residual radioactive contamination.
Ordnance and Explosives (O&E)	Bombs and warheads, guided and ballistic missiles; artillery and mortar; rocket ammunition, mines; demolition charges, pyrotechnics, grenades; containerized and uncontainerized explosives and propellants; military chemical agents; and all similar and related items or components, explosive in nature or otherwise designed to cause damage to personnel or material. Soils with explosive constituents are considered O&E if the concentration is sufficient to be reactive and present an imminent safety hazard.
Palustrine	Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%.
PCB-Contaminated Equipment	Equipment that contains a concentration of polychlorinated biphenyls (PCBs) from 50 to 449 ppm or greater. Disposal and removal are regulated by EPA.
Peak Hours	The hours of highest traffic volume on a given section of roadway, usually between 7:00 a.m. and 9:00 a.m. or between 4:00 p.m. and 6:00 p.m.

Permit	An authorization, license, or equivalent control document to implement the requirements of an environmental regulation.
Pitchblende	A massive, brown to black, and fine grained, amorphous, or microcrystalline variety of uraninite (UO ₂) found in hydrothermal sulfide-bearing veins and having a distinctive pitchy to dull luster.
Polychlorinated Biphenyls (PCBs)	Any of a family of industrial compounds produced by chlorination of biphenyl. These compounds are noted chiefly as an environmental pollutant that accumulates in organisms and concentrates in the food chain with resultant pathogenic and teratogenic effects. They also decompose very slowly.
Potable Water	Water that is suitable for drinking.
Prehistoric	The period of time before the written record.
Prehistory	The archaeological record of nonliterate cultures; the cultural past before the advent of written records.
Radioactive Material	A material that spontaneously emits ionizing radiation.
Radon	A colorless, naturally occurring, radioactive, inert gaseous element formed by radioactive decay of radium in soil or rocks.
Record of Decision (ROD)	A document prepared under the federal government that documents the reasoning behind a decision.
Region of Influence	For each resource, the region affected by the proposed action or alternatives and used for analysis in the affected environment and impact discussion.
Remedial Investigation (RI)	An investigation performed to more fully define the nature and extent of the contamination at a site and evaluate possible methods of cleaning up the site. During the investigation, groundwater, surface water, soil, sediment, and biological samples are collected and analyzed to determine the type and concentration of each contaminant. Samples are collected at different areas and depths to help determine the spread of contamination.
Removal Actions	In the event of an immediate threat or potential threat to human health or the environment, a short-term mitigating or cleanup action may be implemented. The goal of the removal action is to isolate the contamination hot spots and their source from all biological receptors. Usually, removal actions do not completely clean up a site, and additional remediation steps are required.
Runoff	The noninfiltrating water entering a stream or other conveyance channel shortly after a rainfall event.
Short-term Impacts	Transitory effects of the proposed program that are of limited duration and are generally caused by construction activities or operations start-up.
Significance	The importance of a given impact on a specific resource as defined under the Council on Environmental Quality regulations.
Soil Types	A category or detailed mapping unit used for soil surveys based on phases or changes within a series (e.g., texture, grain size).

Solid Waste Management	Supervised handling of waste materials from their source through recovery processes to disposal.
State Historic Preservation Officer (SHPO)	The official within each state, authorized by the state at the request of the Secretary of the Interior to act as a liaison for purposes of implementing the National Historic Preservation Act.
Stratigraphy	Study and description of the form, arrangement, geographic distribution, chronologic succession, classification, and correlation and mutual relationships of rock strata in normal sequence with respect to any or all of the characters, properties, and attributes which rocks may possess.
Surface Water	All water naturally open to the atmosphere and all wells, springs, or other collectors that are directly influenced by surface water.
Threatened Species	Plant and wildlife species likely to become endangered in the foreseeable future.
Toxic	Harmful to living organisms.
Transfer	To deliver U.S. government property accountability to another federal agency.
Unaffected Area	Any area that is not expected to contain any residual radioactivity, based on knowledge of site history and previous radiological survey information. The unaffected areas of a facility may consist of a single survey of unlimited size.
Unexploded Ordnance (UXO)	An item of ordnance that has failed to function as designed, or has been abandoned or discarded and is still capable of functioning and causing injury to personnel or material.
U.S. Environmental Protection Agency	The independent federal agency established in 1970 to regulate federal environmental matters and oversee the implementation of federal environmental laws.
Wetlands	Areas that are inundated or saturated with surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil. This classification includes swamps, marshes, bogs, and similar areas. Jurisdictional wetlands are those wetlands which meet the vegetation, soils, and hydrology criteria under normal circumstances (or meet the special circumstances as described in the U.S. Army Corps of Engineers' 1987 wetland delineation manual where one or more of these criteria may be absent) and are a subset of "waters of the United States."
Zoning	The division of a municipality into districts for the purpose of regulating land use, types of buildings, required yards, necessary off-street parking, and other prerequisites to development. Zones are generally shown on a map, and the text of the zoning ordinance specifies requirements for each zoning category.

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation	EO	Executive Order
ACM	asbestos-containing material	EPA	United States Environmental Protection Agency
AIRFA	American Indian Religious Freedom Act of 1978	ESA	Endangered Species Act
AnA	Angola Silt Loam	°F	degree Fahrenheit
ARPA	Archaeological Resources Protection Act	FAR	floor area ratio
BEA	Bureau of Economic Analysis	FEMA	Federal Emergency Management Agency
bgs	below ground surface	FOSL	Finding of Suitability to Lease
BLM	Bureau of Land Management	FPPA	Farmland Protection Policy Act
BRAC	Base Realignment and Closure	gpd	gallons per day
BTI	Building Technology, Incorporated	gpm	gallons per minute
CAA	Clean Air Act	GPG	Greeley-Polhemus Group, Incorporated
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	HQDA	Headquarters Department of the Army
CERFA	Community Environmental Response Facilitation Act	HAZMAT	hazardous material
CEQ	Council on Environmental Quality	HIR	High Intensity Reuse
CFR	Code of Federal Regulations	HP	horsepower
CWA	Clean Water Act	ICUZ	Installation Compatibility Use Zone
DaA	Darien Silt Loam	II	infiltration/inflow
DdB	Darien-Danley-Cazenovia Silt Loam	IRP	Installation Restoration Program
DLA	Defense Logistics Agency	Is	Ilion Silty Clay Loam
DoD	Department of Defense	kV	kilovolt
DU	depleted uranium	kVa	kilovolt ampere
EA	environmental assessment	lb/day	pound per day
EBS	Environmental Baseline Survey	lb/hr	pounds per hour
EDC	Economic Development Conveyance	LBP	lead-based paint
EIFS	Economic Impact Forecast System	LIR	Low Intensity Reuse
EIS	Environmental Impact Statement	LRA	Local Redevelopment Authority
		MBTA	Migratory Bird Treaty Act
		MHIR	Medium-High Intensity Reuse
		MIR	Medium Intensity Reuse
		MLIR	Medium-Low Intensity Reuse

MOA	Memorandum of Agreement	ROD	Record of Decision
NAAQS	National Ambient Air Quality Standards	ROI	region of influence
NCO	Non-Commissioned Officer	RTV	rational threshold value
NEPA	National Environmental Policy Act	RXO	Residual Explosive Ordnance
NHPA	National Historic Preservation Act	SARA	Superfund Amendments and Reauthorization Act
NOI	Notice of Intent	SDWA	Safe Drinking Water Act
NPDES	National Pollutant Discharge Elimination System	SCIDA	Seneca County Industrial Development Agency
NRC	Nuclear Regulatory Commission	SEDA	Seneca Army Depot Activity
NRCS	National Resources Conservation Service	SEDLRC	Seneca Army Depot Local Redevelopment Authority
NRHP	National Register of Historic Places	SEQR	State Environmental Quality Review
NYCRR	New York Codes Rules and Regulations	SHPO	State Historic Preservation Officer
NYNEX	New York New England Telephone	SPDES	State Pollutant Discharge Elimination System
NYSDEC	New York State Department of Environmental Conservation	STP	sewage treatment plant
NYSDOH	New York State Department of Health	SWMU	solid waste management unit
NYSEG	New York State Electric and Gas	TCE	trichloroethylene
NYSHPO	New York State Historic Preservation Officer	TSDF	Treatment Storage or Disposal Facility
OB/OD	open burning/open detonation	ULI	Urban Land Institute
PBS	petroleum bulk storage	USACE	United States Army Corps of Engineers
PCB	polychlorinated biphenyls	USDA	United States Department of Agriculture
pCi/L	picoCuries per liter	USDOC	United States Department of Commerce
PID	Planned Office/Industrial Development	USFWS	United States Fish and Wildlife Service
PVC	polyvinyl chloride piping	UST	underground storage tank
RAB	Restoration Advisory Board	UXO	unexploded ordnance
RBC	rotating biological contactor		
RCRA	Resource Conservation and Recovery Act		
Ro	Romulus Silty Clay Loam		

