US Army Corps
Of Engineers
New York District

New Jersey
Department of
Environmental
Protection

PASSAIC RIVER FLOODWAY BUYOUT STUDY
LIMITED UPDATE

Final REPORT &
ENVIRONMENTAL ASSESSMENT

MAIN REPORT

Appendix A –Real Estate Plan

Appendix B –MCACES Cost Estimate

Appendix C –Air Quality Analysis

Appendix D –Pertinent Agency Correspondence

Appendix E –Fish and Wildlife Coordination Report

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August 2005

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SYLLABUS

This integrated report and Environmental Assessment has been prepared by the New York District of the U.S. Army Corps of Engineers (Corps), and provides a limited update to the Passaic River Floodway Buyout Study, October 1995. The report contained herein is a limited update of the 1995 report, as it focuses on two areas of the floodway in the Township of Wayne and Borough of Pompton Lakes and analyzes the acquisition of thirty (30) homes.

The non-Federal sponsor for this study, the State of New Jersey, Department of Environmental Protection (NJDEP), requested that acquisition of properties under this buyout focus on these two municipalities, due to the fact that NJDEP had already acquired properties in Pompton Lakes, and because the Township of Wayne had specifically requested NJDEP to address their flood problems in the Hoffman Grove area. The study includes an update of costs, benefits, and an environmental assessment to meet National Environmental Policy Act requirements.

No adverse environmental impacts would occur as a result of project implementation. However, a number of environmental benefits can be achieved through a buyout. They include space for recreation, restored wildlife habitat, improved water quality, and the elimination of pollution sources from future flood events. Other environmental benefits include a reduction in environmental remediation by cleanup of acquired properties.

The most obvious economic benefit of a buyout is the direct reduction of flood damages through the removal of flood-prone structures. Additionally, a buyout reduces publicly subsidized flood insurance costs, reduces uninsured private property losses, avoids lost wages for workers isolated at home or places of employment made inaccessible by flood events, and can reduce the community cost of flood emergencies and disaster relief.

Updated costs for the limited acquisition program amount to $9,946,400. The plan has total average annual costs of $ 576,700, total average annual benefits of $269,650, a benefit-cost ratio of 0.47 to 1, and negative annual net benefits of $307,050. The total project first costs - including Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRD) - are shared on a 75 percent basis by the Federal government and a 25 percent basis by the non-Federal partner. The Federal share of the entire project's total first cost is $ 7,459,800; the non-Federal share is $ 2,486,600. The Federal Government will design the acquisition and demolition plans, prepare detailed plans/specifications and acquire residential properties on behalf of the non-Federal partner.

PERTINENT DATA

DESCRIPTION

The identified plan provides for the acquisition and demolition of thirty (30) residential structures in Wayne Township and Pompton Lakes Borough, Passaic County, New Jersey.

LOCATION

Passaic County, New Jersey

FLOOD DAMAGE REDUCTION FACILITIES

Level of Protection (storm with probability of exceedance)	PMF

REAL ESTATE REQUIREMENTS

Fee Simple Purchase (estimated total)	5.4 Acres

ENVIRONMENTAL MITIGATION

Impacts:

None

ECONOMICS

Initial Project Cost (December 2004 price level)	$9,946,400
Annualized Initial Cost (discounted at 5.375 % over a 50-year period)	$576,700
Operations and Maintenance (O&M) Costs	$0
Total Annual Cost (discounted at 5.375 % over a 50-year period)	$576,700
Average Annual Benefits	$269,650
Average Annual Net Benefits	($307,050)
Benefit-to-Cost Ratio	0.47

COST APPORTIONMENT

Federal Project Cost (75%)	$ 7,459,800
Non-Federal Project Cost (25%)	$ 2,486,600
Total Cost	**$ 9,946,400**

Finding of No Significant Impact (FONSI)

I. DESCRIPTION OF ACTION

The proposed action involves the voluntary acquisition and removal of 10 homes along River Edge Drive in Pompton Lakes and 20 homes in the Hoffman Grove area of Wayne Township. These homes are located within the State defined floodway and sustain damages during flood events. Subsequent to demolition and removal activities, the area will be reseeded with native herbaceous vegetation and will be allowed to revert back to a more natural floodplain environment. The proposed action is authorized in Section 1148 of the Water Resources Development Act of 1996 (WRDA 1996) and Section 327 of WRDA 2000.

II. ANTICIPATED ENVIRONMENTAL IMPACTS

No significant impacts to the environment are anticipated. My determination of a FONSI is based on the Environmental Assessment and the following considerations:

- The project will not negatively impact the quality of the human environment.
- The project will return the floodway to natural conditions.
- The project is not expected to have significant long-term impact on fish or endangered State and Federal species.
- Employing standard erosion control techniques will minimize excess sedimentation to the Pompton and Ramapo Rivers.
- No archaeological or historical resources will be affected by this project.
- The project will not adversely impact air quality.

III. CONCLUSION

Based on my review and evaluation of the environmental effects as presented in the Environmental Assessment, I have determined that the Passaic River Floodway Buyout Project is not a major federal action significantly affecting the quality of the human environment. Therefore, I have determined that this project is exempt from the requirement to prepare an Environmental Impact Statement.

Date: 17 August 2005

Richard J. Polo, Jr.
Colonel, Corps of Engineers
District Engineer

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GLOSSARY OF TERMS, ACRONYMS, AND ABBREVIATIONS

CW	Civil Works Program
CEQ	Council On Environmental Quality
CFR	Code Of Federal Regulations
Corps	United States Army Corps Of Engineers
DEP	Department Of Environmental Protection (New Jersey)
EA	Environmental Assessment
EIS	Environmental Impact Statement
EM	Engineering Manual
ER	Engineering Regulation
FEMA	Federal Emergency Management Agency
FWCA	Fish and Wildlife Coordination Act
HTRW	Hazardous, Toxic, And Radiological Wastes
MCACES	Microcomputer Aided Cost Estimating System
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NHP	Natural Heritage Program
NHPA	National Historic Preservation Act
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department Of Environmental Protection
NJSHPO	New Jersey State Historic Preservation Office
NRHP	National Register of Historic Places
O&M	Operations And Maintenance
P&G	Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies
PED	Preconstruction Engineering And Design
PMP	Project Management Plan
REP	Real Estate Plan
S&A	Supervision And Administration
USACE	United States Army Corps Of Engineers
USFWS	United States Fish And Wildlife Service
USGS	United States Geological Survey
WES	Waterways Experiment Station
WRDA	Water Resources Development Act
WSEL	Water Surface Elevation

PASSAIC RIVER FLOODWAY BUYOUT STUDY
LIMITED UPDATE

FLOOD DAMAGE REDUCTION

INTEGRATED REPORT & ENVIRONMENTAL ASSESSMENT

1. INTRODUCTION

This integrated report and Environmental Assessment has been prepared by the New York District of the U.S. Army Corps of Engineers (Corps), and provides a limited update to the Passaic River Floodway[1] Buyout Study, October 1995. The 1995 report assembled data on costs and other aspects of buyouts of various defined floodplains to provide a basis for direct comparison with the authorized flood damage reduction plan for the Passaic River Basin.

The floodway buyout involves the acquisition and removal of approximately 800 homes from the State defined floodway in the municipalities of Fairfield, Lincoln Park, Wayne, Pompton Lakes, Montville, East Hanover, Pequannock, Little Falls, and Riverdale. As documented in the 1995 report, these homes are subject to frequent flood damages. The general contents of the report were estimated costs of acquiring and removing most of the constructed environment of affected portions of the floodplains and a discussion of the consequences -- both positive and negative -- of a large non-structural flood damage reduction project.

The report contained herein is a limited update of the 1995 report, as it focuses on two areas of the floodway in the Township of Wayne (Passaic County, New Jersey) and Borough of Pompton Lakes (Passaic County, New Jersey), and analyzes the acquisition of thirty (30) homes. General location maps are provided on Figures 1-1 and 1-2. These two study areas comprise 135 properties, with 10 properties located between the Ramapo River and River Edge Drive in Pompton Lakes, and 125 properties along the Pompton River in the Hoffman Grove area of Wayne Township. The non-Federal sponsor for this study, the State of New Jersey, Department of Environmental Protection (NJDEP), requested that acquisition of properties under this buyout occur in these two municipalities, due to the fact that NJDEP had already acquired properties in Pompton Lakes, and because the Township of Wayne had specifically requested NJDEP to address their flood problems in the Hoffman Grove area.

The study includes an update of costs, benefits, and an environmental assessment to meet National Environmental Policy Act requirements. The New Jersey Department of

[1] The term "floodway" used throughout this report is defined as the channel of a natural stream and portions of the flood hazard area adjoining the channel which are reasonably required to carry and discharge the flood water or flood flow. Floodways are usually the area where water velocities and forces are the greatest and most destructive. National Flood Insurance Program (NFIP) regulations, adopted in local flood damage prevention ordinances, require that floodway encroachments, including fill, new construction, substantial improvements, and other development that would increase flood levels be prohibited.

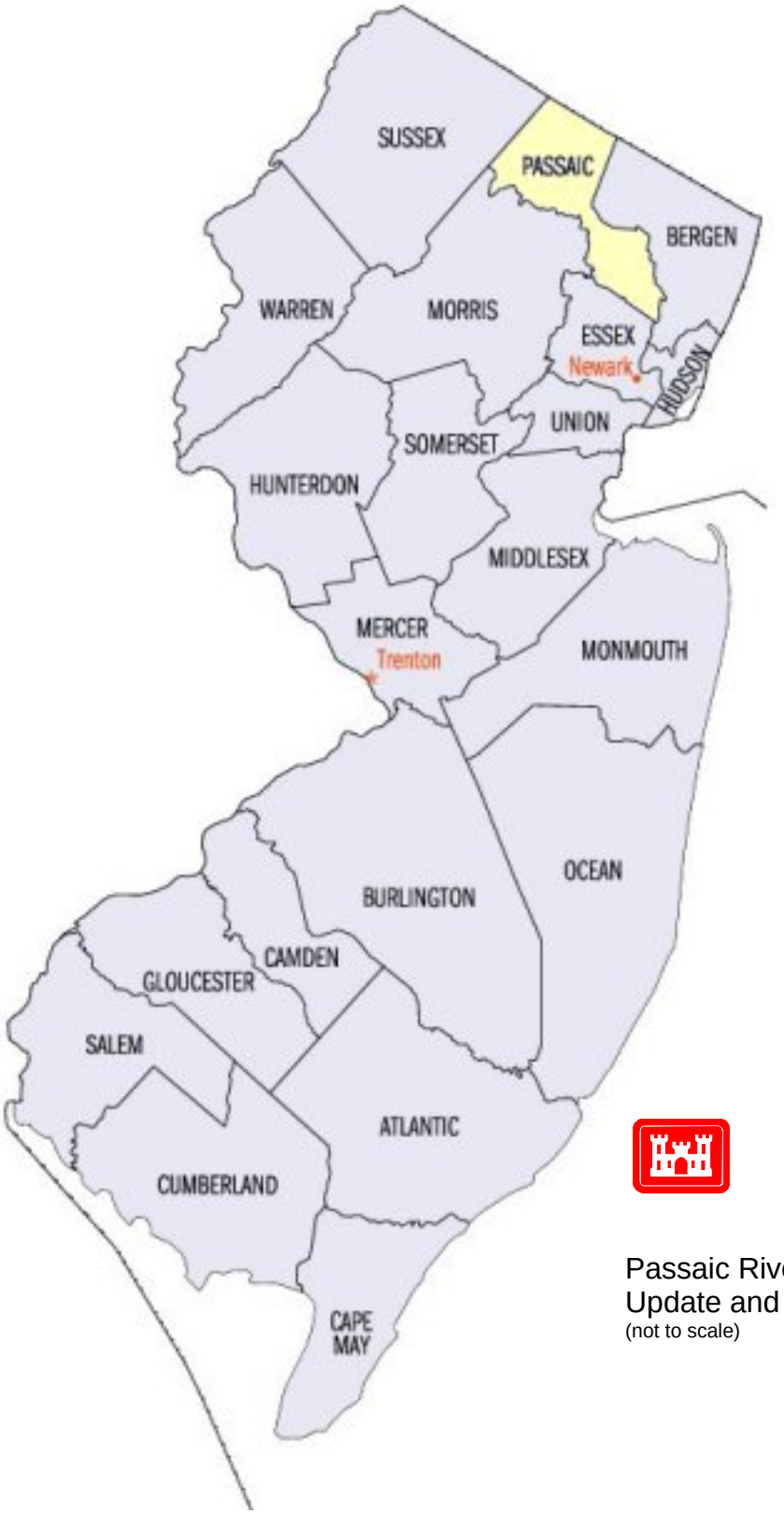

FIGURE 1-1:
Passaic County Within New Jersey

Passaic River Floodway Buyouts Limited Update and Environmental Assessment
(not to scale)

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FIGURE 1-2:
Wayne Township and Pompton Lakes Borough
Within Passaic County, New Jersey

Passaic River Floodway Buyouts Limited Update and
Environmental Assessment
(not to scale)

Environmental Protection (NJDEP) is the non-Federal partner for this study and for any subsequent project implementation.

This document has been organized in a manner consistent with both Corps requirements for reports and with NEPA requirements. The main report summarizes the results of the limited update study and contains sections appropriate for EA documentation. Details of technical investigations conducted during the study are appended to this document. Some section headings are marked with an asterisk to indicate consistency with requirements of Corps studies and NEPA documents.

1.1 Acquisition of Floodway Properties

Permanent evacuation of the floodway involves the acquisition of land and structures by fee purchase, as participation is voluntary in this program. Following acquisition, all structures and improvements are to be demolished and disposed, or relocated. Defining buyout alternatives for study should follow beneficial criteria, each of which has significant policy implications. To establish the criteria, it is important to define the goals of a buyout effort. While public expectations vary, any buyout effort should accomplish the following:

- public acquisition and removal of flood-prone structures,
- assembly of vacant parcels to preclude development,
- prohibitions against new structures in the floodplain or floodproofing and stormwater management in some limited cases,
- development of permanent public open space to provide new recreational opportunities,
- removal or adjustments to the public infrastructure to eliminate intrusions into the floodplains and to prevent interruption of essential services during floods, and
- enforcement of land use controls to prevent redevelopment in acquired areas and establishment of water management standards at un-acquired properties.

All of these goals have important cost implications which should be clearly identified as each level of a buyout is defined, then weighed by the public.

1.1.1 Environmental Benefits of Acquisition

A number of environmental benefits can be achieved through a buyout. They include space for recreation, restored wildlife habitat, improved water quality, and the elimination of pollution sources from future flood events. Other environmental benefits include reduction in downstream flooding and environmental remediation by cleanup of acquired properties. Any buyout program must be analyzed to determine whether these benefits will occur and if so, whether they are significantly achieved.

1.1.2 Economic Benefits of Acquisition

The most obvious economic benefit of a buyout is the direct reduction of flood damages through the removal of flood-prone structures. Additionally, a buyout reduces publicly subsidized flood insurance costs, reduces uninsured private property losses, and avoids lost wages for workers isolated at home or places of employment made inaccessible by flood events. Property values of parcels adjacent to acquired floodprone areas can be enhanced, and the local economy can be stimulated through recreational and related commercial uses of acquired properties. Again, each of these benefits must be analyzed to determine the likelihood of occurrence and potential significance.

1.1.3 Community Advantages of Acquisition

Other potential benefits of acquisition programs relate to communities or regions not necessarily located in the floodplains. An acquisition program may reduce the cost of providing municipal services in flood prone neighborhoods or may create an incentive for flood proofing the remaining community infrastructure. Overall, acquisition of flood-prone homes should reduce the community cost of flood emergencies and disaster relief.

1.2 Study Authority

The Corps has been working on plans to reduce flooding in the basin since 1936, but no comprehensive plan has yet been implemented. Congress authorized a new study of the Passaic River Basin for the State of New Jersey in the Water Resources Development Act (WRDA) of 1976 (Public Law 94-587) which led to a plan authorized in WRDA 1990 and modified in WRDA 1992, WRDA 1996, and WRDA 2000. The project includes several elements, which are currently being implemented throughout the basin.

The project element discussed in this report is the Floodway Buyout (specific authorization: Section 1148 of WRDA 1996 and Section 327 of WRDA 2000). The cost sharing is set at 75 percent Federal and 25 percent non-Federal. The State of New Jersey through the New Jersey Department of Environmental Protection (NJDEP) is the non-Federal sponsor. The authorization specifies that the buyouts are to be strictly voluntary (i.e., participation only by willing sellers). The State began to implement the buyouts through the State's Blue Acres Program in the late 1990's utilizing the draft report and $15,000,000 in State funding, which has been expended.

1.3 * Study Purpose and Need

The purpose of the Passaic River Floodway Buyout Study (limited update) is to evaluate the feasibility of Federal participation in the acquisition of thirty (30) flood-prone homes located in Passaic County, New Jersey.

Flooding has long been a problem in the Passaic River Basin. Since colonial times, floods have claimed lives and damaged property. The most severe flood, the "flood of record," occurred in 1903, and more recent floods in 1968, 1971, 1972, 1973, two in 1975, 1984, 1992, and 1999 were sufficiently devastating to warrant Federal Disaster declarations. The flood of 1984 resulted in the loss of three lives and caused $658 million in damages (October 2004 dollars).

Tropical Storm Floyd in September 1999 caused over $263 million in flood damages (October 2004 dollars).

Implementation of a comprehensive solution to the flooding problems in the Passaic River Basin has been fraught with controversy and indecision. In the 50 years since the Corps was first directed to prepare solutions to the Passaic River Basin's flood problems, opposition has prevented the implementation of any of the six plans that were deemed feasible. This opposition revolved around the use of the upstream floodplain to protect downstream damage areas, intensive structural measures, including dams and levees, and implementation costs. These plans could not find universal acceptance and were rejected based on environmental, economic, and social arguments effectively put forward by various Passaic River Basin interests, including local governments, and non-governmental organizations. The many levels of political jurisdiction within the basin have further complicated resolution of the multiple issues surrounding flood damage reduction planning. As a result, the threat of property losses, hazards to health and safety, and injury and loss of life continue.

1.4 Prior Studies, Reports, and Existing Water Projects

The Corps involvement in Passaic River planning was first authorized in the Flood Control Act of 1936. Since then, reports recommending plans of action were issued in 1939, 1948, 1962, 1969, 1972, 1973, 1987 and 1995. None of these plans were implemented. Brief descriptions of major reports are provided below.

Survey Report of 1939. In the Flood Control Act of May 1936, and further in the Flood Control Act of December 1936, the Corps received its first authorization for water resources planning in the Passaic River Basin. The New York District prepared a survey report in 1939 that considered three alternative plans of improvement. Each plan included a dry flood detention reservoir and channel modifications. The recommended plan located the detention reservoir on the Passaic and Pompton Rivers at Two Bridges, and included channel modifications from Two Bridges downstream to Little Falls. The 1939 report was presented at a public meeting on December 1939 in Paterson, New Jersey. Concerns were then expressed about the great cost of the project and the financial burden its construction would impose on small municipalities. Opposition was voiced against any permanent reservoir in the central basin area, and concerns over the possibility of gates in Dundee Dam also surfaced.

Survey Report for the Passaic River Watershed, New Jersey, October 1948. In October 1948, the New York District prepared a survey report recommending the construction of a reservoir and channel modification as a project for flood control and other purposes within the Passaic River watershed, New Jersey.

Survey Report for the Passaic River Watershed, New Jersey, June 1962. In June 1962, the New York District submitted an updated and revised draft survey report recommending favorable action on an alternative plan of improvement for the Passaic River watershed.

Survey Report for the Passaic River Watershed, New Jersey, 1969. Seven new Basinwide plans were formulated and presented in a 1969 draft survey report. These plans included a reclamation plan, a flood detention plan, an intermediate conservation development plan, a maximum conservation development plan, a comprehensive reservoir-

tunnel plan, a tunnel plan, and a local protection plan. The intermediate conservation development plan was tentatively recommended in the 1969 draft report. It included a multiple-purpose reservoir in the Passaic River above Two Bridges, with a conservation pool for water supply, hydropower production and pollution abatement. It also included diversions of the Pompton River into the reservoir, and levees and floodwalls along the Pompton River and along the proposed diversion channel. The plan also included protection along the lower reaches of major tributaries within the backwater influence of the Passaic River from Two Bridges to the mouth and local protection measures in the tidal reach of the lower Passaic River against the tide of record.

Survey Report for the Passaic River Watershed, New Jersey, June 1972. The most recent survey report prepared by the Corps was issued in June 1972 and amended by a supplemental report in April 1973. In these reports, the District Engineer recommended for authorization a plan of improvement for flood protection and allied resources development in the Passaic River Basin. Included in this recommendation were local protection plans. The alternatives presented in the 1969 draft report were updated and revised during detailed planning, and five alternative plans of improvement and six local protection projects were presented in the 1972 survey report. The recommended plan, Plan III, included a multipurpose reservoir at Two Bridges, with a conservation pool for water supply and water quality enhancement in the Great Piece Meadows, and a multiple-purpose reservoir with conservation storage for water supply at Myers Road. It also featured channel modifications along the Passaic, Pompton, Pequannock, Wanaque, and Ramapo Rivers. The 1972 report also recommended six local protection projects located on the Saddle River at Lodi, New Jersey; on the Ramapo River at Pompton Lakes and Oakland, New Jersey; on the Rockaway River at Denville, New Jersey; on Nakoma Brook at Sloatsburg, New York; on the Ramapo and Mahwah Rivers at Mahwah, New Jersey and Suffern, New York and on Molly Ann's Brook at Haledon.

Public reaction to the 1972 Supplemental Report again reflected the divergence of opinion which, throughout the years, had lead to an inability to develop complete agreement among affected municipalities. This delayed implementation of any solution to the Passaic River Basin's flood problems. Among discordant voices, two groups were present at public meetings: those who advocated structural flood control measures, and those who opposed structural works largely out of concern for the environment. Structural measures were costly and often affected large land areas. However, nonstructural measures alone were also costly, ineffective for many areas, and required the kind of self-discipline in local development not always apparent in New Jersey.

Additional concerns were also expressed over the loss of tax ratables and the impact of project costs on local governments. These were the same concerns repeatedly expressed ever since the Corps formulated its first plans in 1939.

Passaic River Mainstem Feasibility Report, December 1987. A Feasibility Report and Environmental Impact Statement (EIS) for the Main Stem Passaic River was completed in December 1987 under the overall Phase 1 authority. The report recommendations were concurred with by the Board of Engineers for Rivers and Harbors in July 1988 and by the Chief of Engineers in February 1989. The Assistant Secretary of the Army transmitted the report to the Office of Management and Budget for review in October 1989. The recommended plan consisted of a 39 foot diameter, 13.5 mile long main tunnel; a 22 foot

diameter, 1.2 mile long spur tunnel; 5.9 miles of channel modifications; 37.3 miles of levees and floodwalls, and preservation of 5,350 acres of flood storage. This plan would protect flood-prone areas along the Passaic, Pompton, Pequannock, Wanaque, Ramapo, Rockaway and Whippany Rivers and Deepavaal and Pinch Brooks. Preconstruction engineering and design was initiated in FY89 and was scheduled for completion in September 1995. The study of the enhancement of the Passaic River's Flood Emergency Preparedness System resulted in a recommendation to improve the timeliness, accuracy and reliability of flood warnings throughout the Basin. The recommended plan included the establishment of local self-help programs, increased rain and stream gage density and automation, flood warning, improved computer software and flood warning hardware facilities, and enhancement of local response programs. Installation was completed in 1988 and the project is now operational. The project is operated and maintained by the Corps through a contract with the National Weather Service.

Passaic River Buyout Study, September 1995. In February 1994, New Jersey Governor Christine Whitman announced her interest in a formal evaluation of a buyout of residential and commercial properties in flood prone areas of the Basin for comparison to the authorized dual inlet tunnel plan. Governor Whitman called for a side-by-side study to enable the State government to make an informed decision. She called for analyses at various flood stage levels up to the 100-year recurrence interval. The study found that the direct cost of a buyout for a portion of the 10-year floodplain would reach 2.3 billion dollars (October 1994 price level) if fully funded with inflation for a 15-year implementation. The 25-year, 50-year, and 100-year floodplain buyout costs would be 3.2 billion, 4.0 billion, and 5.5 billion dollars, respectively (also October 1994 price level). None of the buyout programs studied in the report met Federal National Economic Development policy for a finding of Federal interest. This was due primarily to insufficient benefit-cost ratios calculated under mandated procedures. As a consequence, Federal funding of all or part of a buyout was not recommended or warranted.

Passaic River Floodway Buyout Study, October 1995. This report was a supplement to the Passaic River buyout Study dated September, 1995. The report was prepared to present data on the costs to buyout the floodways of the Central Passaic River Basin in a manner permitting cost comparisons with the four floodplains described in the September, 1995 report. Far fewer structures and fewer municipalities would be involved in a floodway buyout than the full scale floodplain buyouts evaluated in the September 1995 report. In the three counties of Essex, Morris, and Passaic, only nine municipalities would be affected by a Central Basin floodway buyout. The study found that the total first cost of the floodway buyout program would amount to $158,425,000 (October 1994 price level), the benefit-to-cost ratio was estimated to be 0.2, and net benefits were estimated to be negative $9,950,000 (October 1994 price level). Like the September 1995 report, the buyout program did not meet Federal National Economic Development policy for a finding of Federal interest.

1.5 Study Scope

This integrated report and Environmental Assessment investigates the feasibility of permanent evacuation of the floodway in the study areas. No environmental restoration component is

included. Of the combined 135 properties in the two municipalities, the recommended plan under this voluntary buyout consists of the acquisition of approximately thirty (30) properties.

This document is consistent with Federal water resources policies and practices, including *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* (P&G, 1983), the Corps *Planning Guidance Notebook* (ER-1105-2-100, 22 April 2000), and *Procedures for Implementing NEPA* (ER 200-2-2, 4 March 1988). Throughout this investigation, the Corps has worked closely with the non-Federal project partner, NJDEP, to explain the roles and responsibilities of the Corps and the non-Federal partner in project planning and implementation.

As an integrated report, this document also fully complies with requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.). The integration of the NEPA documentation with the report is consistent with NEPA guidance to combine required documents with other documents, when practicable.

1.6 National Environmental Policy Act Requirements

Unlike other single-topic environmental laws (e.g., Clean Air Act, or Clean Water Act), the National Environmental Policy Act (NEPA) encourages protection of all aspects of the environment. The President's Council on Environmental Quality (CEQ) has pointed out that "NEPA is distinguishable, purposefully so, from other environmental statutes. It targets no specific pollution sources or human health risks for treatment, prescribes formulation of no abetment techniques or remedial actions, and establishes neither milestones nor timetables for achieving its goals" (CEQ, 1990). Instead, NEPA requires that agencies take a systematic, interdisciplinary approach to agency decision making that will ensure the integrated use of the natural sciences, social sciences, and design arts.

An Environmental Assessment (EA) is a concise public document prepared by the Federal agency to determine whether the proposed action has the potential to cause significant environmental effects (40 CFR 1508.9(a)). The purposes of an EA are to:

- Provide evidence and analysis sufficient to determine whether an EIS is required,
- Aid a Federal agency's compliance with NEPA when no EIS is necessary,
- Facilitate preparation of an EIS when one is necessary, and
- Serve as the basis to justify a finding of no significant impact (FONSI).

The CEQ NEPA regulations (40 CFR 1500-1508) do not contain a detailed discussion regarding the format and content of an EA. However, the EA must discuss:

- The need for the proposed action,
- The proposed action and alternatives,
- The probable environmental impacts of the proposed action and alternatives, and
- The agencies and persons consulted during preparation of the EA.

NEPA requires federal agencies to integrate the environmental review into their planning and decision-making process. This integrated report is consistent with NEPA statutory requirements.

The report reflects an integrated planning process, which avoids, minimizes, and mitigates adverse project effects associated with flood damage reduction actions.

1.6.1 Areas of Controversy

At this time, there are no known major areas of controversy regarding the study and selected plan among agencies or the public interest.

1.6.2 Unresolved Issues

At this time, there are no known unresolved issues regarding the study and the selected plan.

1.7 Study Process

The New York District is responsible for conducting the overall study in cooperation with the non-Federal project partner, NJDEP. The limited evaluation and eventual implementation of the project continue to receive strong support from NJDEP and from local governments. The local governments and NJDEP are committed to working with the Corps to address flooding problems along the Passaic River.

2. * BASELINE CONDITIONS / AFFECTED ENVIRONMENT

This section of the report describes existing and most probable future without-project conditions in the study area. The description provides a baseline for measuring expected changes in the physical, environmental, cultural, social, and economic settings that would result from implementation of a floodway buyout project in the study area.

2.1 Topography and Soils

The project areas are characterized by mild slopes (0-1%) and are described as Urban Land. Areas with this classification have mild to nearly level slopes and have had greater than 80 percent of the land surface converted to impervious surfaces such as concrete, asphalt, and buildings (NJDWSC 2002).

2.2 Water Resources

The Ramapo and Pompton Rivers are situated within the Passaic River Basin. Originating above Monroe, New York, the Ramapo flows for approximately 36 miles before converging with the Pequannock River to form the Pompton River. The total drainage area is 160 square miles. The mainstem of the Ramapo River is designated FW2-NT. FW2 criteria uses include:

1. maintenance, migration, and propagation of the natural and established biota,
2. primary and secondary contact recreation,
3. industrial and agricultural water supply,
4. public potable water supply after conventional filtration treatment and disinfection, and
5. any other reasonable uses.

A tributary of the Ramapo River in Oakland is designated FW2-TP (trout production), (C1). C1 waters are those designated under N.J.A.C. 7:9B-1.5(d), "for protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, other characteristics of aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries(s)." (NJDEP 2004).

The Pompton River begins at the confluence of the Pequannock and Ramapo Rivers and flows approximately 7 miles before discharging into the Passaic River. The total drainage area is 177 square miles. The entire length of the Pompton River is designated FW2-NT (non trout waters).

The water quality of both the Pompton and Ramapo Rivers has been adversely impacted due to the extensive amount of development that has occurred within the two watersheds. Factors contributing to water quality degradation include increased stormwater runoff, sedimentation and nutrient loading, and a loss of wetlands and riparian vegetation. As a result, the two watersheds have seen a decline in the diversity of aquatic biota.

2.3 Vegetation

2.3.1 Wetlands

Federal (33 CFR 328.3(b); EO 11990) and State (NJAC 7:7A1.4) definitions of wetlands are similar, identifying wetlands as "*those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions*." As defined above, wetlands generally include swamps, marshes, bogs and similar areas.

The Corps Civil Works (CW) Program recognizes that many wetlands are important natural resources that contribute significant benefits to both the natural and human environments as transitional areas between terrestrial and aquatic ecosystems. As transitional areas wetlands possess features of both aquatic and terrestrial systems. Consequently wetlands are generally areas of great natural productivity, hydrologic utility, and biodiversity, providing natural flood control, and contributing to improved water quality, flow stabilization of streams and rivers and habitat for fish and wildlife resources. Unnecessary alteration or destruction of wetlands is discouraged by the Corps as contrary to the public interest as these wetlands perform functions important to the public interest. As a result, the Corps CW Program follows a policy of no net loss of wetlands, and looks to increase the quality and quantity of the Nation's wetlands when possible.

Palustrine forested wetlands do occur at the Wayne (Hoffman Grove) study area, but they are located outside of immediate area of the project. There are no wetlands present within the Pompton Lakes project area.

2.3.2 Uplands

The upland habitats in the project areas primarily consist of disturbed lands including maintained ornamental lawns, shrubs, and mature evergreen and deciduous tree species. Upland species commonly found within the Study area include oak (*Quercus* spp.), ash (*Fraxinus* spp.) maple (*Acer* spp.), sycamore (*Platanus* spp.) willow (*Salix* spp.), and various evergreen species such as hemlock (*Tsuga* spp.) and pine (*Pinus* spp.).

2.4 Fish and Wildlife

2.4.1 Finfish

Pompton River

Commonly occurring fish species within the Pompton River include redfin pickerel (*Esox americanus*), carp (*Cyprinus carpio*), spottail shiner (*Notropis husonius*), white sucker (*Catostomus commersoni*), brown bullhead (*Ameiurus nebulosus*), redbreast sunfish (*Lepomis auritus*), pumpkinseed (*Lepomis gibbosus*), bluegill (*Lepomis marcrochirus*), largemouth bass (*Micropterus salmoides*), black crappie (*Pomoxis nigromaculatus*), and tesselated darter (*Etheostoma olmstedi*) (USACE 1987).

Ramapo River

Commonly occurring fish species within the Ramapo River include fallfish (*Semotilus corporalis*), white sucker, rock bass (*Ambloplites rupestris*), redbreast sunfish (*Lepomis auritus*), pumpkinseed, bluegill, smallmouth bass (*Micropterus dolomieu*), largemouth bass, and tesselated darter (USACE 1987).

2.4.2 Wildlife

Commonly occurring birds in the project areas include American goldfinch (*Carduelis tristis*), American robin (*Turdus migratorius*), black-capped chickadee (*Parus atricapillus*), blue jay (*Cyanocitta cristata*), European starling (*Sturnus vulgaris*), grackles (*Quiscalus quiscula*), house sparrow (*Passer domesticus*), house wren (*Troglodytes aedon*), mourning dove (*Zenaida macroura,*), northern cardinal (*Cardinalis cardinalis*), and tufted titmouse (*Paurs bicolor*)

Mammals within the project areas are those typically found in urban settings. These species include opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and muskrat (*Ondatra zibethica*), gray squirrel (*Sciurus carolinensis*), red squirrel (*Tamiasciurus hudsonicus*), Norway rat (*Rattus norvegicus*), skunk (*Conepauts mesoleucus*), and woodchuck (*Marmota monax*) (USACE 1987).

2.5 Threatened and Endangered Species

This section addresses the potential for the presence of threatened and endangered species, and their habitat within the study area. Section 7 of the Endangered Species Act requires Federal agencies to ensure that their actions will not adversely impact the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of such species. Consultation with, and the assistance of, the Secretaries of the Interior and Commerce is required to obtain information about listed or proposed threatened or endangered species and critical habitats found within the project area. The authority to conduct consultations has been delegated to the Director of the USFWS by the Secretary of the Interior.

Federal Species

The federally endangered Indiana bat (*Myotis sodalist)* is known to hibernate in Morris County within 11 miles of both study areas. Indiana bats from this hibernaculum may summer or forage within the study areas, particularly at the Wayne study site. With the exception of possible transients, no other Federal endangered or threatened species are known to utilize or reside in the project areas. Transient species may include the state and Federal threatened bald eagle, and the state endangered peregrine falcon since the project areas are located within their migratory flyway.

State Species

Fowler's toad (*Bufo woodhousii fowleri*), a State listed priority species, occurs within the Palustrine Forested wetland type on and surrounding the Wayne and Pompton Lakes study areas. Other species on the State priority list occur in upland forest within .25 mile south of the Wayne study area. The species include spotted turtle (*Clemmys guttata*), carpenter frog (*Rana virgatipes)*, fowler's toad, Baltimore oriole (*Icterus galbula*), eastern towhee (*Pipilo erythrophthalmus*), eastern wood-peewee (*Contopus virens*), gray catbird (*Dumetella*

carolinensis), hairy woodpecker (*Picoides villosus),* red-eyed vireo (*Vireo olivaceus),* rose-breasted grosbeak (*Pheucticus ludovicianus*), scarlet tanager (*Piranga olivacea),* veery (*Catharus fuscescens),* and wood thrush (*Hylocichla mustelina).*

2.6 Socioeconomics

2.6.1 Pompton Lakes

The U.S. Census Bureau 2000 census reports the population of Pompton Lakes is approximately 10,640 with 89 percent non-Hispanic White, 5.74 percent Hispanic, 1 percent African American, and 3 percent Asian. The median age of the population is 37 years and median per capita personal income is $26,802. The management and professional sectors are the largest employers in the Borough. Approximately 66 percent of the residences within Pompton Lakes are single family homes (U.S. Census Bureau, 2000).

2.6.2 Wayne Township

The U.S. Census Bureau 2000 census reports the population of Wayne Township is approximately 54,069 with 86 percent non-Hispanic White, 5 percent Hispanic, 1 percent African American, and 5.7 % Asian. The median age of the population is 40 years and median per capita personal income is $35,349. The management and professional sectors are the largest employers in the Township. Approximately 71% of the residences within the Wayne Township are single family homes (U.S. Census Bureau, 2000).

2.7 Cultural Resources

A cultural resource study was conducted in order to determine if the project will have an effect on historic properties in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (Scarpa 2005). Other regulations that specifically apply to this cultural resources investigation include Section 101(b)(4) of the National Environmental Policy Act of 1969 and the Advisory Council Regulations for the Protection of Historic Properties (36 CFR Part 800).

2.7.1 Hoffman Grove, Wayne Township

Native Americans first began traveling throughout the region after the retreat of the last glacier associated with the Wisconsin Ice Age around 10,000 B.C. After the retreat of the last glaciers in the area, Native Americans traveled by land on the tundra-like landscape that was characteristic of Wayne and Pompton Lakes at the time. The Wayne area appears first to have been occupied around 8,000 years ago in the Early/Middle Archaic Period. By this time thick temperate climate forests became the typical upland environment in the area, travel by land became more difficult and the movement of people across the land was done most efficiently via water. After 500 A.D., the people of Wayne and Pompton Lakes began farming and occupying the area year-round. These prehistoric peoples favored the banks of rivers in this area for their village sites. Because fishing was a fundamental food source for these prehistoric people, the confluence of the Pompton and the Passaic Rivers just south of Hoffman Grove would have encouraged Native Americans to settle for periods of time in the area (Lenik 1985).

Archaeological surveys have been conducted along the river over the past one hundred years by a number of archaeologists. A site file search at the New Jersey State Museum did not locate previously recorded prehistoric sites directly within the project areas. However, many sites are located nearby. In the vicinity of Hoffman Grove, two campsites, one prehistoric lithic scatter and three miscellaneous prehistoric sites, were identified in the early part of the 20th century. No additional sites have been identified by subsequent surveys. The Hoffman Grove area is believed to possess a reasonable potential for recovery of prehistoric archaeological remains.

In the latter part of the 17th century, Captain Arent Schuyler, traveled the Minisink Trail through modern Wayne Township and Pompton Lakes. He and Major Anthony Brockholst formed an investment group with two wealthy New York merchants, Colonel Nicholas Bayard and Samuel Bayard, and a number of affluent farmers. The group purchased the land in 1695. The tract consisted of two thirds of what is now Wayne and much of Pompton Lakes on the eastern side of the Pequannock River (Caccioppo 1997).

In the late 18th century a man by the name of John Mead established a settlement in the southwestern section of Wayne Township. The small community was called Mead's Basin and it served the needs of local farmers in the area for a time. Later, with the construction of the Morris Canal and the Pompton feeder in 1836-1837, iron, timber, and coal industries and shipping brought economic progress to the village. The name, Mead's Basin came from a boat basin constructed by Mead along the Morris Canal where many travelers would dock their boats for a bite to eat or a night's stay (Tobin 2001). The Morris Canal ran on the opposite side of the Pompton River from the current project area.

In 1847, Wayne Township became an independent township. Throughout the 19th century the town continued to be characteristically farming-based with a number of gristmills and saw mills. Industry of the late 19th century included brick manufacture, gunpowder manufacture, and iron mining (Brubaker et al. 1976). In the early 1870's the Montclair Railway Company (later the New York and Erie Lake and Western Railway) and the Delaware, Lackawanna, and Western Railroads (the Boonton Line) built lines running through southern Wayne Township. Two stations were eventually built in Wayne. The station located in the center of Mead's Basin was called Mountain View and before long the town adopted the name (Cacioppo 1997).

Mountain View began to grow in the early 1900's. With the advent of the railroad, many wealthy New York residents began looking for places to vacation and get out of the city. The Montclair Railroad advertised its line with sponsored excursions into the Wayne area and people began forming summer camping or bungalow communities (Cacioppo 1997). Hoffman Grove was one of the summer bungalow communities established in the early 20th century.

The Hoffman family was one of the owners of the tract during the first half of the 20th century. During that time they rented bungalows and campsites to summer vacationers. In the early 1920's, because of housing shortages, many people moved into their summer homes permanently. The Depression also caused an in-migration of people who could no longer afford living in New York City. This movement over a couple of decades changed the nature of the Mountain View area from seasonal recreation to mostly full-time residential (Connell 1972). The Hoffman Grove Association was formed as a co-op community more than fifty years ago when a group of home owners finally bought the tract and turned it into a co-op. The co-op remained intact until just recently when the lots were finally individually deeded (Sue Linton; Hoffman Grove Association Representative; Personal Correspondence).

There are four historic properties listed on the NRHP within a mile of the Hoffman Grove project area. These are the Morris Canal, the John Dod Tavern and House located approximately one mile from the project area on the opposite side of the Pompton River in Lincoln Park. One historic property, the Van Duyne House, is listed on the State Register of Historic Places. In addition, there are seven properties eligible for listing on the NRHP. These are the Pompton River Bridge, which carries the NJ Transit Boonton Line, the Wayne Radio Transmitter Building, Hixon's Hotel, the Sear's House, the Farsburg House, the VanDuyne house, and the Three Demarest Houses. None of these properties are within the project area and therefore will not be impacted by the project.

2.7.2 River Edge Drive, Pompton Lakes

The River Edge Drive Project area is located along the Ramapo River, which is a tributary to the Pompton River, and eventually the Passaic River. The prehistory of Pompton Lakes mirrors that of Wayne. Native Americans were attracted to the area due to the riverine environment consisting of freshwater springs and potable streams; favorable areas of occupation and resources for exploitation (Kraft 1981). The Ramapo River provided fish and mussels as well as the possibility of canoe transportation. The surrounding woodlands supplied materials for house construction and firewood as well as nuts and berries in season, birds, mammals and other faunal, and floral food resources (Lenik 1985). In the River Edge Drive project vicinity, three prehistoric lithic scatters, and five additional prehistoric sites were identified in the early 20th century. Two of the prehistoric sites are located on the opposite bank of the Ramapo River from the project area. A survey conducted by Herbert Kraft in 1981 of the riverbank and the surrounding area determined that the project area at River Edge Drive has a low to medium probability to yield prehistoric remains where ground has not been disturbed for construction of homes.

Originally a part of the Brockholst – Schuyler purchase, Pompton Lakes was first settled in the late 17th century. The first mill was erected in 1723 by Simon Van Ness. Also around this time, gristmills, sawmills and a tannery were built in Pompton Lakes. The Pompton Iron Works was the most important industry in Pompton. Built in 1726, the furnace turned out ammunition for the French and Indian War and later the Revolutionary War (Bzdak and Howson 1995).

Pompton was the setting for Revolutionary War activity. French and Patriot troops passed through the town frequently on their way to the Hudson River to the east or Morristown to the west where General Washington was headquartered for a time. During the Revolutionary War, the forge at Pompton Lake Dam produced cannon balls. In 1777 General Heard was sent with 200 men from the New Jersey militia to guard the furnace, roads, and the town. In 1781, the remaining troops at Pompton mutinied. General Washington stayed for a short time in the Hopper home, but what orders he issued from Pompton came from the Dey mansion, home of Colonel Theunis Dey of Pompton (Vreeland 1960). Following the Revolution, most people farmed and milling and smelting remained the only industries in the area. Soon after its construction, the Morris Canal and the Pompton Feeder carried materials like coal to the smelting furnaces and the finished materials out to city ports (Vreeland 1960).

Around the time of the Civil War, railroad expansion in the area peaked. Horner and Ludlum, who now owned the Pompton Furnace, manufactured springs for railway cars and renamed the company Pompton Iron and Steel Company. (Lenik et al. 1990). As the 20th century drew near,

many of the farmsteads became smaller and smaller as farmers sold off sections of their land for development. Summer communities developed here as they also did in Wayne. Sunnybank is a well-known summer community and the Riverview community, still identified as such, was also developed at this time. Permanent development increased in the area as it had in Wayne Township as people began moving in permanently to work the newly available jobs and to enjoy the country setting.

The 20th century saw rapid suburban growth. In the last fifty years, major growth has taken place in the areas between the Paterson and Hamburg Turnpike and the Pequannock River despite the risk of flooding (Bdzak and Howson 1995). The area of River Edge Drive has been developed in the 20th century. Use prior to that was likely farming if the land was dry enough to be farmed. Any evidence of nineteenth century structures is not seen in historic maps or early photographs. However, the Ramapo River once operated as a waterway, a part of the Pompton Feeder of the Morris Canal. Remains of the Feeder and associated elements are found along some portions of the Ramapo River.

There is one property within a mile of the River Edge Drive project area that is listed on the NRHP. The Schuyler Colfax House is situated along Hamburg Turnpike directly across the Ramapo River from the River Edge Drive project area. The Pompton Furnace Iron Works and Dam, and the Pompton Lakes Train Station are eligible for listing on the NRHP but are outside of the project area as well. In addition to these sites, the Colfax Bridge replacement concrete bridge, Dawes Avenue Bridge (eligible for listing on the NRHP), and the Ramapo River, a part of which was once a waterway for boats on the Pompton Feeder Canal (certain elements being potentially eligible for inclusion on the NRHP) are both adjacent to the project area but are not within the area of potential effects (APE).

2.8 Hazardous, Toxic, and Radioactive Waste

As required by ER 1165-2-132 (Hazardous, Toxic and Radioactive Waste Guidance for Civil Works, 26 June 1992), an assessment of hazardous, toxic, and radioactive waste (HTRW) was conducted in the project corridor. Hazardous, Toxic, and Radioactive Waste (HTRW) are defined as any "hazardous substance" regulated under Comprehensive, Environmental Response, Compensation, Liability Act (CERCLA), 42 U.S.C. 9601 et seq, including "hazardous wastes" under Section 3001 of the Resource Conservation and Recovery Act (RCRA), 42 U. S. C. 6921 et seq.

A review of current regulatory database and historical site information was conducted to assess the potential presence of any hazardous, toxic, and/or radioactive waste. Based on the review, the only potential sources of hazardous or toxic waste may be from underground storage tanks (UST) containing home heating oil, lead based paint (LBP) or asbestos containing materials (ACM). Prior to demolition of the homes, a more detailed assessment will be performed on each candidate house and the lot to determine the presence of any UST's, LBP and ACM. Removal of UST's, LBP and ACM will be the responsibility of the demolition contractor, and will be conducted in accordance with all state and Federal regulations.

2.9 Air Quality and Noise

2.9.1 Air Quality

The EPA assesses overall air quality according to the National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). Based on these measurements of air quality, the USEPA designates attainment areas and non-attainment areas nationwide. Non-attainment areas are designated in areas where air pollution levels persistently exceed the national ambient air quality standards. Commonly cited sources of criteria pollutants include automobile exhaust emissions, fossil fuel (coal and oil) fired power plants, oil refineries, ore smelters, storage and transfer operations involving solvents, and industrial emissions, among others (USEPA 1998).

Passaic County is located in the New York-New Jersey-Long Island Air Quality Control Region. Similar to most urban industrial areas, emissions from automobiles, manufacturing processes, utility plants, and refineries have impacted air quality in the Project Area. Based on the National Ambient Air Quality Standards (NAAQS) six primary pollutants, Passaic County is designated as a non-attainment area for ozone and an attainment area for carbon monoxide, sulfur dioxide, respirable particulate matter (PM10), lead and nitrogen oxide.

2.9.2 Noise

Noise is generally defined as unwanted sound. The primary source of noise in the project area is vehicular traffic on local roadways.

2.10 Coastal Zone Management

The proposed project area is not located within the State of New Jersey's Coastal Zone Management (CZM) District.

2.11 Future Without-Project Conditions / No Action Alternative

Future without-project conditions were determined by projecting conditions in the study area over a 50-year period of analysis (2010-2059). In the absence of Federal action, flooding problems associated with storms in the study area are expected to continue, and ecosystems within the study area will continue to exhibit limited functionality.

2.11.1 Flood Damages

The no-action alternative reflects the continuation of existing economic, social, and environmental conditions and trends within the affected area. Implicit in taking no action would be the continuation of Federally subsidized flood insurance coverage for property owners that is currently available through the National Flood Insurance Program and the enforcement of local flood plain zoning ordinances.

Failure to provide opportunities for permanent floodplain evacuation could, in the predictable occurrence of a significant flood, contribute to the loss of life and physical as well as

environmental damage to study area communities. Significant flooding can result in the contamination of drinking water supplies, dispersion of hazardous, toxic, and/or radioactive waste (HTRW) and dispersion of large quantities of solid waste. Experience has shown that vast quantities of debris (e.g., homes, vehicles, mobile homes, etc.) and sediment must be removed from the floodplain after a flood event. The physical removal of the debris from the flood plain typically involves large, heavy equipment and requires the removal of trees and vegetation to provide points of ingress and egress for the cleanup equipment. Hauling the collected debris to the local municipal landfill requires significant transportation resources, and involves huge quantities of solid waste that fill available landfill space.

2.11.2 Study Area Conditions That Are Unlikely To Change

Some existing conditions are not expected to undergo significant change during the period of analysis (2010-2059). For example, most aspects of the physical setting are expected to remain largely unchanged over the planning period, specifically: geology, physiography, topography, and soils. In addition, no significant changes are anticipated for cultural and historic resources, air quality, noise, HTRW, aesthetics, and infrastructure.

2.11.3 Study Area Conditions That Are Likely To Change

Other aspects of existing conditions are likely to change during the period of analysis. In particular, it is likely that several study area conditions related to flooding would undergo some changes over time. Ongoing urbanization of the Passaic River watershed could exacerbate flood risks by accelerating runoff from the watershed during storms, although future increases in vulnerability would be mitigated by municipal flood plain management ordinances.

3. PLAN EVALUATION

The term "floodway" was defined in Section 1 of this document as:

> *the channel of a natural stream and portions of the flood hazard area adjoining the channel which are reasonably required to carry and discharge the flood water or flood flow. Floodways are usually the area where water velocities and forces are the greatest and most destructive. National Flood Insurance Program (NFIP) regulations, adopted in local flood damage prevention ordinances, require that floodway encroachments, including fill, new construction, substantial improvements and other development that would increase flood levels, be prohibited.*

This section provides an evaluation of the limited floodway buyout program. Planning objectives and constraints under which the voluntary buyout program was conceived are first discussed, followed by a description of the methods used to estimate existing conditions flood damages, and concludes with an economic analysis of the limited buyout program.

3.1 Planning Objectives & Constraints

The following discussions identify critical objectives, constraints, and assumptions used to develop and evaluate alternative plans. The goal was to address problems and opportunities and to determine the Federal interest in flood damage reduction for the study areas.

3.1.1 Planning Objectives

The Federal objectives in making investments in flood damage reduction projects are to contribute to National Economic Development (NED). The pursuit of planning objectives must be consistent with Federal, State and local laws and policies, and technical, economic, environmental, regional, social, and institutional considerations. Recommended plans should avoid, minimize, and then mitigate, if necessary, adverse project impacts to the environment. They should also maximize net economic benefit, avoid adverse social impacts, and meet local preferences to the fullest extent possible.

Based on the problems and opportunities within the study area, local desires, and the intent of the current authorization, the planning objectives of this study have been identified as follows:

- develop cost-effective plans to provide the flood protection for the project area, which complies with all laws and regulations,
- reduce to the extent possible financial and personal losses,
- maintain to the extent possible the social and cultural resources study areas,
- minimize to the extent possible the social and economic disruptions within the study areas,
- develop the most socially acceptable and environmentally sound plan, and
- avoid and minimize adverse environmental impacts.

3.1.2 Planning Constraints

The formulation and evaluation of alternative plans was constrained by a variety of considerations. The planning constraints used to guide the study are listed below:

- Technical constraints include the need for plans to be: (1) sound, safe, and acceptable solutions, (2) in compliance with sound engineering practices, (3) realistic and state-of-the-art, (4) consistent with existing local plans, and (5) complete and not dependent on future projects.
- Economic constraints include: (1) the need for flood damage reduction features to be efficient (*i.e.*, average annual benefits exceed average annual costs); and (2) the requirement to select the flood damage reduction plan that maximizes net excess benefits (*i.e.*, the NED plan) unless there are overwhelming reasons to select a different plan and an exception is granted by the Assistant Secretary of the Army (Civil Works).
- Environmental constraints affecting the formulation and selection of flood damage reduction plans include the need to: (1) avoid unreasonable impacts to environmental resources, and (2) first consider avoidance followed by minimization, mitigation, and replacement.
- Regional and social constraints include the need for plans to: (1) weigh the interests of State and local public institutions and the public at large, and (2) consider the potential impacts of the project on other areas and groups.
- Institutional constraints include the need for plans to: (1) be consistent with existing Federal, State and local laws, (2) be locally supported, (3) provide public access to the project in accordance with Federal and State laws and regulations, and (4) find overall support in the region and state.

3.2 Flood Damage Analyses

Flood damages under future with- and without-project conditions were estimated through: (1) an inventory of flood plain development, (2) estimation of depreciated structure replacement costs and content damages, and (3) combination of stage/frequency relationships and stage/damage relationships into frequency/damage relationships. The process and results of damage estimation for the study areas is summarized below.

3.2.1 Residential Structure Surveys

A structure inventory was compiled by conducting field surveys of structures in the study area floodways during September, 2004. There are approximately 135 total structures within the study area floodways. Each structure was assigned a unique structure identification number. First floor and low opening elevations (measured off known benchmarks using a transit) and street addresses were recorded for all structures. Structure information required to compute depreciated replacement values was collected for residential structures based on Means Real Estate Valuation Guide. Data collected included the following categories: structure type, style, construction material, quality, condition, effective age, finished floor area, and other exterior

characteristics. Content values were estimated in accordance with guidance provided in Corps economic guidance memoranda EGM 01-03 and 04-01[2].

3.2.1.1 Principal Flood Damage Reaches

The study areas were divided into two reaches: Hoffman Grove (reach 1) and Pompton Lakes (reach 2). Figure 3-1 shows an aerial photograph of the general study area marked with the locations of reaches 1 and 2. Closer views of Reaches 1 and 2 are shown on Figures 3-2, and 3-3. These two flood damage reaches were used to evaluate the costs of structural and nonstructural flood damage reduction measures and to estimate the benefits of the limited buyout plans, based on the corresponding reduction in flood damages.

With- and without-project future conditions for the flood damage reaches assume a stable level of development. Because flood plain regulations restrict new construction in areas that are subject to damage by a 100-year flood event, it was assumed that development of new residential, commercial, and industrial uses in the study area flood plain is not likely.

3.2.2 Hydrologic and Hydraulic Analyses

Hydrologic and hydraulic data used in this analysis were extracted from the Passaic River Flood Damage Reduction Project General Design Memorandum (GDM), Appendix C -Hydrology dated September 1995 (model year 1992). Water surface profiles for the eight modeled design storm events (1-, 2-, 5-, 10-, 25-, 50-, 100-, and 500-year return intervals) are provided in Table 3-1 below. Cross sections are shown for stations in the immediate vicinity of the damage centers.

Table 3-1
Water Surface Profiles for Eight Modeled Storm Events

		Water Surface Elevation (NGVD)							
	River Station	**1-Yr**	**2-Yr**	**5-Yr**	**10-Yr**	**25-Yr**	**50-Yr**	**100-Yr**	**500-Yr**
Reach 1	9.940 on Pompton River (Hoffman Grove)	165.88	167.96	170.24	171.86	174.15	175.51	176.72	179.47
Reach 2	7.800 on Ramapo River (Pompton Lakes)	179.86	181.72	184.15	185.73	187.98	188.93	189.77	191.14

[2] These economic guidance memoranda prescribe a methodology for valuing contents damages that differs from those used in past Corps of Engineers flood damage economic analyses. While prior analyses used a content-to-structure ratio of 0.50, this analysis uses new depth-damage relationship curves developed by the Corps. The new depth-damage curves (full set available in October 2003) model content damages as a percentage of structure value. This differs from the previous technique of first developing content valuations and then content damage relationships as a function of contents valuations. Corps policy states that use of the new damage curves eliminates the need to establish content-to-structure ratios through surveys.

Final

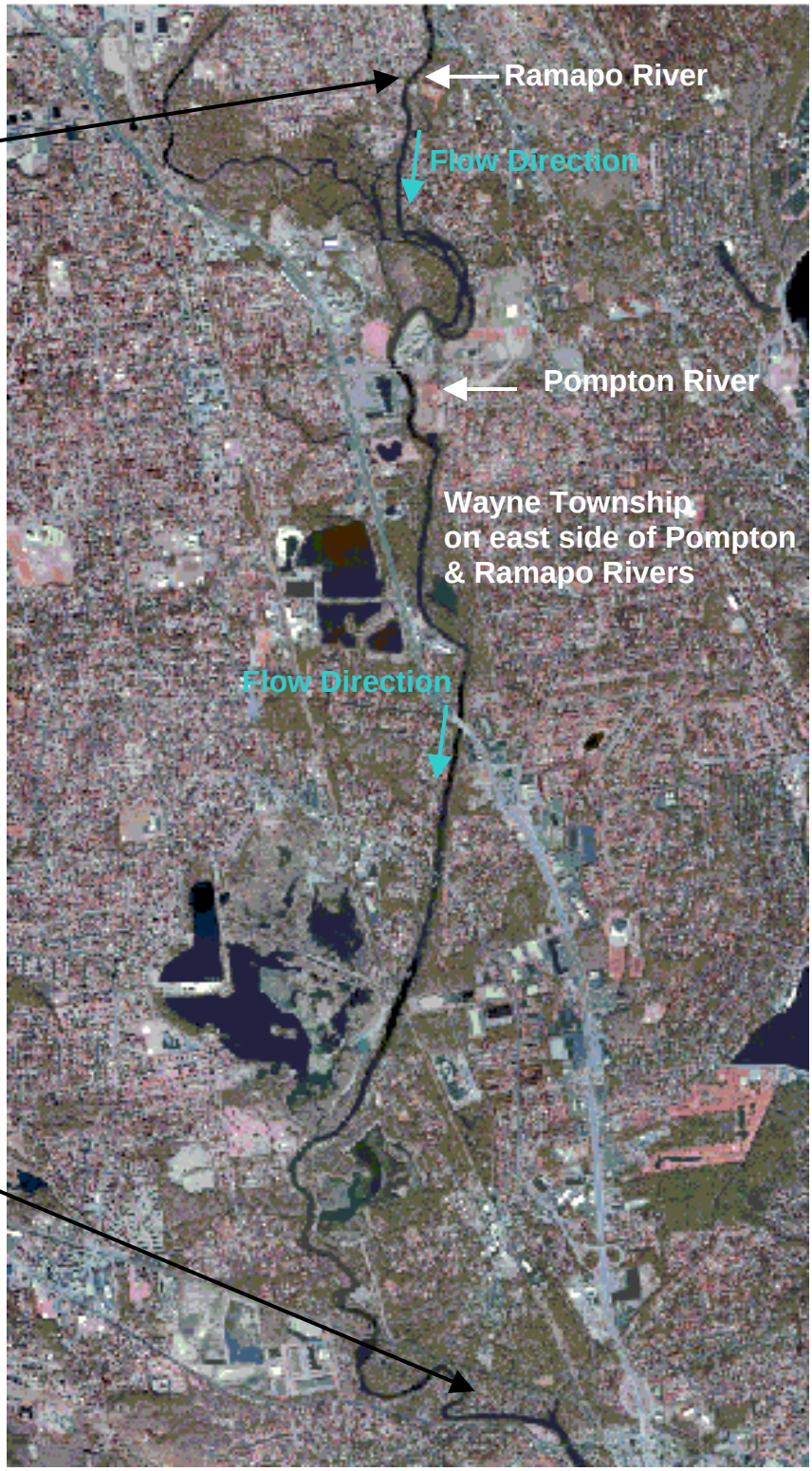


FIGURE 3-1:
Study Area Locations

Passaic River Floodway Buyouts Limited
Update and Environmental Assessment
(not to scale)

N

F



FIGURE 3-2:
Hoffman Grove

N

Passaic River Floodway Buyouts Limited Update and Environmental Assessment
(not to scale)



FIGURE 3-3:
Pompton Lakes

Passaic River Floodway Buyouts Limited Update and Environmental Assessment
(not to scale)

3.2.3 Depth-Damage Relationships

Depth-damage functions from Economic Guidance Memorandum 01-03 – *Generic Depth-Damage Relationships for Residential Structures without Basements* and Economic Guidance Memorandum 04-01 – *Generic Depth-Damage Relationships for Residential Structures with Basements* were applied to the inventory of residential floodplain properties in order to develop depth-damage relationships. Current HEC-RAS output (discharge-frequency-water surface elevations) was combined with the depth-damage data in order to calculate average annual damages under existing conditions.

3.2.4 Structure and Contents Damage Model

Given the relatively low number of structures in this analysis, a risk-based spreadsheet model (MS Excel running statistical modeling software) was used to estimate flood damages to non-residential and residential structures and contents. Structure specific information (identification number, structure type, value, first floor elevation, zero damage level, and reach designation) was included in a structure inventory database for input to the model. Residential structures were classified as one of five types: one-story with a basement, one-story without a basement, split-level, two-story with a basement, and two-story without a basement. The model used depth-percent damage curves corresponding to the structure type to relate flood depth to percent damage for residential and selected non-residential structures and their contents. Each structure was referenced to a cross section which was used to determine the water surface elevations for the storm frequency events of 1-, 2-, 5-, 10-, 25-, 50-, 100-, and 500-year return intervals.

3.2.4.1 Risk and Uncertainty

Planning guidance requires that risk and uncertainty be incorporated into flood damage reduction studies. Statistical modeling software and Microsoft Excel were used to incorporate uncertainty from damage input variables into the analysis. The evaluation process uses Monte Carlo Simulation to compute the expected value of damages while incorporating the variability associated with each input variable.

Under the Monte Carlo approach, multiple iterations selected input values from the full range of possible values for each variable identified as a source of uncertainty. Expected values and standard deviations for each key input variable were used to develop distributions from which sample variables were randomly selected in the calculation of flood damages.

In normal distributions, 68 percent of the sampled values of a particular variable are within one standard deviation on either side of the mean, 95 percent within two standard deviations from the mean, and 99.7 percent within three standard deviations from the mean. With each iteration of the model a value is randomly selected from the key hydraulic and economic variable distributions and used in the calculation of structure and contents flood damages for that particular iteration. The sum of all flood damage calculations divided by the number of iterations yields the expected value of flood damages for the model run. Ten thousand iterations were run for each flood damage reach to ensure that the full range of possible outcomes was represented in the analysis.

Some of the important uncertainties specific to this particular analysis are described below.

Hydrologic and Hydraulic Uncertainty

Hydrologic and hydraulic uncertainty factors include hydrologic data record lengths that are often short or do not exist, precipitation-runoff computational methods that are not precisely known, and imprecise knowledge of the effectiveness of flow regulation. Additional uncertainty arises from the use of simplified models to describe complex hydraulic phenomena, including the lack of detailed geometric data, misalignments of hydraulic structures, material variability, and errors in estimating slope and roughness factors. Water surface elevations were allowed to vary based on the relative standard deviations (standard deviation as a percent of expected value) for specific return events taken from a recent study on the Upper Passaic River (*Upper Passaic River at Long Hill Township Detailed Project Report, October 2004*, New York District, USACE).

Economic Uncertainty

Economic uncertainty factors include land uses, depth/damage relationships, structure/content values, structure locations, first floor elevations, floodwater velocity, the amount of debris and mud, flood duration, and warning time and response of floodplain inhabitants. Variability in depth-damage curves was incorporated into the model by using standard deviations for specific damage percents taken directly from depth-damage functions provided in Corps economic guidance memoranda EGM 01-03 and EGM 04-01. Additional variability in first floor survey error (5 percent), and depreciated replacement values (estimated as a percent of the range shown in Means Cost Estimating Guides) were captured in the damage model.

3.2.5 Existing Conditions Damages

Table 3-2 shows damages to residential structures in the floodway at Hoffman Grove (reach 1) and Pompton Lakes (reach 2). The complete inventory of Hoffman Grove is shown in the first column of the table. A subset of 20 structures in Hoffman Grove that are most impacted (on an average annual damages basis) by flooding is shown in the second column of the table. This subset of 20 structures from Hoffman Grove will be used in benefit-to-cost ratio and net benefit analyses later in this section. Average annual damages to the entire inventory of Hoffman Grove is $326,050 (not used in the economic performance analysis), to the subset 20 structures in Hoffman Grove is $133,125 and to Pompton Lakes is $176,100.

Table 3-2
Damages to Residential Structures and Contents
Without Project Conditions

	Hoffman Grove Complete Inventory		Hoffman Grove 20 Most Damaged Structures		Pompton Lakes Complete Inventory	
Recurrence Interval	**Structures Damaged**	**Damages ($1,000)**	**Structures Damaged**	**Damages ($1,000)**	**Structures Damaged**	**Damages ($1,000)**
1-year	2	9.9	2	9.9	3	26.7
2-year	5	34.5	4	33.5	3	67.8
5-year	57	237.8	19	172.2	7	239.1
10-year	113	848.9	20	370.7	7	420.5
25-year	124	2,285.6	20	682.8	10	789.6
50-year	124	3,199.3	20	832.0	10	947.3
100-year	124	3,850.7	20	943.5	10	1,088.6
500-year	124[3]	5,059.0	20	1,217.4	10	1,305.5

3.3 Economic Benefits

Corps procedures typically calculate benefits based on the difference between the expected annual damages with and without alternative flood protection plans. The implicit assumption incorporated into this procedure is that the reduction in flood damages is directly translatable into increased net income to flood plain land uses. In the case of permanent evacuation measures, however, only the portion of the flood damage that is subsidized by outside agencies qualifies as National Economic Development (NED) benefits. Benefits from future use of the vacated floodplain also qualify as NED benefits, though re-use benefits have not been estimated for this analysis.

Permanent evacuation projects can claim both the reduction in costs of administering flood insurance programs and the elimination of national flood insurance subsidies as benefits. These subsidies consist of the financial support provided by the Federal Emergency Management Agency (FEMA) for flood insurance. The flood insurance subsidy is determined by deducting the average annual insurance premium from the average annual expected insured loss and the

[3] There are minor discrepancies between the ownership information obtained from the Township of Wayne's Assessor's Office for properties located in Hoffman Grove and the inventory conducted as part of the economic analyses. In total, the minor discrepancies resulted in one more residential property identified from the Assessor's Office data than identified from the economic inventory. As the project moves into the acquisition phase these discrepancies will be resolved, since this is a voluntary buyout under which the owner must first notify the non-Federal sponsor of their intent to sell. Subsequent to this notification, a title report and on-site appraisal will be prepared for each property to be acquired.

administrative costs of flood insurance. The insured loss assumes coverage of all physical costs including damage to the building, damage to contents and cleanup of the structure and contents.

Tables 3-3 and 3-4 show the figures used to determine the average annual subsidy per household in each of the study areas. Policyholder annual costs, shown in Table 3-3, are calculated as the sum of the average premium paid (obtained from FEMA statistics for New Jersey municipalities), uninsurable average annual damages (calculated as 5 percent of average annual contents damages), and the annual expected deductible.

Table 3-3 Average Annual Flood Insurance Subsidy Calculation
Policyholder's Costs Per Policy

	Hoffman Grove Reach 1	**Pompton Lakes Reach 2**
Average Premium Paid	$ 831	$ 927
Residential Annual Uninsurable Damage (5% contents damages)	$ 173	$ 398
Annual Expected Deductible	$ 500	$ 500
Total Annual Policyholder's Cost	**$ 1,504**	**$ 1,825**

Agency costs per policy are shown in Table 3-4. Agency costs are equal to the sum of average annual damages[4], Agent's fees (previously calculated as 15 percent of premium costs), and administration costs (provided by EGM 05-07, December 2004).

Table 3-4 Average Annual Flood Insurance Subsidy Calculation
Agency Costs Per Policy

	Hoffman Grove Reach 1	**Pompton Lakes Reach 2**
Agency Average Annual Damages	$ 6,656	$ 17,608
Agent's Fee (15% of premium)	$ 125	$ 139
Administration Costs	$ 163	$ 163
Total Agency Costs	**$ 6,944**	**$ 17,910**

Based on the data shown in tables 3-3 and 3-4 the average annual subsidy per household is calculated at $5,440 for homes in Hoffman Grove and $16,085 for homes in Pompton Lakes.

[4] It is recognized that average annual damages appear high relative to those seen in most Corps flood damage reduction studies. However, because the study area homes incur damage at high frequency events, and have long been involved in buyout programs, a high level of average annual damages is to be expected.

Total annual benefits, which are equal to the annual subsidy per household multiplied by the number of households (20 for Hoffman Grove and 10 for Pompton Lakes Borough) are shown in Table 3-5. Total benefits from implementation of the buyout program could also include reductions in emergency services costs and increases in recreation benefits, though with acquisition of only 30 structures, measurable benefits from these categories would be negligible.

Table 3-5
Average Annual Benefits of Acquisition Plan

Damage Reach	Flood Insurance Subsidy Reduction Benefits
Reach 1 - Hoffman Grove	$ 108,800
Reach 2 - Pompton Lakes	$ 160,850
Total Benefits	$ 269,650

3.4 Limited Floodway Buyout Cost Estimate

The largest component of cost for each buyout is compensation to property owners based on the fair market value of their land and building improvements.

3.4.1 Real Estate

As described in the Real Estate Plan (Appendix A) and summarized in Table 3-6, fee simple acquisition of approximately 30 properties will be necessary. Since a list of impacted property owners interested in participating in this voluntary buyout is to be generated by the Township of Wayne and the Borough of Pompton Lakes, total acreage for these properties cannot accurately be determined at this time. However, a rough estimate of 30 randomly selected properties would yield a total acreage of 5.4 acres (though shown as "TBD" in Table 3-6). Costs were estimated using a December 2004 valuation (reconnaissance estimate). Project real estate requirements would be met using fee simple purchase.

Table 3-6
Lands, Damages and Relocations

Real Estate Cost Item	Cost
30 properties (Fee Simple Purchase)	$ 6,840,500
Administrative Costs	$ 135,000
Contingency (20%)	$1,395,100
Total (30 properties, Acreage TBD)	**$8,370,600**

Detail on the costs summarized in Table 3-6 is provided in Table 3-7.

Table 3-7
Detailed Real Estate Acquisition Costs

Real Estate Cost Item	Base Cost	Contingency	Total Cost
Title Evidence	$ 18,000	$ 3,600	$ 21,600
Closing Costs	$ 27,000	$ 5,400	$ 32,400
Plats and Legal Descriptions	$ 18,000	$ 3,600	$ 21,600
Negotiations	$ 30,000	$ 6,000	$ 36,000
Coordination/PDT Meetings	$ 8,000	$ 1,600	$ 9,600
APPRAISALS -	$ 24,000	$ 4,800	$ 28,800
PL 91-646 ASSISTANCE	$ 10,000	$ 2,000	$ 12,000
REAL ESTATE PAYMENTS	$ 6,753,000	$ 1,350,600	$ 8,103,600
PL 91-646 Assistance Payments	$ 87,500	$ 17,500	$ 105,000
Total Real Estate Costs	$ **6,975,500**	$ **1,395,100**	$ **8,370,600**

3.4.2 Demolition and Disposal Costs

Any extensive buyout will entail the demolition of a substantial number and variety of buildings now standing in the study areas. These buildings, as might be expected, are predominantly of older construction, were built with a range of materials, and will vary in their cost to demolish. Construction materials, as well as size, affect the actual cost of demolition, but more importantly, greatly affect the complexity and cost of disposing of the resulting debris. Some materials are expensive to haul away while other materials are hazardous and difficult to dispose. Landfill space is scarce in northern New Jersey, even for such common, non-hazardous materials as clean wood and bricks.

A detailed cost estimate for demolition and disposal of the 30 residential structures was developed using the Microcomputer Aided Cost Estimating System (MCACES) program. The MCACES estimate provides the cost of demolition for 30 residential structures, debris removal and disposal.

A review of 55 residential structures led to the determination of the number of houses likely to be 1-story or 2-story structures, whether the structures have basements, and whether the basements are located above or below grade. The structures are located in the Central Passaic River Basin. The estimate includes filling incidental excavations and compaction and finish grading to match existing topography and seeding. The price level of the estimate is November 2004, with the application of prevailing Davis Bacon wage rates for Passaic County, New Jersey and current equipment usage costs. The entire work has been assumed to be performed by a single general contractor.

An overall 20 percent contingency rate has been applied to the estimate to account for the possible cost of the abatement and disposal of asbestos and other hazardous materials associated with the buildings' superstructures and underground fuel and/or septic tanks.

A summary of the cost estimate for the limited buyout is provided in Table 3-8.

Table 3-8
MCACES Cost Estimate Summary – Limited Floodway Buyout

Item	Cost	Contingencies	Total Cost
Lands and Damages	$ 6,975,500	$ 1,395,100	$ 8,370,600
Demolition of 30 Residential Structures	$ 875,300	$ 175,100	$ 1,050,300
Planning, Engineering, and Design	$ 374,100	$ 37,400	$ 411,500
Construction Management	$ 95,000	$ 19,000	$ 114,000
TOTAL	$ 8,319,900	$ 1,626,600	$ 9,946,400

Additional detail on the items contained in the MCACES demolition estimate is provided in Table 3-9 (the full MCACES cost estimate is provided in Appendix B). As shown in the table, the summary data includes the cost of site infrastructure removal, utility shut-off, basement wall demolition to specified depths, sidewalk and driveway removal, and site grading and seeding. All disposal costs, such as hauling, and tipping fees also are included.

Table 3-9
Demolition and Disposal Activities Included in MCACES Cost Estimate

Wood Frame Building Demolition
Landfill Tip Fee for Wood Frame Building
Utility Disconnection
Remove & Dispose Fuel / Septic Tank
Remove Concrete Slab
Site Demolition - Bituminous Driveways
Site Demolition Chain Link Fence
Site Demolition - Footers & Foundation
Permitting Inspection
Fine Grading
Spread & Compact
Seeding

Table 3-10 shows the project economic summary for the limited buyout plan. The plan has total average annual costs of $ 576,700, total average annual benefits of $269,650, a benefit-cost ratio of 0.47 to 1, and negative annual net benefits of $ 307,050.

Table 3-10
Project Economic Summary
April 2003 Price Level, 5.375% Discount Rate, 50 Year Period of Analysis

Costs	
Real Estate Acquisition Costs	$ 8,370,600
Demolition & Disposal Costs	$ 1,050,300
Planning, Engineering & Design	$ 411,500
Construction Management	$ 114,000
Interest During Construction[5]	$ 0
Total Investment Costs	**$ 9,946,400**
Annualized Investment Costs	$ 576,700
Annual Operations & Maintenance Costs	$ 0
Total Average Annual Costs	**$ 576,700**
Benefits	
Flood Insurance Subsidy Reduction	269,650
Total Average Annual Benefits	**269,650**
Benefit to Cost Ratio	**0.47**
Net Benefits	**- 307,050**

3.5 * Environmental Mitigation Requirements

As this project is cost-shared under the Civil Works (CW) program, the actions of this project must be in compliance with all applicable Federal and State laws and regulations with regard to environmental compliance (ER 1105-2-100 (2-7)). For purposes of this report, Federal mitigation will not be required.

[5] Interest during construction is equal to zero because full project benefits (100 percent damage reduction) are achieved immediately upon purchase of the residential structure.

4. * ENVIRONMENTAL CONSEQUENCES

Consistent with CW Planning Guidance (EP1165-2-1, ER1105-2-100), EO 11990, NEPA and CEQ regulations, plan formulation of flood damage reduction features have avoided adverse project effects (project implementation or O&M) to the fullest extent practicable. The following is a summary of anticipated adverse effects of the environmental consequences expected to accompany the recommended plan for flood damage reduction.

4.1 Topography and Soils

No significant impacts to topography or geology will result from the implementation of the preferred alternative. Any grading activities will be restricted to the structure footprint, driveway or areas where underground storage tanks are removed. Suitable fill material will be brought in to bring any excavated area to grade.

4.2 Water Resources

Since demolition activities will be contained to the footprint of the structure and does not involve any in-channel work, no impacts to the Pompton and Ramapo Rivers are expected. Erosion control measures such as silt fence and temporary stabilization of unvegetated areas will be implemented during demolition activities to minimize sedimentation to the Ramapo and Pompton Rivers. Additionally, limits of disturbance will be established during demolition activities to help maintain a buffer between the Rivers and the work area.

4.3 Vegetation

Vegetation immediately next to the structures, driveways and any underground storage tank may need to be removed for equipment access. However, the area will be reseeded with native vegetation upon completion of demolition and removal activities. Therefore, no adverse impacts resulting from the project are anticipated.

4.3.1 Wetlands

No adverse impacts to wetlands will occur as a result of project implementation.

4.3.2 Uplands

No adverse impacts to uplands will occur as a result of project implementation.

4.4 Wildlife Resources

4.4.1 Finfish

As previously stated, no in-channel work is proposed as part of this project. Erosion and sediment controls along with establishing a work limits of disturbance will prevent excess sedimentation to the rivers. Therefore, no adverse impacts to fish species are expected as a result from project implementation.

4.4.2 Wildlife

Birds and mammals in the area may temporarily be affected by construction activities. During construction, increased noise levels, and earth moving activities may cause displacement of individuals. However, both species are highly mobile and are expected to avoid direct mortality. The return of the floodplain to a more natural state will provide better habitat to wildlife than the current conditions. Consequently, no significant impacts are anticipated.

4.5 Threatened and Endangered Species

Summer foraging and roosting habitats for the Indiana bat consist of riparian and floodplain forests. Indiana bats typically prefer roosting in the cavities or under the bark of dead or dying trees. Clearing activities, if necessary, will be restricted to the immediate footprint of the structures, driveways and any underground storage tanks. The presence of dead or dying trees around the structures is doubtful since they would presumably be removed due to being a potential hazard to the structures. Therefore, impacts to trees that provide Indiana bat habitat are not expected. However, the Corps will assess site conditions at the time when the structures to be removed are identified and will consult with the U.S. Fish and Wildlife Service as necessary. Similarly, no impacts to State listed priority species are expected from project implementation.

4.6 Socioeconomics

Implementation of the project is not expected to have any temporary or long-term adverse socioeconomic impacts. Homeowners participating in the voluntary buyout program will receive fair market value for their home. It should be noted, however, that the market value of any given Hoffman Grove home likely to be acquired in this phase of the project (only 20 homes) appears to be roughly half of the median home value in Wayne Township, New Jersey. Therefore, it may be difficult for participants to purchase a residential property comparable in price and location.

Although there may be a loss of property values from the tax roll, the quantity of the homes being removed should not constitute an appreciable financial loss to Pompton Lakes Borough or Wayne Township. Job loss is not expected to occur from this project since the structures that are being removed from the floodway are residential. The project may provide some benefits to recreational opportunities; particularly in the Pompton Lakes project area, where a small park is located. Removal of the homes could allow the potential expansion of the park.

4.7 Cultural Resources

4.7.1 Hoffman Grove, Wayne Township

It is believed that there is a reasonable potential for prehistoric cultural resources to exist in the Hoffman Grove project area in locations where natural soils remain. Removal of the houses is expected to consist of excavation of basements when present and removal of septic tanks. However, none of the houses in Hoffman Grove appear to have basements, and any disturbance generated during construction of the houses would have destroyed any prehistoric resources located within the house footprint. When houses have been selected for removal, a careful

evaluation will be made of the existing limits of disturbance and archaeological testing or monitoring will be recommended if new limits of disturbance are created.

Hoffman Grove developed as part of a movement of upper-middle class city dwellers out of New York City and into the country for summer vacationing. The evolution of vacation bungalows and camping grounds into year-round residences is a nationally significant development that is evident today in the very existence of the structures. Its association to the Depression and the lack of housing in the early twentieth century is notable. However, the community's most significant period is the summer bungalow community period. The bungalow style is prevalent throughout the neighborhood and most of the houses in Hoffman Grove were built in a characteristic bungalow form. However, all of the bungalows in the area have been altered over the last 70 to 100 years. As a result, the development no longer possesses the integrity of that style and because of this, the community as a unit, cannot purvey the appearance of a summer bungalow community. Hoffman Grove is not eligible for listing on the National Register as a district. None of the houses in Hoffman Grove were determined eligible for listing as individual structures. No further evaluation of these houses will be necessary provided the project plans remain the same.

The New Jersey State Historic Preservation Office concurs with these findings.

4.7.2 River Edge Drive, Pompton Lakes

The demolition of the houses will be conducted similarly to the Hoffman Grove demolitions; however, it is more likely that a number of the River Edge Drive houses will have a basement of some kind. The area is believed to have a reasonable potential for prehistoric archaeological remains but a low impact on undisturbed deposits. At the time the demolition plans are developed, a careful evaluation of the proposed area of disturbance shall be done to compare the original boundaries of disturbance to the current plans. Subsurface testing of the areas where new disturbance is anticipated shall be undertaken to determine whether significant archaeological deposits are present. If this is not feasible then archaeological monitoring shall be undertaken during construction. None of the houses within the project area were found to be eligible for inclusion in the NRHP. They are modern in character and do not possess any distinct historic quality that would make them eligible either individually or as a district. The Colfax Bridge and elements of the Pompton Feeder slack water canal, although eligible for listing in the NRHP, will not be impacted by the project. No further work is recommended for historic cultural resources.

The New Jersey State Historic Preservation Office concurs with these findings.

4.8 Hazardous, Toxic, and Radioactive Waste (HTRW)

No adverse impacts are anticipated from implementation of the preferred plan. Any UST and associated piping will be pumped dry, excavated, and removed by a contractor certified to do such work. Similarly, a certified contractor will remove any ACM and secure the material in designated containers for disposal in a regulated landfill prior to demolition. Only after a house has been cleared of USTs and ACM will it be demolished.

4.9 Air Quality and Noise

4.9.1 Air Quality

Heavy equipment used during construction may contribute minor amounts of carbon monoxide or other pollutants in the immediate vicinity of the Project. However, construction activities will have no significant or long-term impact on air quality. Emission calculations based upon the equipment inventory developed to construct the project have determined that the emissions resulting from the project remain under the NAAQS criteria threshold. A draft Record of Non-Applicability is appended to this report (Appendix C).

4.9.2 Noise

There will be a minor increase in noise levels in the immediate project area during operation of construction equipment. However these impacts are expected to be minimal and short-term and limited to the period of active construction. There will be no long-term impact on noise levels.

4.10 Cumulative Impacts

Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time frame. Therefore, the cumulative impacts of an action can be viewed as the total effects on a resource or ecosystem of that action and all other activities affecting that resource regardless of the entity (federal, non-federal, or private) taking the actions. CEQ's regulations require that cumulative impacts be considered along with temporary and long term impacts in order to ensure that the range of actions considered in NEPA documents includes not only the proposed action, but also all actions that could contribute to cumulative impacts.

The authority under which this project is funded authorizes the buyout and removal of approximately 800 homes throughout the Passaic River Basin. However, the non-federal sponsor, NJDEP, has indicated its desire to proceed with the acquisition and removal of homes in this area at this time. The Corps is currently constructing a flood damage reduction project in Oakland and Pompton Lakes that includes channel modification, installation of flood control gates at Pompton Lake Dam and creation of an eight-acre wetland (for mitigation) in Potash Lake. Construction is scheduled to be completed on this project by April 2006.

Acquisition of the homes to be removed under the floodway buyout project is anticipated to begin in December 2005. While construction activities on both projects are expected to overlap, the only foreseeable temporary impact would be a minor increase in emissions from construction equipment. A beneficial cumulative long term impact is reduced flood damages to a greater area in Pompton Lakes and Wayne Township.

5. PLAN IMPLEMENTATION

As non-Federal project partner, NJDEP must sign a Project Cooperation Agreement (PCA), which will carry the project through the completion of acquisition and demolition phase. Funds must be budgeted by the Federal Government and the non-Federal partner to support these activities. A Project Management Plan (PMP) will be developed to identify tasks, responsibilities, and financial requirements of the Federal Government and the non-Federal partner through completion of construction. A project schedule will be established based on reasonable assumptions for the acquisition and demolition schedules.

5.1 General

The completion of this report and recommendation by the District Engineer is the first step toward implementing the floodway buyout program in the study areas. The New York District will complete a Quality Control / Quality Assurance review, respond to comments from other agencies and interested parties, and then submit the final version of the report to the North Atlantic Division Commander for approval. The project will be considered for inclusion in the President's budget on the basis of national priorities, magnitude of the Federal commitment, economic and environmental feasibility, level of local support, willingness of the non-Federal partner to fund its share of the project cost, and budgetary constraints that may exist at the time of funding.

5.2 Local Cooperation

A fully coordinated PCA package, which will include the non-Federal partner's financing plan, will be prepared subsequent to the approval of the study report. The non-Federal partner, NJDEP, has indicated support for recommendations presented in this report and its desire to execute a PCA for the buyout plan.

As the non-Federal project partner, NJDEP must comply with all applicable Federal laws and policies and other requirements, including but not limited to:

Project Responsibility

- Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project and any Project-related betterments, except for damages due to the fault or negligence of the United States or its contractors.
- Assume complete financial responsibility, as between the Federal Government and the non-Federal project partner for all necessary cleanup and response costs of any Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, or maintenance of the Project.
- Operate the project for the purpose of CERCLA liability. To the maximum extent practicable, operate, maintain, repair, replace and rehabilitate the Project in a manner that will not cause liability to arise under CERCLA.

- Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17),and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for the construction, operation, and maintenance of the Project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.
- Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense directive 5500.11 issued pursuant thereto, as well as Army regulation 600- 7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

Floodplain Management

- Participate in and comply with applicable Federal flood plain management and flood insurance programs and comply with the requirements in Section 402 of the Water Resources Development Act of 1986, as amended.
- Publicize flood plain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with the protection provided by the project.

Financial & Administrative Management

- Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal project partner has entered into a written agreement to furnish its required cooperation for the project or separable element.
- Provide, during the first year of construction, any additional funds needed to cover the non-Federal share of PED costs.
- Provide, during construction, any additional funds needed to cover the non-Federal share of costs.
- Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Codes of Federal regulations (CFR) Section 33.20.

- Not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.
- Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement.

Inspection, Performance, and Maintenance

- Grant the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the non-Federal project partner owns or controls for access to the project for the purpose of inspection and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing or rehabilitating the project.
- Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might hinder its operation and maintenance, or interfere with its proper function, such as any new development on project lands or the addition of facilities which would degrade the benefits of the project.
- Provide to the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal project partner, now or hereafter, owns or controls for access to the Project for the purpose of inspection, and, if necessary after failure to perform by the non-Federal project partner, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall operate to relieve the non-Federal project partner of responsibility to meet the non-Federal project partner's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance.
- Not less than once each year inform affected interests of the extent of protection afforded by the Project.
- Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms.

5.3 Cost Sharing

Table 5-1 displays the apportionment of cost sharing responsibilities between the Federal government and the non-Federal sponsor, NJDEP. The total project first costs - including Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRD) - are shared on a 75 percent basis by the Federal government and a 25 percent basis by the non-Federal partner. As indicated in the table the Federal share of the entire project's total first cost is $ 7,459,800; the non-Federal share is $ 2,486,600. The Federal Government will design the acquisition and demolition plans, prepare detailed plans/specifications and acquire residential properties on behalf of the non-Federal partner.

Table 5-1
Cost Apportionment
Federal and Non-Federal Responsibilities

Federal Project Cost (75%)	**$ 7,459,800**
Non-Federal Project Cost (25%)	**$ 2,486,600**
Total Project Cost (100%)	**$ 9,946,400**

It should be noted that the costs presented are estimated and that actual costs will be determined based upon financial accounting as stipulated in the construction Project Cooperation Agreement that will be executed with the NJDEP prior to actual implementation of the acquisition plan.

5.4 Implementation Schedule

A preliminary implementation schedule was developed for the selected plan. The schedule is based on information available to date, and is largely dependent on whether the Project continues to receive Congressionally-directed funding. The estimated implementation schedule for the first group of buyouts is provided below:

- Project Cooperation Agreement Execution – Sepember 2005 - October 2005
- Plans and Specifications Phase Begins – October 2005
    - Real Estate Activities and Acquisitions– October 2005 – April 2006
    - Plans and Specifications for Demolition – January 2006 – April 2006
- Construction Phase Begins – May 2006
    - Advertisement and Contract Award – May 2006 – July 2006
    - Demolition – August 2006 – April 2008

For the remaining structures, the estimated implementation schedule is contingent on Congressionally-directed funding. If funding is available, Real Estate Acquisition will continue through September 2007.

5.5 Financial Analysis

For purposes of executing the PCA, the NJDEP has stated its intention to act as the non-Federal partner. The state will provide funds in increments appropriate to the proportion of the amount of Federal funds to be expended on the project each year. State funds will be derived through the State's annual budget process. The State has indicated its intent to enter into a PCA at the conclusion of this study. The State of New Jersey has secured funding for the first year of the acquisition phase.

5.6 Views of Non-Federal Partners and Other Agencies

The selected plan has received strong support from the non-Federal project partner, NJDEP, as well as other agencies of the State of New Jersey. The affected local governments, Passaic County, Pompton Lakes Borough, and the Township of Wayne, New Jersey also have expressed their support for the project. A meeting was held on August 17, 2005 with the NJDEP, the Township of Wayne, the Borough of Pompton Lakes, and the Corps to discuss the implemenatation of the project.

5.7 Areas Of Concern

There are no outstanding areas of concern regarding the acquisition plan. The plan is fully voluntary, supported by the non-Federal project partner, NJDEP, as well as affected local governments and interested Federal agencies. These parties have full confidence in the anticipated performance of the plan in terms of flood damage reduction and impacts on the environment.

6 * COORDINATION AND COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The Draft report was coordinated with the public and involved agencies through targeted mailings, placement of the report in public repositories at the local library and town hall, and by advertisement of the document's availability on the New York District's web site. The Notice of Availability of the Draft EA was issued on July 11, 2005 and had a 30-day public comment period, ending on August 9. With the exception of a letter supporting the project from the Mayor of the Township of Wayne, no comments were received. The mailing list comprising of the state and Federal agencies, and interested organizations and stakeholders who received a copy of the Draft report is located in Appendix F.
The Fish and Wildlife Coordination Act Report is located in Appendix E. The Corps received concurrence on its recommendations regarding the cultural resources assessment from the New Jersey State Historic Preservation Office on June 1, 2005. The correspondence is located in Appendix D. Applicable laws and regulations to federal actions are summarized in Table 6-1.

Table 6-1
Summary of Primary Laws and Regulations Applicable to the Proposed Project

Legislative Title	U.S. Code/Other	Compliance
Clean Air Act	42 U.S.C. §§ 7401-7671g	An air quality analysis was completed for the project (See Appendix C). Based upon the completed analysis, the emissions from the project are considered to have an insignificant impact on the regional air quality, and according to 40 CFR 93.153 (f) and (g) the proposed project is presumed to conform to the SIP. A Record of Non-Applicability is appended to the Draft Environmental Assessment.
Clean Water Act	33 U.S.C. §§ 1251 et seq.	The project does not involve any discharge or fill of the Ramapo and Pompton Rivers or associated wetlands. Erosion and sediment control measures will be implemented during construction to minimize sedimentation to the rivers. Therefore, the project is in compliance with this Act.
Endangered Species Act of 1973	16 U.S.C. §§ 1531 et seq.	Per coordination with the U.S. Fish and Wildlife Service, the project area has potential Indiana bat habitat. Although the proposed project is not expected to have adverse impacts to any endangered or threatened species, any tree clearing activities conducted from April 1 through September 30 will require formal consultation.
Fish and Wildlife Coordination Act	16 U.S.C. § 661 et seq.	The FWCAR is located in Appendix E.
National Environmental	42 U.S.C. §§ 4321-4347	The circulation of the Draft and Final

Policy Act of 1969		Environmental Assessment fulfills requirements of this act.
National Historic Preservation Act of 1966	16 U.S.C. §§ 470 et seq.	The NJSHPO concurrence letter is located in Appendix D The Corps will continue to coordinate with the State Historic Preservation Office throughout the project to fulfill requirements of this act.
Executive Order 11990, Protection of Wetlands	May 24, 1977	Circulation of this report for public and agency review fulfills the requirements of this order.
Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks	April 21, 1997	Implementation of this project will reduce environmental health risks. Circulation of this report for public and agency review fulfills the requirements of this order.

During construction, best management procedures will be followed to maintain compliance with Standards for Soil Erosion and Sediment Control in New Jersey (NJAC 2:90), and NJDEP Water Quality Certifications (NJAC 7:7A-2.1(d)).

The following measures will be taken to minimize and avoid adverse environmental impacts:

- Establishing a limit of disturbance to maintain a buffer between the demolition area and the Rivers,
- Employing erosion and sediment controls to reduce the potential of sedimentation to the Ramapo and Pompton Rivers, and
- Reseeding the area with native vegetation to enhance the habitat value of the site.

7. RECOMMENDATIONS

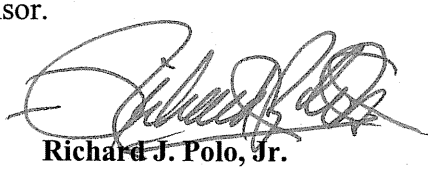
In making the following recommendations, I have given consideration to all significant aspects in the overall public interest, including environmental, social and economic effects, engineering feasibility and compatibility of the project with the policies, desires and capabilities of the State of New Jersey and other non-Federal interests.

Although the project is not economically justified, I recommend that the selected plan for acquisition of thirty (30) residential structures located within the floodway of the Passaic River be implemented as a Federal project for flood damage reduction, subject to such modifications as may be prescribed by the Chief of Engineers and to the extent that funds have been appropriated by the U.S. Congress. To date, $1,250,000 has been appropriated. These funds, coupled with the non-Federal sponsor's share of project costs, will be used to initiate the buyout program. If additional appropriations are made, those funds will be used to advance the buyout program toward completion, as well.

The recommendations contained herein reflect the information available at this time and current departmental policies governing individual projects. They do not reflect program and budgeting priorities inherent in the formulation of a national Civil Works construction program nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendations may be modified. The non-Federal project partner (the New Jersey Department of Environmental Protection), interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

These recommendations are made with the provisions that local interests will:

a. Hold and save the United States free from claims for damages which may result from construction and subsequent maintenance, operation, and public use of the project, except damages due to the fault or negligence of the United States or its contractors.
b. Maintain public ownership and public use of the areas upon which the amount of Federal participation is based during the economic life of the project.
c. Provide and maintain necessary access roads, parking areas, and other public use facilities open and available to all on equal terms.
d. Contribute the local share of non-Federal costs for initial construction and operation and maintenance over the economic life of the project, as required to serve the intended purposes.
e. Upon completion of each project feature, acquire, rehabilitate, repair, replace, operate and maintain easements for public access to areas created or enhanced by the project. The cost of the operation and maintenance of these easements will be the responsibility of the non-Federal sponsor.



Richard J. Polo, Jr.
Colonel, Corps of Engineers
District Engineer

8. * REFERENCES AND CONTACTS

The following references were consulted during the preparation of the Environmental Assessment.

Brubaker, Robert M., Anne Brubaker Burns, and Gratia Mahony. 1976. "A Wondrously Beautiful Valley." A Commemorative History of Wayne. Wayne Township Bicentennial Committee, Wayne, New Jersey.

Bzdak, Meredith Arms and Jean Howson. 1995. Cultural Resources Investigation, Passaic River Flood Protection, Main Spur Tunnel Inlets, Associated elements. Volume IV: Historic and Architectural Investigations. Submitted to USACE, NY District.

Cacioppo, Richard K. 1997. Scenic Crossroads: The History of Wayne. On file, Wayne Public Library.

Connell, Thomas. Wayne Township: A Perspective. On file, Wayne Public Library, Wayne, NJ.

DeRooy, Carissa. 2004. Phase 1 Cultural Resources Investigation, Lower Passaic River Floodway Buyouts Project, Pompton and Ramapo Rivers, Wayne Township and Borough of Pompton Lakes, Passaic County, New Jersey. Submitted to the New Jersey State Historic Preservation Office, Trenton, NJ.

Kraft, Herbert E. 1981. Archaeological, Historical, Architectural Cultural Resources Survey of the Proposed Oakland Sewage Treatment Plant Site and Alternate Effluent Alignments Through Oakland and Pompton Lakes, Bergen and Passaic Counties, New Jersey. Archeo-Historic Research. Submitted to Elam and Popoff, Engineering Associates.

Lenik, Edward J. The Archaeology of Wayne. Wayne Township Historical Commission, Wayne, NJ. On file, Wayne Public Library.

Lenik, Edward J., Diane Dallal, Nancy L. Gibbs, Elise Barankowski, Ronald J. Dupont, Jr., Thomas Fitzpatrick, Eugene Reyes. 1990. The Pompton Iron Works and Village, Passaic County, New Jersey. An Archaeological and Historical Survey. Sheffield Archaeological Consultants.

New Jersey Department of Environmental Protection (NJDEP). August 2004. Surface Water Quality Standards, N.J.A.C. 7:9B. August 2004. Available at http://www.state.nj.us/dep/wmm/sgwqt/2004swqs.pdf

New Jersey District Water Supply Commission (NJDWSC). November 2002. Watershed Characterization and Assessment Passaic River Basin WMA 3. Available at http://www.njdwsc.com/prbwmp/wma3/doc/wma3wca_11_02.htm

Tobin, Cathy. 2001. Images of America: Wayne Township. Arcadia Publishing, Charleston, SC.

U.S. Army Corps of Engineers, New York District. October 2004. Upper Passaic River at Long Hill Township Detailed Project Report and Environmental Assessment.

U.S. Army Corps of Engineers. December 1987. Passaic River Basin, New Jersey and New York, Phase 1 General Design Memorandum, Flood Protection Feasibility Main Stem Passaic River, Main Report and Environmental Impact Statement.

U.S. Army Corps of Engineers, New York District. October 1995. Passaic River Floodway Buyout Study.

U.S. Army Corps of Engineers, New York District. September 1995. Passaic River Buyout Study.

U.S. Army Corps of Engineers, New York District. December 1987. Passaic River Basin, New Jersey and New York, Phase 1 General Design Memorandum, Flood Protection Feasibility Main Stem Passaic River, Main Report and Environmental Impact Statement.

U.S. Census Bureau. 2002 Census. Information for Pompton Lakes found on http://www.scc.rutgers.edu/public/data/c2000_soc_econ/1603460090.pdf ; Information for Wayne Township found on: http://www.scc.rutgers.edu/public/data/c2000_soc_econ/0603403177840.pdf

Vreeland, Ethel 1960. Pompton Area History. Pompton Women's Club.

LIST OF STUDY TEAM MEMBERS AND REPORT PREPARERS

The following individuals were primarily responsible for the preparation of this integrated report and environmental assessment.

Individual	Responsibility
Kevin Smyth	Project Planner
Kimberly Rightler	Biologist; National Environmental Policy Act Compliance; Mitigation
Paul Tumminello	Project Manager
Sheila Rice-McDonnell	Engineering & Design
John Chew	Cost Engineering
Norman Blumenstein	Economics
Carissa Scarpa	Cultural Resources
Richard Dabal	Hazardous, Toxic, and Radioactive Wastes
Mary Daly	Real Estate
Jay Hecht	Office of Counsel

Appendix A

Real Estate Plan

REAL ESTATE PLAN
FOR THE PASSAIC RIVER BASIN
FLOOD MANAGEMENT (FLOODWAY BUYOUT) FEASIBILITY STUDY
BOROUGH OF POMPTON LAKES AND WAYNE TOWNSHIP
PASSAIC COUNTY, NEW JERSEY

1. GENERAL

2. REAL ESTATE REQUIREMENTS

   a. Description of Land, Easements, Rights of Way and Roadway Requirements for Project
   b. Standard Estates
   c. Non-Standard Estates
   d. Current Ownership
   e. Real Estate Mapping

3. FEDERALLY-OWNED LANDS AND EXISTING FEDERAL PROJECTS

4. LANDS OWNED BY THE NON-FEDERAL SPONSOR

5. NAVIGATIONAL SERVITUDE

6. INDUCED FLOODING

7. BASELINE COST ESTIMATE FOR REAL ESTATE

8. PUBLIC LAW 91-646 RELOCATIONS

9. TIMBER RIGHTS AND MINERAL ACTIVITY

10. ASSESSMENT OF NON-FEDERAL SPONSOR ACQUISITION CAPABILITY

11. ZONING

12. ACQUISITION SCHEDULE

13. UTILITY AND FACILITY RELOCATIONS

14. ENVIRONMENTAL CONCERNS

15. ATTITUDES OF THE LANDOWNERS

16. NOTIFICATION TO NON-FEDERAL SPONSOR

17. RISK ANALYSIS

REAL ESTATE PLAN

1. GENERAL

This Real Estate Plan (REP) is for the Passaic River Basin Flood Management (Floodway Buyout) Study, Borough of Pompton Lakes and Wayne Township, Passaic County, New Jersey. Congress authorized a study of the Passaic River Basin in the Water Resources Development Act (WRDA) of 1976 (Public Law 94-587), which led to a plan authorized in WRDA 1990, and modified in WRDA 1992, 1996, and 2000. The specific authorization for this element, the Floodway Buyout, is Section 1148 of WRDA 1986, as amended by Section 333 of WRDA 1996 and Section 327 of WRDA 2000. A Draft Passaic River Floodway Buyout Study, dated September, 1995, examined the acquisition and removal of approximately 800 homes from the State of New Jersey defined floodway throughout nine municipalities of the Central Passaic River Basin.

The purpose of this project is flood damage reduction. No environmental restoration component is included. This study and REP will focus on two of the nine municipalities in the Central Passaic River Basin, the Borough of Pompton Lakes and the Township of Wayne, located approximately 25 miles and 30 miles northwest of the City of Newark and New York City, respectively. These two study areas comprise approximately 135 properties, with 10 properties located between the Ramapo River and River Edge Drive in Pompton Lakes, and 125 properties along the Pompton River in the Hoffman Grove area in Wayne. The non-Federal sponsor (NFS) for this study, the State of New Jersey, Department of Environmental Protection (NJDEP), requested that acquisition of properties under this buyout begin in these two municipalities, due to the fact that NJDEP had already acquired properties in this area of Pompton Lakes, and because the Township of Wayne had specifically requested NJDEP to address their flood problems in the Hoffman Grove area. However, of the combined 135 properties in these two municipalities, the recommended plan under this voluntary buyout consists of the acquisition of approximately thirty (30) properties, since Congress has and is expected to appropriate limited funding annually. Consequently, the sponsor will request the two municipalities to notify the impacted prperty owners in order to generate an aquisition list of those interested in participating in this voluntary buyout. Under this voluntary buyout, if an impasse in reaching an agreement with an owner occurs, an offer would be presented to the next owner on the list. With the continued appropriation of funding, offers will eventually be made to all of the interested property owners. Given these conditions, this real estate plan will provide mapping and ownership information for the combined 135 properties, and cost information for the acquisition of thirty (30) of those properties.

2. REAL ESTATE REQUIREMENTS

a. Description of Land, Easements, Rights of Way and Roadway Requirements for Project:

The project will require the following:

Fee - For buyout purposes, fee simple acquisition of approximately 30 properties will be necessary. Since a list of impacted property owners interested in participating in this vouluntary buyout is to be generated by the Township of Wayne and the Borough of Pompton Lakes, total acreage for these properties cannot accurately be determined at this time.

However, a rough estimate of 30 randomly selected properties would yield a total acreage of 5.4 acres.

b. Standard Estates:

The minimum estate required for this project is Fee (Estate No. 1).

The standard estate language will be as follows:

FEE (Estate No. 1) The fee simple title to the land described in Schedule A, Tract No. ____, subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines, excepting and excluding all mineral rights which are outstanding in parties other than the surface owners and all appurtenant rights for exploration, development and removal of said minerals so excluded.

c. Non-Standard Estates

There are no non-standard estates necessary for this project.

d. Current Ownership

Properties eligible for acquisition under this voluntary buyout include 10 in the Borough of Pompton Lakes, and all 125 in the Hoffman Grove area in the Township of Wayne. Though only 30 properties will be acquired under this study, all 135 properties are necessarily listed, since acquistion of the properties will be based on a list, to be generated by the Township of Wayne and the Borough of Pompton Lakes, of the impacted owners interested in participating in this vouluntary buyout. Ownership information is provided in Exhibits B.1 and B.2.

It is noted for this REP that, in regard to the ownership information provided for the properties in the Hoffman Grove area in Exhibit B.2, there are several discrepancies between the properties listed and those identified with arrows on the Real Estate Mapping. These discrepancies include ownership information obtained from the Township of Wayne's Assessor's Office for properties located on 72 River Road, 29 Brookside Road, and 15 Spring Road for which no house is identified by an arrow on the Real Estate Mapping, and conversely houses identified by an arrow on the Real Estate Mapping for 71, 74, and 78 River Road, and 32 Brookside Road for which no Tax Assessor's record was found. However, as the project moves into the acquisition phase these discrepancies will be resolved, since this is a voluntary buyout under which the owner must first notify the NFS of his/her intent to sell. Subsequent to this notification, a title report and on-site appraisal will be prepared for each property to be acquired.

e. Real Estate Mapping

A location map identifying the two study areas in relation to each other is attached as Exhibit A.1. Real Estate Project Planning Maps, Plate R-1, entitled "Passaic River Limited Floodway Acquisition Project, Pompton Lakes Study Area," dated 3 December 2004, and Plates R-2 through R-6, entitled "Passaic River Limited Floodway Acquisition Project, Hoffman Grove Study Area," dated 6 December 2004, are attached as Exhibits A.2 and A.3, respectively. In the Hoffman Grove study area properties marked by an "X" indicate no house/improvement exists.

In the Pompton Lakes Study Area properties marked by an "X" indicate the property is already owned by the NFS. Since it cannot be determined which 30 properties will be acquired under this study, the mapping can only indicate individual tract acreage and does not include total acreage. However, a rough estimate of 30 randomly selected properties would yield a total acreage of 5.4 acres.

3. FEDERALLY-OWNED LANDS AND EXISTING FEDERAL PROJECTS
There are no Federally-owned lands nor existing Federal projects in the proposed project area.

4. LANDS OWNED BY THE NON-FEDERAL SPONSOR
There are no lands involved in this project that are owned by the Non-Federal Sponsor.

5. NAVIGATIONAL SERVITUDE
The New York District has determined that the Passaic River from the mouth of Newark Bay to mile 23.8 in Paterson, New Jersey is navigable and the remainder non-navigable. The section of the Passaic River for this project is upstream of Paterson, and therefore the Passaic River for this project is a non-navigable waterway, and not subject to the Federal Navigational Servitude. Similarly, the floodway buyout areas along the Pompton and Ramapo Rivers of the Passaic River Basin are upstream of Paterson. Therefore, the Pompton and Ramapo Rivers areas for this project are non-navigable waterways and not subject to the Federal Navigational Servitude for this project.

6. INDUCED FLOODING
No induced flooding is anticipated due to these proposed non-structural flood damage reduction project measures.

7. BASELINE COST ESTIMATE FOR REAL ESTATE
The total estimated administrative and estate costs for lands, easements, rights-of-way, relocations, and disposal areas (LERRD), without contingency, are $6,975,500, and $8,370,600 with contingency. For consistency purposes in the cost estimates for this study, the New York District has requested that a contingency factor of 20% be used by all the technical areas . Those totals breakdown as follows:

	Without Contingency	With Contingency
Administrative Costs	$ 135,000	$ 162,000
LER	$6,840,500	$8,208,600
TOTAL:	**$6,975,500**	**$8,370,600**

8. PUBLIC LAW 91-646 RELOCATIONS
Since this is a voluntary buyout, in accordance with 49 CFR 24 Subpart B, 24.101(a), relocation benefits will not be paid to the owner(s) of the property. However, under this same citation, any tenant(s) meeting the eligibility requirements will receive relocation benefits. Of the 125 properties in the Hoffman Grove study area, approximately 45 are rented. Consequently for this REP, the MCACES will include costs for tenant relocation benefits for 10 properties. These

costs include a rental assistance payment (RAP) of $5,250, the current maximum allowed by law, and moving costs of $3,500.

9. TIMBER RIGHTS AND MINERAL ACTIVITY

There is no present or anticipated timber harvesting or mineral activity in the vicinity of the project that may affect the operation thereof.

10. ASSESSMENT OF THE NFS' REAL ESTATE ACQUISITION CAPABILITY

The Non-Federal Sponsor (NFS) for this project is the State of New Jersey, Department of Environmental Protection. The NFS has indicated that the required real estate acquisitions would be accomplished by the U. S. Army Corps of Engineers. It is anticipated that, upon execution of the Project Cooperation Agreement (PCA), the NFS would enter into a Memorandum of Agreement (MOA) with the Department of the Army, U. S. Army Corps of Engineers, New York District, requesting the Government to act on its behalf to acquire the real estate interests required for the project. It is anticipated that the Government will contract for title, and closing services in the acquisition of the properties, with title being taken in the name of the NFS. The Assessment of the Non-Federal sponsor's Real Estate Acquisition Capability is included in Exhibit D.

11. ZONING

The enactment of zoning ordinances is not proposed to facilitate real estate acquisition for this project.

12. ACQUISITION SCHEDULE

The current goal is to have the PCA executed by September, 2005, and for the Government, acting in behalf of the Non-Federal Sponsor, to begin the process to acquire properties immediately thereafter. Since acquisition of the properties is contingent upon the annual project funding appropriated by Congress, it is estimated that acquisition of the total 30 properties will span approximately three (3) fiscal years. Consequently, the following schedule represents the initial acquisition phase under which it is anticipated approximately 4-6 properties would be acquired.

Sign PCA	Oct 28, 2005	Oct 28, 2005
Title Work	Oct 31, 2005	Dec 02, 2005 5 wks
Prepare Plats and Legal Descriptions	Dec 05, 2005	Dec 30, 2005 4 wks
Perform Appraisals	Dec 05, 2005	Jan 20, 2006 7 wks
Negotiations and Closings	Dec 29, 2005	Mar 02, 2006 9 wks
Certify LERRD Acquisition	Mar 03, 2006	Mar 17, 2006 2wks

13. UTILITY AND FACILITY RELOCATIONS

There are no relocations of utilities or facilities anticipated for this project.

14. ENVIRONMENTAL CONCERNS

No hazardous, toxic, and radioactive waste (HTRW) are known or suspected of being on the site. There are no sites within or adjacent to the project area that have been identified as known or

potential HTRW sites. Therefore, the real estate plan cost estimate does not reflect the presence of contamination.

15. ATTITUDES OF THE LANDOWNERS

The property owners are concerned about future flooding and the consequent flood damage and reduced values to their homes, and are therefore receptive to buyouts. However, since the project is voluntary by legislation, an eligible property owner is under no obligation to participate in this voluntary buyout. In addition, the Township of Wayne and the Borough of Pompton Lakes are supportive of the project, with neither having raised any objection to the potential effects of an acquisition of this nature on its tax base.

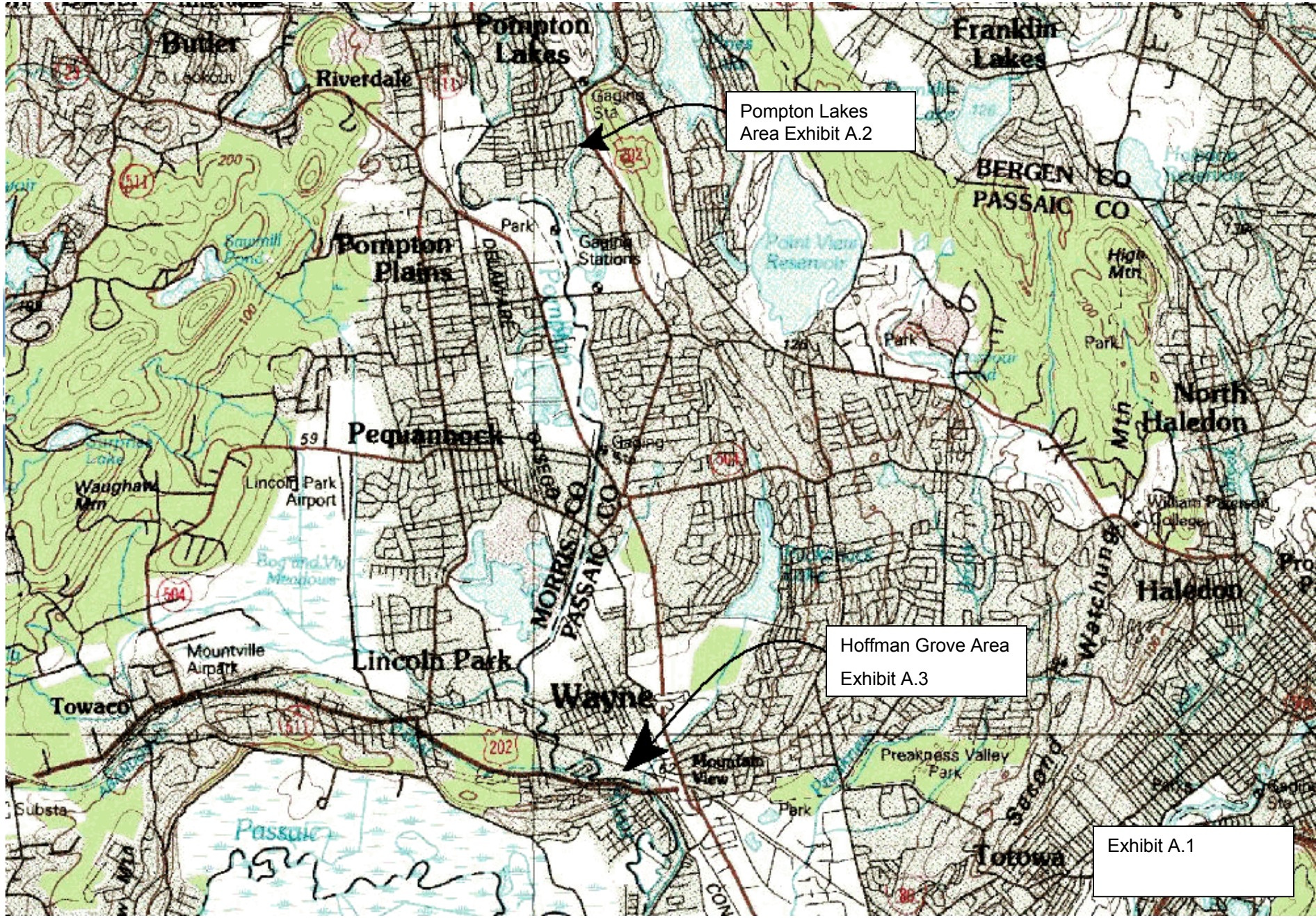
16. NOTIFICATION TO NFS OF RISKS PRIOR TO PCA EXECUTION:

The NFS, New Jersey Department of Environmental Protection, has been notified in writing, in a letter dated November 10, 2004, regarding the risks associated with acquisition of land prior to the execution of the PCA.

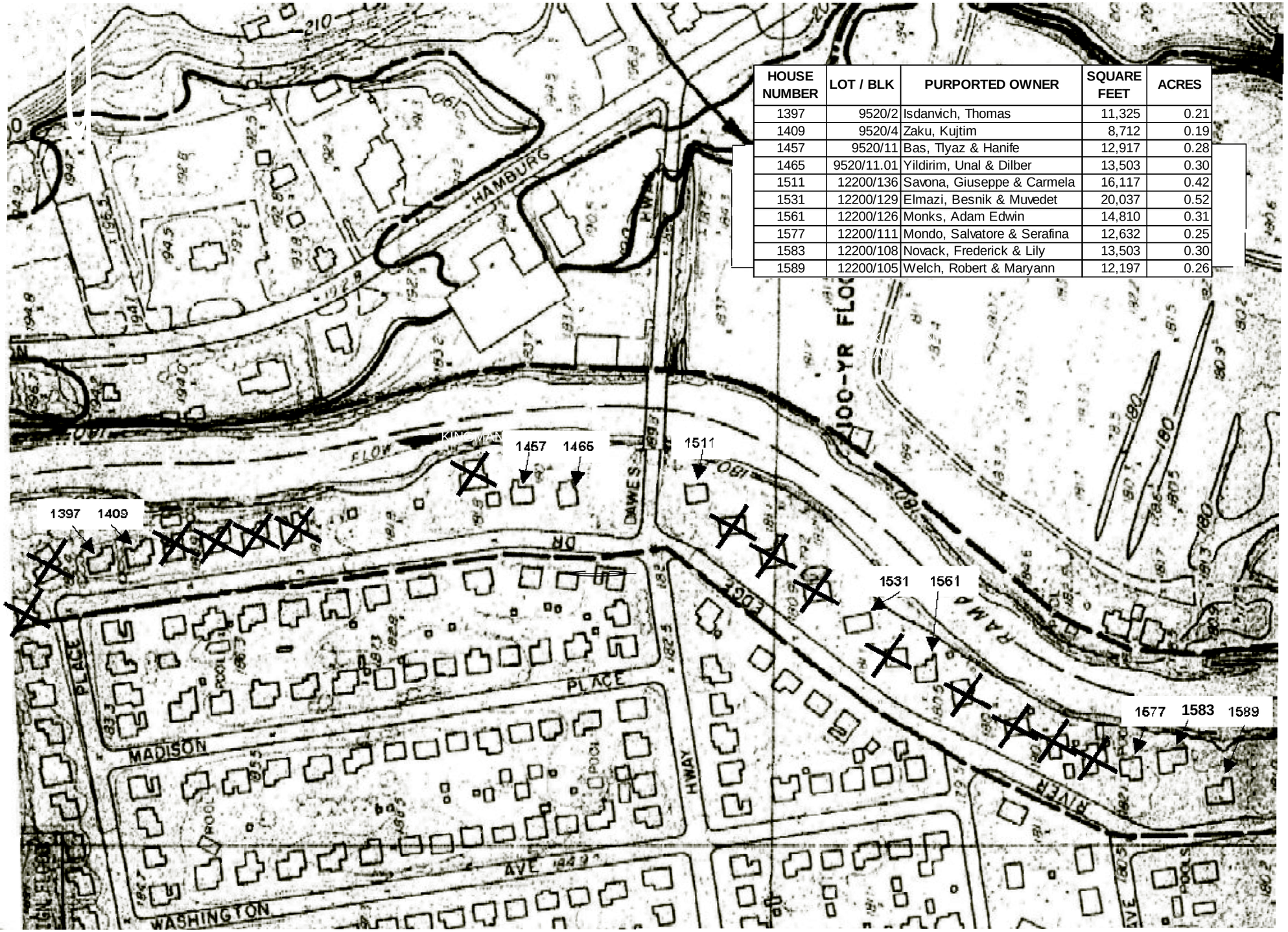
17. RISK ANALYSIS

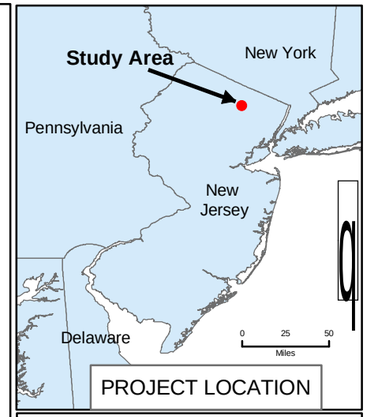
Since this is a voluntary buyout with no project features or construction required, there are no risks anticipated under this study.

EXHIBITS A.1 – A.3


Pompton Lakes
Area Exhibit A.2
Hoffman Grove Area
Exhibit A.3
Exhibit A.1
Butler
Riverdale
Pompton Lakes
Franklin Lakes
BERGEN CO
PASSAIC CO
Pompton Plains
Pequannock
Lincoln Park Airport
Lincoln Park
Wayne
Towaco
Mountville Airpark
MORRIS CO
PASSAIC CO
North Haledon
Haledon
Totowa
Preakness Valley Park
Mountain View
Point View Reservoir
Waughaw Mtn
Bog and Vly Meadows
Sawmill Pond
Gaging Stations
Gaging Sta
Park
Substa
Passaic
Watchung Mtn
William Paterson College
High Mtn
Second

HOUSE NUMBER	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES
1397	9520/2	Isdanvich, Thomas	11,325	0.21
1409	9520/4	Zaku, Kujtim	8,712	0.19
1457	9520/11	Bas, Tlyaz & Hanife	12,917	0.28
1465	9520/11.01	Yildirim, Unal & Dilber	13,503	0.30
1511	12200/136	Savona, Giuseppe & Carmela	16,117	0.42
1531	12200/129	Elmazi, Besnik & Muvedet	20,037	0.52
1561	12200/126	Monks, Adam Edwin	14,810	0.31
1577	12200/111	Mondo, Salvatore & Serafina	12,632	0.25
1583	12200/108	Novack, Frederick & Lily	13,503	0.30
1589	12200/105	Welch, Robert & Maryann	12,197	0.26





REAL ESTATE PROJECT PLANNING MAP

PASSAIC RIVER LIMITED FLOODWAY ACQUISITION PROJECT

POMPTON LAKES STUDY AREA

0 37.5 75 150 225 300
Feet

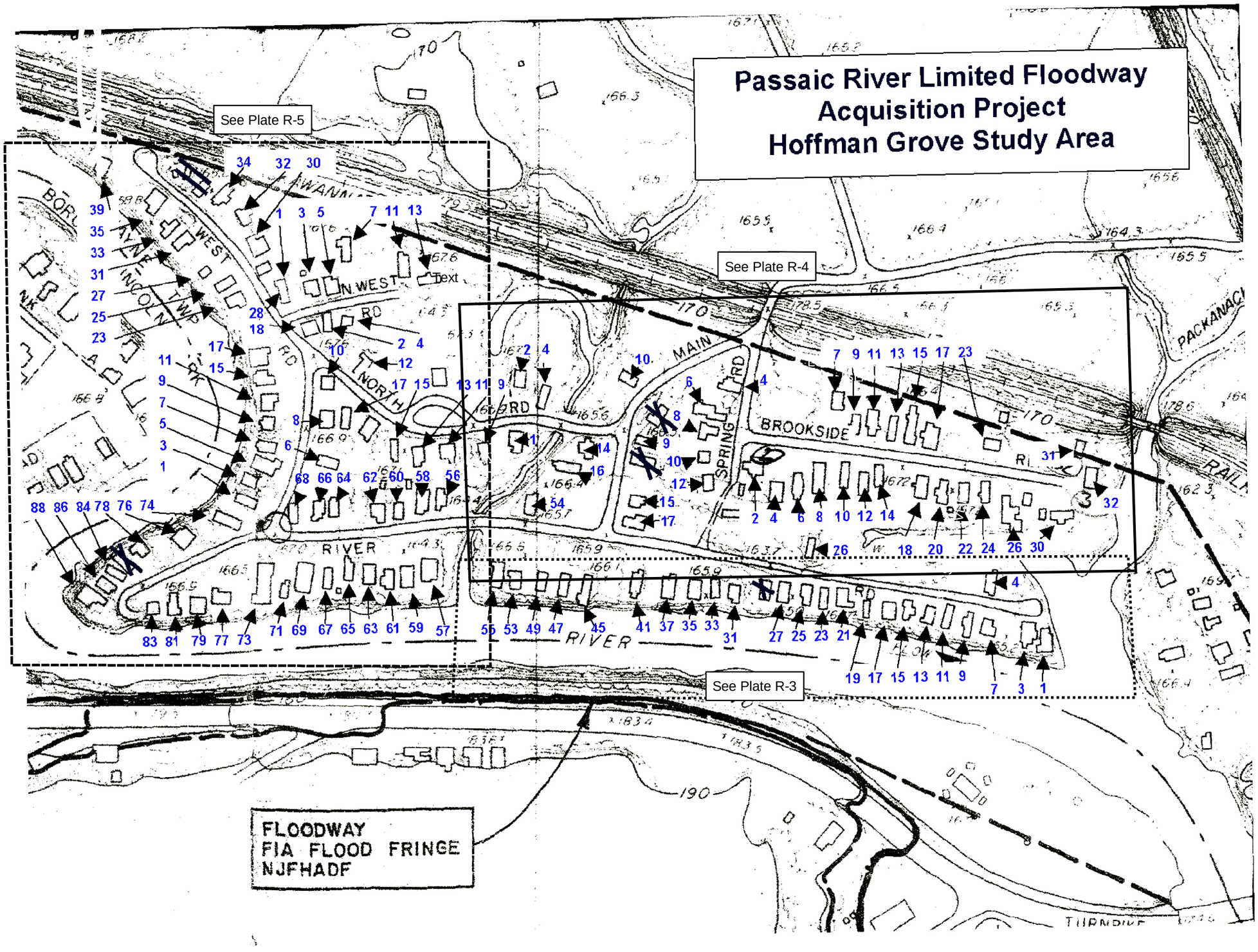
Absolute Scale 1:2,003

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
REAL ESTATE DIVISION
BALTIMORE, MARYLAND

PROJECT FILE: pompton_lakes.mxd
CREATED BY: rts
DATE: 3 Dec 2004
SCALE: AS SHOWN

PLATE: **R-1**

Passaic River Limited Floodway Acquisition Project Hoffman Grove Study Area





REAL ESTATE PROJECT PLANNING MAP

PASSAIC LIMITED FLOODWAY

ACQUISITION PROJECT

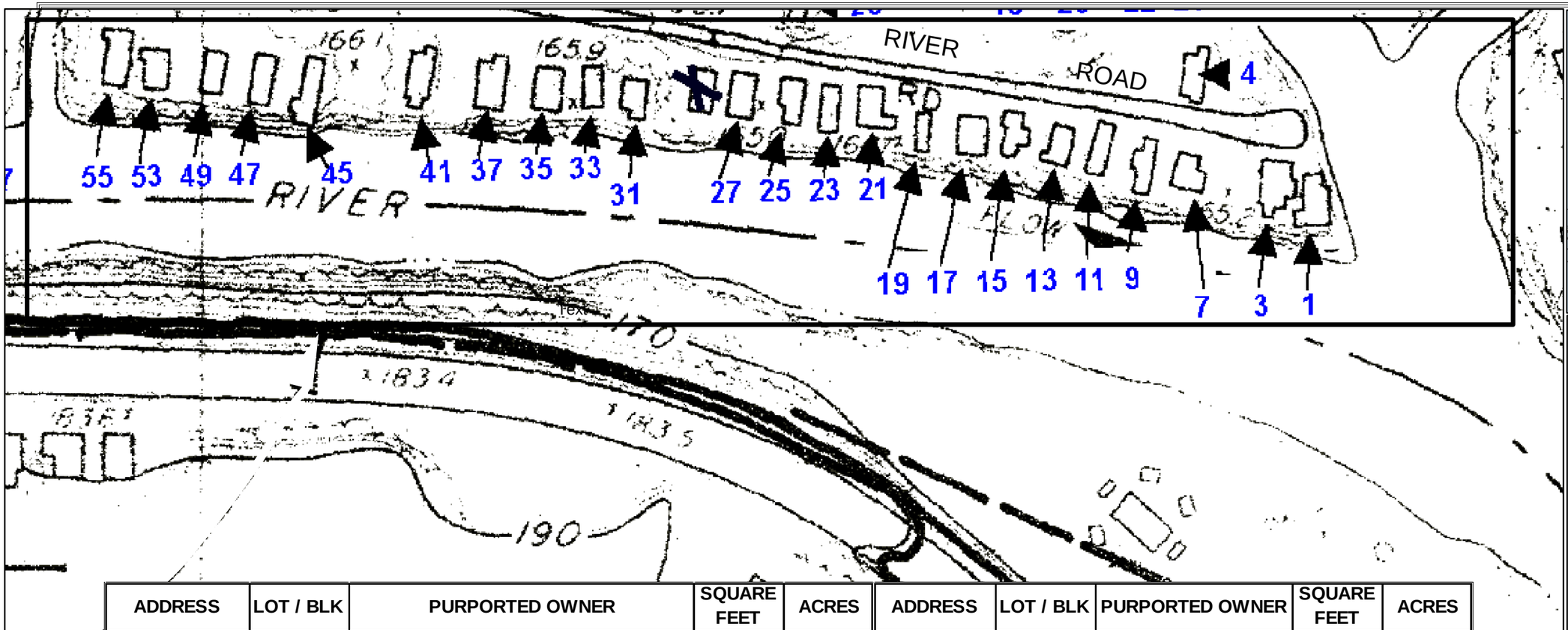
HOFFMAN GROVE STUDY AREA

0 75 150 300
Feet

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
REAL ESTATE DIVISION
BALTIMORE, MARYLAND

PROJECT FILE: hoffman_grove_rev.mxd
CREATED BY: RTS
DATE: 17 Dec 2004
SCALE: AS SHOWN

PLATE: **R-2**





ADDRESS	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES	ADDRESS	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES
1 River Road	818/3	Wright, John & Bonnie D.	1,904.00	0.044	25 River Road	818/3	Mulvaney, Francis	3,511.00	0.081
3 River Road	818/3	Kahn, Zamir	3,264.00	0.075	27 River Road	818/3	Giordano, Robert	2,369.00	0.054
4 River Road	818/3	Heines, Robert	6,829.00	0.157	31 River Road	818/3	Hayes, Lucille, B.	3,547.00	0.081
7 River Road	818/3	Jicha, Gerard & Karen	3,821.00	0.088	33 River Road	818/3	Karasch, Paul C.	3,157.00	0.072
9 River Road	818/3	Slater, Louis	2,797.00	0.064	35 River Road	818/3	Karasch, Paul C.	3,470.00	0.08
11 River Road	818/3	Roll, Robert & Linda	2,571.00	0.059	37 River Road	818/3	Moeller, Dennis	5,482.00	0.126
13 River Road	818/3	Palmeri, Peter M.	2,485.00	0.057	41 River Road	818/3	Wilson, Bonnie L.	6,623.00	0.152
15 River Road	818/3	Hoffman Grove Condominium Association	2,317.00	0.053	45 River Road	818/3	Wines, Bruce	5,184.00	0.119
17 River Road	818/3	Mende, Curt Jr.	2,636.00	0.061	47 River Road	818/3	Lott, Ethel C.	4,516.00	0.104
19 River Road	818/3	Slater, Julie & Charles Sr.	2,052.00	0.047	49 River Road	818/3	Cunniff, Linda	4,347.00	0.1
21 River Road	818/3	La Monica, Salvatore	3,205.00	0.074	53 River Road	818/3	McCabe, Robert J.	3,763.00	0.086
23 River Road	818/3	Mulvaney, Thomas & Anne	2,132.00	0.049	55 River Road	818/3	Del Sardo, Dorothy	4,987.00	0.114

REAL ESTATE PROJECT PLANNING MAP

PASSAIC LIMITED FLOODWAY

ACQUISITION PROJECT

HOFFMAN GROVE STUDY AREA

0 45 90 180
Feet

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
REAL ESTATE DIVISION
BALTIMORE, MARYLAND

PROJECT FILE: HG_plateR3.mxd
CREATED BY: RTS
DATE: 17 Dec 2004
SCALE: AS SHOWN

PLATE: **R-3**

ADDRESS	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES
26 River Road	818/3	Del Grosso, Marion c/o E. Lott	4,774.00	0.11
54 River Road	818/3	Saeburn, Jeffrey c/o Sally Saeburn	6,054.00	0.139
2 Brookside Road	818/3	Andersen, Beatrice A.	5,510.00	0.127
4 Brookside Road	818/3	Lorenzo, Jennifer	5,226.00	0.12
6 Brookside Road	818/3	Loughheed, S. Daniel & Janet	4,845.00	0.111
7 Brookside Road	818/3	Herbek, Mary	6,396.00	0.147
8 Brookside Road	818/3	Thornley, Robert	5,774.00	0.133
9 Brookside Road	818/3	Herbek, Robert	4,418.00	0.101
10 Brookside Road	818/3	Urban, Jeanne & Frank	6,300.00	0.145
11 Brookside Road	818/3	Bremer, Paul & Anne	4,980.00	0.114
12 Brookside Road	818/3	Lewin, William & Mary	5,484.00	0.126
13 Brookside Road	818/3	Hayes, Patrick & Ellen M.	4,970.00	0.114
14 Brookside Road	818/3	O'Leary, Helene	5,102.00	0.117
15 Brookside Road	818/3	Pace, Loretta	4,175.00	0.096
17 Brookside Road	818/3	Crowell, Thomas & Kathleen	8,608.00	0.198
18 Brookside Road	818/3	Brown, Philip Taylor	10,392.00	0.239
20 Brookside Road	818/3	Herbek, Richard & Regina	5,381.00	0.124
22 Brookside Road	818/3	Riley, William & Laurette	8,875.00	0.204
23 Brookside Road	818/3	Zilke, John & Zilke, James	6,363.00	0.146
24 Brookside Road	818/3	Ahmid, Zakaria	5,353.00	0.123

ADDRESS	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES
26 Brookside Road	818/3	Palumbo, Michael & Eileen P.	10,220.00	0.235
29 Brookside Road	818/3	Myer, Catherine	4,998.00	0.115
30 Brookside Road	818/3	Solari, Bernadette	10,272.00	0.236
31 Brookside Road	818/3	McGurr, Robert	5,986.00	0.137
1 North Road	818/3	Borger, William H. & Brandy L.	7,854.00	0.18
2 North Road	818/3	DeMario, Philip	5,825.00	0.134
4 North Road	818/3	Scalzitti, Sara	5,001.00	0.115
9 North Road	818/3	Moscoso, Carlos Jr.	4,134.00	0.095
4 Spring Road	818/3	Ossi, Ronald	5,710.00	0.13
6 Spring Road	818/3	Hartmann, Edward	5,973.00	0.14
8 Spring Road	818/3	Cook, Thomas	4,327.00	0.1
10 Spring Road	818/3	Dawson, Mark & Kristine	4,561.00	0.1
12 Spring Road	818/3	Gordon, George P.	5,161.00	0.12
15 Spring Road	818/3	Linton, Margaret	4,550.00	0.1
9 Main Road	818/3	Hoffman Grove Condominium Association	7,161.00	0.164
10 Main Road	818/3	Schlacter, Steven	9,848.00	0.226
14 Main Road	818/3	Lamonica, Heidi & Philip Jr.	5,752.00	0.132
15 Main Road	818/3	Dawson, Kristine & Mark	4,324.00	0.099
16 Main Road	818/3	Candela, Peter & Mary	6,997.00	0.161
17 Main Road	818/3	Fontanella, Martha & Parashac, Tom	3,246.00	0.075



REAL ESTATE PROJECT PLANNING MAP

PASSAIC LIMITED FLOODWAY

ACQUISITION PROJECT

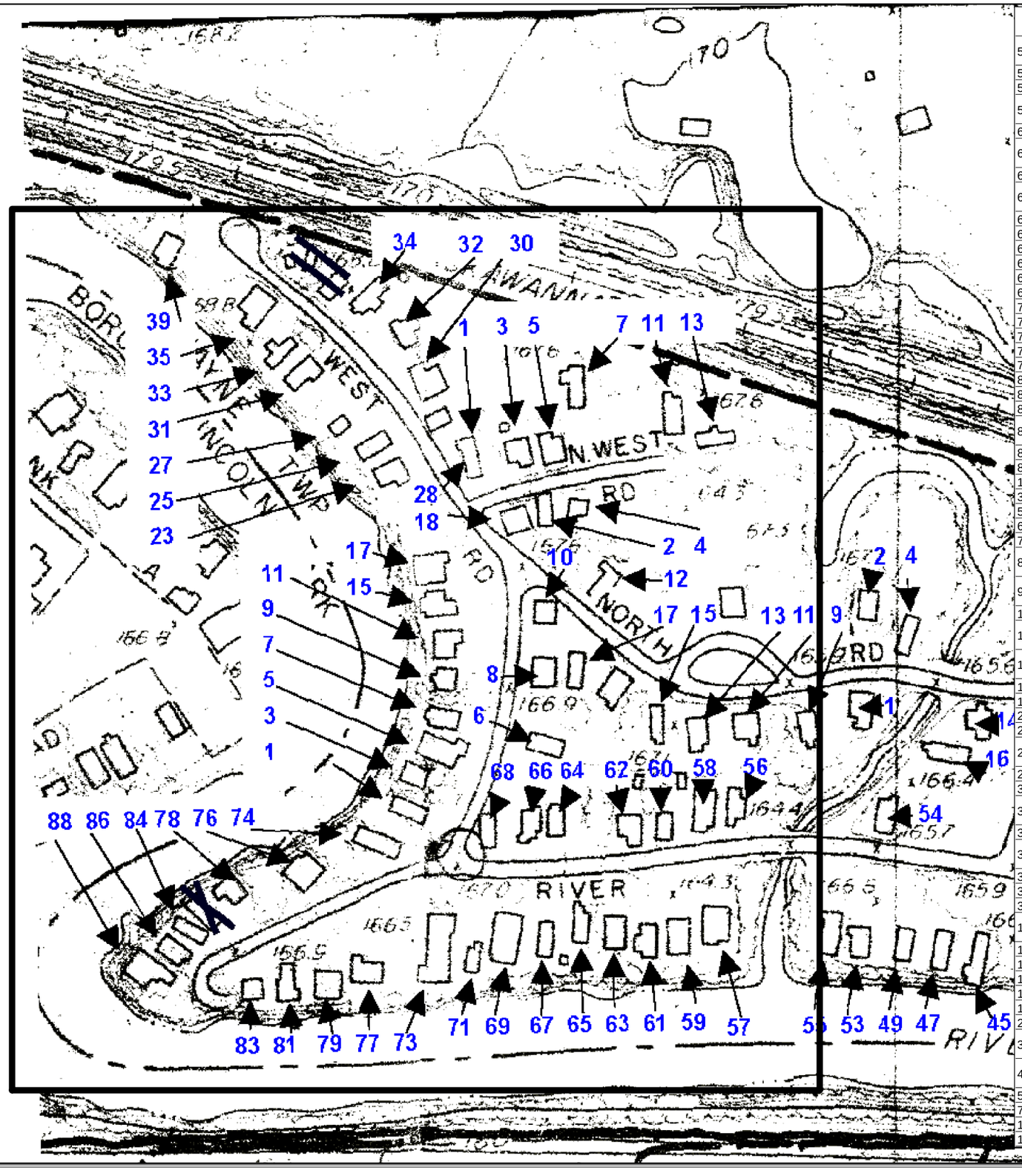
HOFFMAN GROVE STUDY AREA

0 50 100 200
Feet

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
REAL ESTATE DIVISION
BALTIMORE, MARYLAND

PROJECT FILE: HG_plateR4.mxd
CREATED BY: RTS
DATE: 6 Dec 2004
SCALE: AS SHOWN

PLATE: **R-4**



HOUSE NUMBER	LOT / BLK	PURPORTED OWNER	SQUARE FEET	ACRES
56 River Road	818/3	Camacho, Christopher & Precious	4,998.00	0.12
57 River Road	818/3	DeGraw, Robert	6,134.00	0.14
58 River Road	818/3	Anello, Salvatore	3,245.00	0.075
59 River Road	818/3	Comer, Jennifer & Comer, Stephen	4,417.00	0.101
60 River Road	818/3	Van Pamel, Laurie	3,409.00	0.078
61 River Road	818/3	Lewis, Michele & Lewis, Steven A.	4,295.00	0.099
62 River Road	818/3	Grover, Virginia	6,080.00	0.14
63 River Road	818/3	La Monica, Philip Jr. & Heidi R.	4,895.00	0.112
64 River Road	818/3	Varcadipane, Robert	5,068.00	0.116
65 River Road	818/3	Lewis, Donna	5,207.00	0.12
66 River Road	818/3	Altschuler, Scott	4,048.00	0.093
67 River Road	818/3	McGurr, Joseph	4,371.00	0.1
68 River Road	818/3	Rozakis, John	5,871.00	0.135
69 River Road	818/3	Donohue, Michael J.	11,150.00	0.256
72 River Road	818/3	Le Grand, Carol	4,376.00	0.1
73 River Road	818/3	Novelli, Lorraine	11,074.00	0.254
76 River Road	818/3	Fontanella, Martha	3,612.00	0.083
77 River Road	818/3	Hanley, Susan	4,663.00	0.107
79 River Road	818/3	Magill, Patricia	4,673.00	0.107
80 River Road	818/3	Hopper, John	3,654.00	0.084
81 River Road	818/3	Hopper, Andrew J.	2,814.00	0.065
83 River Road	818/3	Noble, Beth Ann	3,468.00	0.08
84 River Road	818/3	Crozier, Frank & Crozier, Betty	2,359.00	0.054
86 River Road	818/3	Realistic Properties LLC	2,080.00	0.048
88 River Road	818/3	Dacey, John & Claudia	4,478.00	0.103
1 West Road	818/3	McLellan, Charles	3,495.00	0.08
3 West Road	818/3	Grover, Virginia	4,146.00	0.095
5 West Road	818/3	Ludwig, Theresa	3,318.00	0.076
6 West Road	818/3	Lewis, Paul C. Jr.	4,951.00	0.114
7 West Road	818/3	Kahn, Marion	3,747.00	0.086
8 West Road	818/3	Porter, Raymond & Susan	4,207.00	0.097
9 West Road	818/3	McCabe, John M. & McCabe, Jack	4,248.00	0.098
10 West Road	818/3	Marino, Joseph	3,037.00	0.07
11 West Road	818/3	Walczak, Eleonora & Walczak, Isabella	4,495.00	0.103
15 West Road	818/3	Sullivan, Maureen & Kundracky, Michael	4,887.00	0.112
17 West Road	818/3	Frontin, Mildred	4,701.00	0.108
18 West Road	818/3	Dempsey, Florence E.	2,315.00	0.053
23 West Road	818/3	Levesen, Melissa	4,310.00	0.099
25 West Road	818/3	Haun, Donald	3,527.00	0.081
27 West Road	818/3	Ruehle, Richard & Mary F.	5,114.00	0.117
28 West Road	818/3	Williams, Robert	11,371.00	0.25
30 West Road	818/3	Cheon, Ronald & Raeann	8,802.00	0.202
31 West Road	818/3	Urban, Frank & Jeanne E.	5,324.00	0.122
32 West Road	818/3	D'Alessio, Robert	5,361.00	0.123
33 West Road	818/3	Voloshin, Walter & Margaret	3,877.00	0.089
34 West Road	818/3	Boris, Suzanne	6,564.00	0.151
35 West Road	818/3	Farmer, Mara	7,415.00	0.17
39 West Road	818/3	Philibin, Jack	8,939.00	0.205
11 North Road	818/3	Hoffman Grove Condominium Association	3,351.00	0.077
12 North Road	818/3	Tonelli, June	3,484.00	0.08
13 North Road	818/3	Linton, Margaret S.	4,654.00	0.107
15 North Road	818/3	Zupa, Janet L.	5,639.00	0.129
17 North Road	818/3	Stack, Joanne	3,975.00	0.091
1 Northwest Road	818/3	Comer, Margaret, M.	5,039.00	0.116
2 Northwest Road	818/3	Scura, Jeanne Marie	3,572.00	0.082
3 Northwest Road	818/3	Seiferheld, Dolores & Draznin, Andrea	6,027.00	0.138
4 Northwest Road	818/3	Seiferheld, Dolores & Draznin, Andrea	5,039.00	0.069
5 Northwest Road	818/3	Riley, Michael	3,572.00	0.109
7 Northwest Road	818/3	Riley, Dawn	6,027.00	0.242
11 Northwest Road	818/3	Byrnes, William Jr.	12,921.00	0.25
13 Northwest Road	818/3	Congdon, Stephen J.	9,341.00	0.214



REAL ESTATE PROJECT PLANNING MAP

PASSAIC LIMITED FLOODWAY

ACQUISITION PROJECT

HOFFMAN GROVE STUDY AREA

0 62.5 125 250
Feet

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
REAL ESTATE DIVISION
BALTIMORE, MARYLAND

PROJECT FILE: HG_plateR5.mxd
CREATED BY: RTS
DATE: 6 Dec 2004
SCALE: AS SHOWN

PLATE: **R-5**

EXHIBITS B.1 & B.2

PROPERTY LIST
BOROUGH OF POMPTON LAKES, NEW JERSEY

Street No.	Block/Lot	Owner
Riveredge Drive		
1397	9520/2	Isdanvich, Thomas
1409	9520/4	Zaku, Kujtim
1457	9520/11	Bas, Tlyaz & Hanife
1465	9520/11.01	Yildirim, Unal & Dilber
1511	12200/136	Savona, Giuseppe & Carmela
1531	12200/129	Elmazi, Besnik & Muvedet
1561	12200/126	Monks, Adam Edwin
1577	12200/111	Mondo, Salvatore & Serafina
1583	12200/108	Novack, Frederick & Lily
1589	12200/105	Welch, Robert & Maryann

PROPERTY LIST
HOFFMAN GROVE, WAYNE TOWNSHIP, NEW JERSEY

Street No.	Block/Lot	Owner
River Road		
1	818/3	Wright, John & Bonnie D.
3	818/3	Kahn, Zamir
4	818/3	Heines, Robert
7	818/3	Jicha, Gerard & Karen
9	818/3	Slater, Louis
11	818/3	Roll, Robert & Linda
13	818/3	Palmeri, Peter M.
15	818/3	Hoffman Grove Condominium Association
17	818/3	Mende, Curt Jr.
19	818/3	Slater, Julie & Charles Sr.
21	818/3	La Monica, Salvatore
23	818/3	Mulvaney, Thomas & Anne
25	818/3	Mulvaney, Francis
26	818/3	Del Grosso, Marion c/o E. Lott
27	818/3	Giordano, Robert
31	818/3	Hayes, Lucille, B.
33	818/3	Karasch, Paul C.
35	818/3	Karasch, Paul C.
37	818/3	Moeller, Dennis
41	818/3	Wilson, Bonnie L.
45	818/3	Wines, Bruce
47	818/3	Lott, Ethel C.
49	818/3	Cunniff, Linda
53	818/3	McCabe, Robert J.
54	818/3	Saeburn, Jeffrey c/o Sally Saeburn
55	818/3	Del Sardo, Dorothy
56	818/3	Camacho, Christopher & Precious
57	818/3	DeGraw, Robert
58	818/3	Anello, Salvatore
59	818/3	Comer, Jennifer & Comer, Stephen
60	818/3	Van Pamel, Laurie
61	818/3	Lewis, Michele & Lewis, Steven A.
62	818/3	Grover, Virginia
63	818/3	La Monica, Philip Jr. & Heidi R.
64	818/3	Varcadipane, Robert
65	818/3	Lewis, Donna
66	818/3	Altschuler, Scott
67	818/3	McGurr, Joseph
68	818/3	Rozakis, John
69	818/3	Donohue, Michael J.
72	818/3	Le Grand, Carol

73	818/3	Novelli, Lorraine
76	818/3	Fontanella, Martha
77	818/3	Hanley, Susan
79	818/3	Magill, Patricia
80	818/3	Hopper, John
81	818/3	Hopper, Andrew J.
83	818/3	Noble, Beth Ann
84	818/3	Crozier, Frank & Crozier, Betty
86	818/3	Realistic Properties LLC
88	818/3	Dacey, John & Claudia

Brookside Road

2	818/3	Andersen, Beatrice A.
4	818/3	Lorenzo, Jennifer
6	818/3	Loughheed, S. Daniel & Janet
7	818/3	Herbek, Mary
8	818/3	Thornley, Robert
9	818/3	Herbek, Robert
10	818/3	Urban, Jeanne & Frank
11	818/3	Bremer, Paul & Anne
12	818/3	Lewin, William & Mary
13	818/3	Hayes, Patrick & Ellen M.
14	818/3	O'Leary, Helene
15	818/3	Pace, Loretta
17	818/3	Crowell, Thomas & Kathleen
18	818/3	Brown, Philip Taylor
20	818/3	Herbek, Richard & Regina
22	818/3	Riley, William & Laurette
23	818/3	Zilke, John & Zilke, James
24	818/3	Ahmid, Zakaria
26	818/3	Palumbo, Michael & Eileen P.
29	818/3	Myer, Catherine
30	818/3	Solari, Bernadette
31	818/3	McGurr, Robert

West Road

1	818/3	McLellan, Charles
3	818/3	Grover, Virginia
5	818/3	Ludwig, Theresa
6	818/3	Lewis, Paul C. Jr.
7	818/3	Kahn, Marion
8	818/3	Porter, Raymond & Susan
9	818/3	McCabe, John M. & McCabe, Jack
10	818/3	Marino, Joseph
11	818/3	Walczak, Eleonora & Walczak, Isabella
15	818/3	Sullivan, Maureen & Kundracky, Michael
17	818/3	Frontin, Mildred
18	818/3	Dempsey, Florence E.
23	818/3	Levesen, Melissa
25	818/3	Haun, Donald
27	818/3	Ruehle, Richard & Mary F.
28	818/3	Williams, Robert

30	818/3	Cheon, Ronald & Raeann
31	818/3	Urban, Frank & Jeanne E.
32	818/3	D'Alessio, Robert
33	818/3	Voloshin, Walter & Margaret
34	818/3	Boris, Suzanne
35	818/3	Farmer, Mara
39	818/3	Philibin, Jack

North Road

1	818/3	Borger, William H. & Brandy L.
2	818/3	DeMario, Philip
4	818/3	Scalzitti, Sara
9	818/3	Moscoso, Carlos Jr.
11	818/3	Hoffman Grove Condominium Association
12	818/3	Tonelli, June
13	818/3	Linton, Margaret S.
15	818/3	Zupa, Janet L.
17	818/3	Stack, Joanne

Northwest Road

1	818/3	Comer, Margaret, M.
2	818/3	Scura, Jeanne Marie
3	818/3	Seiferheld, Dolores & Draznin, Andrea
4	818/3	Seiferheld, Dolores & Draznin, Andrea
5	818/3	Riley, Michael
7	818/3	Riley, Dawn
11	818/3	Byrnes, William Jr.
13	818/3	Congdon, Stephen J.

Spring Road

4	818/3	Ossi, Ronald
6	818/3	Hartmann, Edward
8	818/3	Cook, Thomas
10	818/3	Dawson, Mark & Kristine
12	818/3	Gordon, George P.
15	818/3	Linton, Margaret

Main Road

9	818/3	Hoffman Grove Condominium Association
10	818/3	Schlacter, Steven
14	818/3	Lamonica, Heidi & Philip Jr.
15	818/3	Dawson, Kristine & Mark
16	818/3	Candela, Peter & Mary
17	818/3	Fontanella, Martha & Parashac, Tom

The complete tax identification number for all the listed properties also includes a Qualifying Number which will be obtained from the Assessor's Office prior to acquisition.

EXHIBIT C

Feasibility Study Cost Estimate-MCACES Format
Real Estate Acquisition Requirements
Passaic River Basin Flood Management (Buyout) Study
Borough of Pompton Lakes & Township of Wayne, Morris County, New Jersey

	Private			Commercial			Public			Requirement		
	#	$ each	req	#	$ each	req	#	$ each	req	Base	Contingency	Total
0102------- ACQUISITIONS												
010201--- By Government												
010202--- By Non-Federal Sponsor (NFS)												
010203--- By Government on Behalf of NFS												
01020301 Title Evidence	30	600	18,000	0	0	0	0	0	0	18,000	3,600	21,600
01020302 Closing Costs	30	900	27,000							27,000	5,400	32,400
01020303 Plats and Legal Descriptions	30	600	18,000							18,000	3,600	21,600
01020304 Negotiations	30	1,000	30,000							30,000	6,000	36,000
01020305 Coordination/PDT Meetings	8	1,000	8,000							8,000	1,600	9,600
010204--- Review of NFS												
SUBTOTAL										101,000	20,200	121,200
0103------- CONDEMNATIONS												
010301--- By Government												
010302--- By Non-Federal Sponsor (NFS)												
010303--- By Government on Behalf of NFS	0	0	0	0	0	0 0	0	0	0			
010304--- Review of NFS										0	0	0
SUBTOTAL										0	0	0
0105------- APPRAISALS												
010501--- By Government												
010502--- By Non-Federal Sponsor (NFS)												
010503--- By Government on Behalf of NFS	30	800	24,000	0	0	0	0	0	0	24,000	4,800	28,800
010504--- Review of NFS										0	0	0
SUBTOTAL										24,000	4,800	28,800
0106------- PL 91-646 ASSISTANCE												
010601--- By Government												
010602--- By Non-Federal Sponsor (NFS)												
010603--- By Government on Behalf of NFS	10	1,000	10,000	0	0	0	0	0	0	10,000	2,000	12,000
010604--- Review of NFS												
SUBTOTAL										10,000	2,000	12,000
0107------- TEMPORARY PERMITS/LICENSES/RIGHTS-OF-WAY												
010701--- By Government	0									0	0	0
010702--- By Non-Federal Sponsor (NFS)	0									0	0	0
010703--- By Government on Behalf of NFS										0	0	0
010704--- Review of NFS										0	0	0
010705--- Other										0	0	0
010706--- Damage Claims										0	0	0
SUBTOTAL										0	0	0
						0						
0115------- REAL ESTATE PAYMENTS												
011501--- Land Payments												
01150101 By Government										0	0	0
01150102 By Non-Federal Sponsor (NFS)										0	0	0
01150103 By Government on Behalf of NFS	30	Job	6,753,000							6,753,000	1,350,600	8,103,600
01150104 Review of NFS										0	0	0
011502--- PL 91-646 Assistance Payments										0	0	0
01150201 By Government										0	0	0
01150202 By Non-Federal Sponsor (NFS)										0	0	0
01150203 By Government on Behalf of NFS	10	8,750	87,500				0			87,500	17,500	105,000
01150204 Review of NFS										0	0	0
011503--- Damage Payments										0	0	0
01150301 By Government										0	0	0
01150302 By Non-Federal Sponsor (NFS)										0	0	0
01150303 By Government on Behalf of NFS	0			0			0			0	0	0
01150304 Review of NFS										0	0	0
SUBTOTAL										6,840,500	1,368,100	8,208,600
Account 01 Real Estate Total										6,975,500	1,395,100	8,370,600
Account 02 Facility/Utility Relocations (Construction cost only)							0				0	0
REAL ESTATE ACQUISITION TOTAL										**$6,975,500**	**$1,395,100**	**$8,370,600**

EXHIBIT D

ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY

PASSAIC RIVER BASIN FLOOD MANAGEMENT (FLOODWAY BUYOUT) STUDY
BOROUGH OF POMPTON LAKES AND TOWNSHIP OF WAYNE
PASSAIC COUNTY, NEW JERSEY

1. Legal Authority

a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes?

Yes.

b. Does the sponsor have the power of eminent domain for this project?

Yes.

c. Does the sponsor have "quick-take" authority for this project?

Yes.

d. Are there any lands/interests in land required for the project located outside the sponsor's political boundary?

No.

e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn?

No.

2. Human Resource Requirements:

a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended?

Yes. The Sponsor's in-house staff has worked primarily with projects involving beach real estate issues, not flood control issues.

b. If the answer to 2a is yes, has a reasonable plan been developed to provide such training?

No. Training on flood control property issues is not scheduled. Due to the sponsor's lack of experienced personnel on flood control issues in particular, the sponsor has indicated it will request the Corps to acquire the real estate required for the project.

c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project?

No. The sponsor has worked primarily with projects involving beach real estate issues

d. Is the sponsor's projected in-house staffing level sufficient considering its other workload, if any, and the project schedule?

N/A.

e. Can the sponsor obtain contractor support, if required, in a timely fashion?

N/A.

f. Will the sponsor likely request USACE assistance in acquiring real estate?

Yes. The sponsor has indicated it will request the U. S. Army Corps of Engineers to acquire the real estate required for the project. Upon execution of the PCA, it is anticipated that the sponsor will enter into a Memorandum of Agreement with the New York District requesting the Government to provide real estate acquisition services for the project.

3. Other Project Variables:

a. Will the sponsor's staff be located within reasonable proximity to the project site?

Yes.

b. Has the sponsor approved the project/real estate schedule/milestones?

Yes.

4. Overall Assessment:

a. Has the sponsor performed satisfactorily on other USACE projects?

N/A. The sponsor has not worked on acquiring real estate for flood control projects.

b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable?

N/A. The Corps will acquire the real estate for this project.

5. Coordination

a. Has this assessment been coordinated with the sponsor?

Yes.

b. Does the sponsor concur with this assessment?

Yes.

Prepared by:

Mary Daly
Realty Specialist

Reviewed and approved by:

Nina P. Kelley
Chief, Civil Projects Support Branch
Real Estate Division

Concurrence by:

John Moyle, P.E., Manager
Bureau of Dam Safety and Flood Control
New Jersey Department of Environmental Protection

Appendix B

MCACES Cost Estimate

Passaic River Buyout
Central Passaic River Basin
Demolition of 30 Wood Framed
Residential Structures

Designed By: USA COE NYD
Estimated By: P. Harimohan

Prepared By: Checked by: John Chew

Preparation Date: 01/31/05
Effective Date of Pricing: 11/23/04

Sales Tax: 0.00%

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This estimate develops the cost of demolishing, debris removal, and disposal of 30 residential structures including foundations and walls, upto 4 feet below grade, including fuel and septic tanks, asphaltic driveways, and fences,

A review of 55 residential structures led to the determination of the number number houses with 1-story or 2-stories, whether they have basements, and if the basements are located above or below grade. The structures are located in the Central Passaic River Basin. The estimate includes filling incidental excavations and compaction and finish grading to match existing topography and seeding for nurturing erosion retarding vegetation. The price level of this estimate is November 2004 with the application of prevailing Davis Bacon wage rates for Passaic County, NJ and current equipment usage costs. The entire work has been assumed to be performed by a single general contractor.

An overall 20% contingency rate has been applied to the estimate to account for the possible cost of the abatement and disposal of asbestos and other HAZMAT associated with the buildings' superstructures and underground fuel and/or septic tanks.

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** PROJECT OWNER SUMMARY - Feature (Rounded to 100's) **

	QUANTY	UOM	CONTRACT	CONTINGN	TOTAL COST	UNIT
01 Lands and Damages						
01_25 Real Estate Plan			6,975,500	1,395,100	8,370,600	
TOTAL Lands and Damages			6,975,500	1,395,100	8,370,600	
15 Houses Demolition for Floodway						
15_00 Demolition of 30 houses	30.00	EA	875,300	175,100	1,050,300	35011
TOTAL Houses Demolition for Floodway	30.00	EA	875,300	175,100	1,050,300	35011
30 Planning, Engineering and Design						
30_30 Plans & Specs			265,000	26,500	291,500	
30_35 Project Management			109,100	10,900	120,000	
TOTAL Planning, Engineering and Design			374,100	37,400	411,500	
31 Construction Management			95,000	19,000	114,000	
TOTAL Passaic River Buyout	30.00	EA	8,319,900	1,626,600	9,946,400	331548

** PROJECT INDIRECT SUMMARY - Feature (Rounded to 100's) **

	QUANTY	UOM	DIRECT	FIELD OH	HOME OFC	PROFIT	BOND	TOTAL COST	UNIT
01 Lands and Damages									
01_25 Real Estate Plan			6,975,500	0	0	0	0	6,975,500	
TOTAL Lands and Damages			6,975,500	0	0	0	0	6,975,500	
15 Houses Demolition for Floodway									
15_00 Demolition of 30 houses	30.00	EA	694,500	55,600	30,000	78,000	17,200	875,300	29176
TOTAL Houses Demolition for Floodway	30.00	EA	694,500	55,600	30,000	78,000	17,200	875,300	29176
30 Planning, Engineering and Design									
30_30 Plans & Specs			265,000	0	0	0	0	265,000	
30_35 Project Management			109,100	0	0	0	0	109,100	
TOTAL Planning, Engineering and Design			374,100	0	0	0	0	374,100	
31 Construction Management			95,000	0	0	0	0	95,000	
TOTAL Passaic River Buyout	30.00	EA	8,139,100	55,600	30,000	78,000	17,200	8,319,900	277329
Contingency	19.55	%						1,626,600	
TOTAL INCL OWNER COSTS								9,946,400	

01_25. Real Estate Plan	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
01. Lands and Damages											
TOTAL Real Estate Plan					0	0	0	0	6975500	6,975,500	
TOTAL Lands and Damages					0	0	0	0	6975500	6,975,500	

15_00. Demolition of 30 houses	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
15. Houses Demolition for Floodway											
15_00. Demolition of 30 houses											
15_00.01. Demolition of 30 Houses											
15_00.01.10. 30 Wood Houses Demolition											
USR AA < > Wood Frame Building Demolition					0.00	0.00	0.00	0.00	8000.00	8000.00	
2-story house	7.00	EA	NA	0.00	0	0	0	0	56,000	56,000	8000.00
Assumed footprint 20FT X 50FT and 8 FT story height.											
Refer Means' 04 02220 110 1220 Lump sum bare cost = $6,400 Applying ENR CCI from Dec 03 to Nov 04 gives 12.28% cost increase + increase due to location from Mean's 04 NJ CCI max weighted average 11% Use lump sum bare cost = $6,400 X 1.1228 X 1.11 = $ 8000/EA											
L USR AA <02049 1220 > Remove concrete slab, plain					24.00	1090.90	497.69	0.00	0.00	1588.59	
Assuming 6" slab 20Ft X 50Ft Volume = 1000SF X 1/2FT X 1/27 = 19CYD or 2 slabs per day	30.00	EA	CLADD	0.25	240	10,909	4,977	0	0	47,658	1588.59
Mean'04 02220 240 5000 Plain (45cy/day) 02220 240 5500 add 200% for small quantities											
<*Mod* > For small quantities					480	21,818	9,954				
L MIL AA <02046 1800 > Site dml, bituminous driveways					40.00	2012.84	684.18	0.00	0.00	2697.02	
Assumed 8 hrs per driveway	30.00	EA	CLADB38	0.13	1,200	60,385	20,526	0	0	80,911	2697.02
L RSM AA <02046 0700 > Site dml, chain link, remove					6.00	292.44	25.96	0.00	0.00	318.40	
only	30.00	EA	CODLB6	0.50	180	8,773	779	0	0	9,552	318.40
Assume 2hours per fence per property											
L USR AA <02074 2100 > Foot/fdn dml, walls, remove					48.00	2339.52	163.54	0.00	0.00	2503.06	
Assumed 2 work days = 16 hours per house of Crew ZA-1B is required to demolish basement walls and foundations upto 4 Ft below grade.	30.00	EA	ZA-1B	0.06	1,309	63,805	4,460	0	0	75,092	2503.06
Crew ZA-1B consists of a											

15_00. Demolition of 30 houses	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
wheeled FE loader equipped with a grapple bucket and concrete cracking jaws, equipment operators and construction laborers.											
<*Mod* > Avg Reinforcing					131	6,381	446				
USR AA < > Remove/Dispose Fuel & Septic					0.05	2.23	0.00	0.00	6000.00	6002.23	
Per Yannuzzi Inc quote on 3 Nov 04 Budget $3000 per fuel or septic tank. TM Roy Messaros telecon with township indicates 22 houses in Hoffman Grove have both fuel and septic tanks while 8 in River Edge Drive in Pompton Lakes have municipal sewerage and appear to be gas heated and so have no fuel tank	22.00	EA	ALABCLAB1	18.75	1	49	0	0	132,000	132,049	6002.23
Cost of removal and disposal of the 2 tanks per house = 2 X $3000 = $6000 per house of the 22 counted from Hoffman Grove											
USR AA < > Permitting inspection costs					0.05	2.23	0.00	0.00	600.00	602.23	
Quote from Yannuzzi Inc approximates $600 EA shown under "OTHER"	30.00	EA	ALABCLAB1	18.75	2	67	0	0	18,000	18,067	602.23
USR AA < > Utility disconnection costs					0.05	2.23	0.00	0.00	1500.00	1502.23	
Yannuzzi quote $1500/EA	30.00	EA	ALABCLAB1	18.75	2	67	0	0	45,000	45,067	1502.23
USR AA < > Dump Fee for 7 two story houses					0.00	0.00	0.00	0.00	2700.00	2700.00	
includes concrete slab, and foundation.	7.00	EA		0.00	0	0	0	0	18,900	18,900	2700.00
Quote by demo GC Yanuzzi Inc recommended 30CY containers due to site accessability & 15% of house external volume, as volume of all debris including slab on grade, bituminous driveway, and foundations upto 4 feet below grade. Assume story height 8 Ft and footprint 20Ft X 50Ft											
Volume of 2 story house debris = 0.15 X 2 X 8 X 20 X 50/27 = 88CYD											
3 X 30 CYD containers required											

15_00. Demolition of 30 houses	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
First 2 containers would cost about $700EA = $1400 due to light debris and 3rd would cost $1300 EA due to heavier debris So total bare cost $2700/EA											
MIL AA <02226 4100 > fine grade, 3 passes w/grader					1.00	52.19	15.09	0.00	0.00	67.28	
Assume 60'x100' lot x 30 structures	200.00	CSY	COFGB11L	2.00	200	10,439	3,017	0	0	13,456	67.28
B MIL AA <02239 0012 > Spread & compact, 8" lift, roadway embankment, 300 HP tractor					0.01	0.56	0.46	10.00	0.00	11.02	
	1958.00	CY	CODTB10C	150.00	20	1,090	902	19,580	0	21,572	11.02
Specs require excavation of structure upto 4 Ft below grade which is the frost line level.											
Pictorial survey and statistical analysis shows 3 houses with basement half way below grade.											
Volume of imported fill to bring 3 half basements to surrounding grade level = 1.15 (fill factor) X 20Ft X 50 Ft X 4Ft/27 = 170CY											
Volume of fill to replace perimeter walls and footings demolition and removal for 30 houses = approximately 2Ft wide X say 5 Ft deep = 1.15 (fill factor) X 2Ft X 5Ft X 140 Ft (perimeter) X 1/27 X 30 houses = 1788CYD Total volume = 1788 + 170CYD = 1958 CYD											
perimeter of 140Ft (2 X 20 + 2 X 50) for 30 houses giving perimeter excavation volume for 30 houses = 30 X 140 X 3.5 X 4 X 1/27 = 2177 CYD to be filled. Also to be filled is half basement X 21 houses to surrounding grade level. This volume = 21 X 20Ft X 50Ft X approximately 4 FT depth = 20Ft X 50 Ft X 4 Ft X 1/27 X 21 = 3111 CYD Total volume = 2177 + 3111 = 5288 CYD											

15_00. Demolition of 30 houses	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
MIL AA <02932 0320 > Seeding, athletic field mix,					4.26	266.17	67.90	549.50	0.00	883.57	
mechanical seeding, 450#/acre	4.20	ACR	COELB66	0.24	18	1,118	285	2,308	0	3,711	883.57
Qty Calc: 100' x 60' x 30houses											
USR AA < > Wood Frame Building Demolition					0.00	0.00	0.00	0.00	5500.00	5500.00	
1-story house, wood, maximum	23.00	EA	NA	0.00	0	0	0	0	126,500	126,500	5500.00
Assumed footprint is 20Ft X 50FT and story height 8FT											
Refer Means' 04 02220 110 1020 Lump sum bare cost = $4,400 Applying ENR CCI from Dec 03 to Nov 04 gives 12.28% cost increase + increase due to location from Mean's 04 NJ CCI max weighted average 11% Use lump sum bare cost = $4,400 X 1.1228 X 1.11 = $ 5500/EA											
USR AA < > Dump Fee for 23 one story houses					0.00	0.00	0.00	0.00	2000.00	2000.00	
Demo GC Yannuzzi Inc recommends using 30CYD containers due to the house sites' accessability Per GC quote approximate volume of debris per house including slab on grade, bituminous driveway, fondations upto 4 Ft below grade = 15% of its external volume Assume story height 8 Ft and footprint 20 Ft X 50FT so volume of debris = (0.15 X 1 X 8 X 20 X 50)/27 = 44 CYD 2 30CYD containers are required. First container costs cost $700 to dump due to light debris and another costs $1300 to dump due toheavier debris So total dump fee for one story house debris = $2000 per 1 story house	23.00	EA		0.00	0	0	0	0	46,000	46,000	2000.00
TOTAL 30 Wood Houses Demolition	30.00	EA			3,782	184,900	45,346	21,888	442,400	694,534	23151
TOTAL Demolition of 30 Houses	30.00	EA			3,782	184,900	45,346	21,888	442,400	694,534	23151

15_00. Demolition of 30 houses	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
TOTAL Demolition of 30 houses	30.00	EA			3,782	184,900	45,346	21,888	442,400	694,534	23151
TOTAL Houses Demolition for Floodway	30.00	EA			3,782	184,900	45,346	21,888	442,400	694,534	23151

30_30. Plans & Specs	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
30. Planning, Engineering and Design											
TOTAL Plans & Specs					0	0	0	0	265,000	265,000	

30_35. Project Management	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
TOTAL Project Management					0	0	0	0	109,100	109,100	
TOTAL Planning, Engineering and Design					0	0	0	0	374,100	374,100	

31. Construction Management

	QUANTY	UOM	CREW ID	OUTPUT	MANHRS	LABOR	EQUIPMNT	MATERIAL	OTHER	TOTAL COST	UNIT
31. Construction Management Value is calculated using 17-2.1Log(DCC) Where DCC is $876,000 or 10.82%											
TOTAL Construction Management					0	0	0	0	95,000	95,000	
TOTAL Passaic River Buyout	30.00	EA			3,782	184,900	45,346	21,888	7887000	8,139,134	271304

SRC	LABOR ID	DESCRIPTION	BASE	OVERTM	TXS/INS	FRNG	TRVL	RATE	UOM	UPDATE	**** TOTAL **** DEFAULT	HOURS
MIL	B-EQOPRLT	Equip. Operators, Light	33.50	0.0%	30.0%	19.00	0.00	62.55	HR	11/04/04	33.66	318
MIL	B-EQOPRMED	Equip. Operators, Medium	33.50	0.0%	30.0%	19.00	0.00	62.55	HR	11/04/04	35.24	473
MIL	B-LABORER	Laborers	22.95	0.0%	30.0%	12.00	0.00	41.84	HR	11/04/04	27.04	1551
MIL	X-EQOPRMED	Outside Equip. Operators, Medium	33.50	0.0%	30.0%	19.00	0.00	62.55	HR	11/04/04	35.24	480
MIL	X-LABORER	Outside Laborers	22.95	0.0%	30.0%	12.00	0.00	41.84	HR	11/04/04	27.04	960

** EQUIPMENT BACKUP **

SRC	ID.NO.	EQUIPMENT DESCRIPTION	DEPR	FCCM	FUEL	FOG	TR WR	TR REP	EQ REP	TOTAL RATE	** TOTAL ** HOURS
GEN	A15Z0150	AIR COMPRESSOR, 375CFM, 100 PSI	2.92	0.80	3.86	1.33	0.15	0.03	3.42	12.50 HR	120
GEN	A20Z0400	PAVING BREAKER, 66LB (30KG)	0.27	0.03					0.58	0.87 HR	240
GEN	A20Z0475	AIR HOSE,1.0"X 100'L (25MMX 31M)	0.11	0.01					0.21	0.33 HR	240
GEN	G15Z3080	GRADER, MOTOR, 135 HP (101KW)	9.72	3.59	3.60	1.49	0.47	0.08	11.23	30.17 HR	100
GEN	H10Z3120	HYD HAMMER, 1000FT-LBS (1356N-M)	2.67	0.41		1.00			4.06	8.13 HR	240
GEN	H25Z3680	BUCKET, PAVEMENT-REMOVAL, 36"	1.44	0.22					1.75	3.40 HR	240
GEN	H25Z3690	BUCKET, ROTATING GRAPPLE, 2.0CY	6.53	0.99		1.00			7.94	16.46 HR	480
GEN	H25Z3706	CONC CRACKING JAWS, 36.0"OPENING	11.86	1.65		0.75			16.98	31.24 HR	480
GEN	L15Z4040	SPREADER, DRY CHEMICAL 85CF	1.40	0.14			0.03	0.00	1.41	2.98 HR	18
GEN	L35Z4270	LOADER, F/E, CRWLR, 3.75CY	30.82	6.06	6.50	2.99			63.14	109.51 HR	120
EP	L40ME019	LDR,FE, WH, 66"BKT, SKID-STEER	2.71	0.51	2.28	1.18	0.38	0.07	3.10	10.22 HR	480
GEN	L40Z4410	LOADER, F/E, WHEEL, 4.00CY	19.49	5.43	6.24	3.23	3.76	0.65	22.21	61.01 HR	240
GEN	L50Z4640	LOADER/BCK-HOE,WH, 0.80CY(0.6M3)	3.78	1.06	1.70	0.67	0.72	0.12	4.93	12.98 HR	318
GEN	R50Z5760	ROLLER, VIB, SD, SP 3.0T	4.45	0.88	0.95	0.37	0.07	0.01	6.68	13.42 HR	13
GEN	T15Z6520	DOZER, CRAWLER, 181-250HP	15.57	6.50	7.43	2.56			23.63	55.69 HR	13

Appendix C

Air Quality Analysis

DRAFT GENERAL CONFORMITY - RECORD OF NON-APPLICABILITY

Project/Action Name: Passaic Floodway Buy-Out

Project/Action Identification Number: N/A

Project/Action Point of Contact: Kimberly Rightler, Project Biologist, (212) 264-9846

Estimated Begin Date: TBD

Estimated End Date: TBD

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project/action because:

_X_ Total direct and indirect emission of from this project/action have been estimated that Ozone (NOx & VOC's) 1.07 tons, and Carbon monoxide (CO) .54 tons, are below the conformity threshold value established at 40 CFR 93.153(b) of 25 tons per year and 100 tons respectively.

AND

The project/action is not considered regionally significant under 40 CFR 93.153(i).

Supporting documentation and emissions estimates are

(X) ATTACHED

( ) APPEAR IN THE NEPA DOCUMENTATION (*PROVIDE REFERENCE*)

( ) OTHER _____.

SIGNED

(*Frank Santomauro, Chief, Planning Division*)

Equipment ID	Category	Emissions (tons)		
		VOC	CO	NOx
A15Z0150	Air Compressor	.01	.03	.16
G15Z3080	Grader, Motor 135 HP (101KW) 12'(3.6M) Blade width, SP, A	.01	.03	.08
L35Z4270	Loader, F/E, CRWLR, 3.75 CY	.02	.09	.13
L40ME019	LDR, FE,WH, 66"BKT, Skid-Steer	.03	.12	.18
L40Z4410	Loader, F/E, Wheel, 4.00CY	.04	.18	.27
L50Z4640	Loader/Bck-Hoe, WH, 0.80CY (0.6 F/E Bkt, 9.8;(3.0) Depth	.01	.07	.10
R50Z5760	Roller, Vib, SD, SP 3.0T (2.7 MT), 47" (1.2M) W	0	.00	.00
T15Z6520	Dozer, Crawler, 181-250HP	0	.01	.02
Total		.12	.54	.95

Equipment ID	Description	Avg. Engine Horsepower	Usage Hours	# of Pieces	Total Hrs
A15Z0150	Air Compressor	115	120	1	120
G15Z3080	Grader, Motor 135 HP (101KW) 12'(3.6M) Blade width, SP, A	135	100	1	100
L35Z4270	Loader, F/E, CRWLR, 3.75 CY	210	120	1	120
L40ME019	LDR, FE,WH, 66"BKT, Skid-Steer	74	480	1	480
L40Z4410	Loader, F/E, Wheel, 4.00CY	220	240	1	240
L50Z4640	Loader/Bck-Hoe, WH, 0.80CY (0.6 F/E Bkt, 9.8;(3.0) Depth	60	318	1	318
R50Z5760	Roller, Vib, SD, SP 3.0T (2.7 MT), 47" (1.2M)W	24	13	1	13
T15Z6520	Dozer, Crawler, 181-250HP	240	13	1	13

Equipment ID	Description	Load Factor	Exhaust Emission Factor (G/HP-HR)			Reference
			VOC	CO	NOx	
A15Z0150	Air Compressor	75.0%	1.13	3.03	14.06	NEVES, November 1991
G15Z3080	Grader, Motor 135 HP (101KW) 12'(3.6M) Blade width, SP, A	57.5%	1.54	3.80	9.60	NEVES, November 1991
L35Z4270	Loader, F/E, CRWLR, 3.75 CY	46.5%	1.40	6.80	10.10	NEVES, November 1991
L40ME019	LDR, FE,WH, 66"BKT, Skid-Steer	46.5%	1.40	6.80	10.10	NEVES, November 1991
L40Z4410	Loader, F/E, Wheel, 4.00CY	46.5%	1.40	6.80	10.10	NEVES, November 1991
L50Z4640	Loader/Bck-Hoe, WH, 0.80CY (0.6 F/E Bkt, 9.8;(3.0) Depth	46.5%	1.40	6.80	10.10	NEVES, November 1991
R50Z5760	Roller, Vib, SD, SP 3.0T (2.7 MT), 47" (1.2M)W	57.5%	.80	3.10	9.30	NEVES, November 1991
T15Z6520	Dozer, Crawler, 181-250HP	57.5%	1.26	4.20	10.30	NEVES, November 1991

Appendix D

Pertinent Agency Correspondence

State of New Jersey
Department of Environmental Protection
Natural and Historic Resources
Office of Engineering & Construction

Richard J. Codey
Acting Governor

Bradley M. Campbell
Commissioner

FEB 23 2005

Mr. Paul Tumminello, P.E.
U.S. Army Corps of Engineers, New York District
Jacob J. Javits Federal Building
New York, NY 10278-0090

Re: Passaic River Floodway Buyout Study

Dear Mr. Tumminello:

Thank you for the opportunity to review the draft Passaic River Floodway Buyout Study, Limited Update Report and Environmental Assessment. We concur with the findings and recommendations contained in this draft report and have funds available to support this project.

The State of New Jersey has also conditionally approved a grant to the Township of Wayne to purchase and demolish additional flood damaged floodway homes along the Passaic and Pompton Rivers which will further reduce future flood losses.

We look forward to working with the Corps of Engineers and Wayne Township to implement these worthwhile projects.

The Department of Environmental Protection fully supports the Corps of Engineers Passaic River Floodway Buyout Project and is willing to enter into a Project Cooperative Agreement (PCA) and meet all the requirements of the non-federal sponsor to implement this project.

Should you have further questions please contact Clark D. Gilman, P.E. at (609) 292-2296.

Sincerely,

John H. Moyle, P.E.
Manager
Bureau of Dam Safety and Flood Control

V:/NHRG/FM/Passaic River Floodway Buyout Study

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Mailing Address: 501 East State Street, P.O. Box 419, Trenton, NJ 08625

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township of wayne

475 Valley Road
Wayne, New Jersey 07470-3586
Internet: www.WayneTownship.com
(973) 694-1800
FAX: (973) 694-8136

Scott T. Rumana
Mayor

August 5, 2005

Mr. Paul Tumminello
Project Manager
NY District Corps of Engineers
26 Federal Plaza
New York, New York 10278-0090

Re: Passaic River Floodway Buyout

Dear Mr. Tumminello: PAUL

I am writing to endorse the U.S. Army Corps of Engineers proposed voluntary buyout of twenty homes in the Hoffman Grove section of Wayne Township. As you are undoubtedly aware, Hoffman Grove is one of the areas with the Township that historically suffers the most damage during any type of flooding incident. Over the years, the cost of responding to a flood, in both terms of human suffering and loss of personal property, has been exorbitant and the removal of any houses within the State defined floodway can only be seen as a positive step for the Township of Wayne, the State of New Jersey and the Federal Government. As a point of clarification, please confirm that the NJDEP will be responsible for funding the non-federal portion of the buyout program.

We look forward with great anticipation to the commencement of this long awaited flood buyout program.

Please feel free to contact my office if you should have any questions.

Sincerely,

Scott

SCOTT T. RUMANA
Mayor

STR/bt
c. Congressman William J. Pascrell
Neal Bellet, BA
George Holzapfel
Sandy Galacio
Township Council

PASSAIC RIVER COALITION

246 MADISONVILLE ROAD, BASKING RIDGE, NJ 07920 (908) 766-7550

August 3, 2005

Mr. Paul Tumminello
Project Manager
U..S. Army Corps of Engineers, New York District
26 Federal Plaza
New York, New York 10278

Dear Mr. Tumminello:

Re: Passaic River Basin, Flood Management (Floodway Buy-out) New Jersey

The Passaic River Coalition has for many years advocated the vacating of structures from the floodway of the Passaic River Basin, especially in those areas which are flooded more and more frequently. Your selection of houses in Pompton Lakes and the Hoffman Grove Section of Wayne meets these criteria extremely well.

We support the recommendation to move forward with the acquisition of the 30 houses, which your funding makes possible. We believe this project will exceed the projections in your report in benefits to the greater public good.

We acknowledge the statement made in the Syllabus of this report as being straightforward and mindful of the plight of the flood victims in the Passaic River Basin. You are to be commended for undertaking this environmentally, well thought out project.

Very truly yours,

Ella F. Filippone
Executive Director

EFF/e
c: Frelinghuysen
Pascrell

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278–0090

REPLY TO
ATTENTION OF

January 5, 2005

Environmental Assessment Section
Environmental Analysis Branch

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404

Dear Ms. Guzzo:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with a draft of the report entitled *Phase 1 Cultural Resources Investigation, Lower Passaic River Floodway Buyouts Project, Pompton and Ramapo Rivers, Wayne Township and Borough of Pompton Lakes, Passaic County, New Jersey* by Carissa (DeRooy) Scarpa (Enclosure). As part of this investigation, historical research and the collection of background material was conducted for the project areas of Hoffman Grove, Wayne Township and River Edge Drive, Pompton Lakes, New Jersey. The project consists of the removal of twenty houses in Hoffman Grove and ten houses along River Edge Drive as a floodway clearing effort. Because of the nature of the project, no subsurface testing was performed at this time.

Background research suggested that sensitivity for prehistoric cultural resources in undisturbed deposits in the Hoffman Grove project area is low. Research into the historical records revealed that Hoffman Grove once served as a remote vacation spot in the early twentieth century. The community eventually evolved from a grouping of vacation bungalows and camping grounds to year-round residences as people migrated in from New York City and began occupying their summer houses year-round. The bungalow style of the earlier period is prevalent throughout Hoffman Grove; however, all of the bungalows in the area have been altered over the last seventy to one hundred years. Most structures no longer possess the integrity of that style and because of this, the community, as a unit cannot purvey the appearance of a summer bungalow community. It is the opinion of the Corps that Hoffman Grove is not eligible for listing on the National Register of Historic Places (NRHP) as a historic district. However, it is recommended that, when the twenty houses are selected for demolition, a separate evaluation will be undertaken of selected individual houses that maintain some bungalow characteristics for their eligibility for the NRHP. Removal of houses is expected to consist of excavation of basements when present and removal of septic tanks. Any disturbances generated during demolition will only replicate the disturbance generated during house construction. Because of the low potential for buried prehistoric deposits and the low impact the project is expected to have, no further work beyond the evaluation of houses will be necessary.

The River Edge Drive project area has a low potential for prehistoric resources. There are no historic sites or properties within the APE and the houses proposed for demolition are not considered eligible for the NRHP either individually or as a district. Like in Hoffman Grove, any disturbances generated during demolition will only replicate the disturbance generated during house construction. Because of the area's low potential for prehistoric archaeological remains and the low impact the project is expected to have on undisturbed deposits, no additional work will be warranted there.

Please review the draft report and provide any comments in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended. If you or your staff require additional information or have any questions, please contact Carissa (DeRooy) Scarpa, Project Archaeologist at (212) 264-5736. Thank you for your assistance.

Sincerely,

L. Houston

Leonard Houston,
Chief, Environmental Analysis Branch

Enclosure

State of New Jersey

Richard J. Codey
Acting Governor

Department of Environmental Protection
Natural and Historic Resources, Historic Preservation Office
PO Box 404, Trenton, NJ 08625-0404
TEL: (609) 292-2023 FAX: (609) 984-0578
www.state.nj.us/dep/hpo

Bradley M. Campbe
Commissioner

March 29, 2005
HPO-[illegible]2005-289 PROD
05-0576

Leonard Houston
Chief, Environmental Analysis Branch
Department of the Army
Corps of Engineers New York District
Jacob K. Javits Federal Building
New York, NY 10278-0090

ATTN: Carissa DeRooy Scarpa

Dear Mr. Houston:

In accordance with 36 CFR Part 800: Protection of Historic Properties, as published with amendments in the Federal Register on 6 July 2004 (69 FR 40544-40555), I am providing Consultation Comments for the following proposed undertaking:

Passaic County, Wayne Township & Borough of Pompton Lakes
Lower Passaic River Floodway Buyouts Project
U. S. Army Corps of Engineers

800.4 Identifying Historic Properties

Thank you for submitting the January 2005 report *Phase I Cultural Resources Investigation, Lower Passaic River Floodway Buyouts Project, Pompton and Ramapo Rivers, Wayne Township and Borough of Pompton Lakes, Passaic County, New Jersey* by Carissa DeRooy Scarpa.

The early 20th century recreational bungalow communities, which frequently became full time homes as time passed, are an interesting phenomenon. The areas affected by the buyouts do not represent a well preserved or significant example of the type. I concur that none of the buildings in the project area are eligible for listing on the National Register.

Although the River Edge Drive and Hoffman Grove project areas are subject to periodic flooding, I believe that they possess reasonable potential to possess prehistoric sites eligible for

inclusion in the National Register of Historic Places in areas undisturbed by construction of housing and subsequent modern period use.

800.5 Assessing Effects

The project will have **no effect** on architectural properties. At this time the potential for impact to Native American archaeological properties cannot be determined.

Additional Comments

In order for SHPO to provide further Section 106 comment either: 1) the River Edge Drive and Hoffman Grove project areas should be tested archaeologically to determine presence/absence and eligibility of archaeological properties; or 2) the project should be designed to ensure that demolition of structures, utilities, paved surfaces, etc. will not result in new ground disturbance and that buyout areas will remain undisturbed in perpetuity.

Thank you for providing this opportunity for review and comment. The report has been accessioned into HPO's library under designation Passaic A 232. Please note in future submissions that HPO guidelines require either original photographs or submission of a CD with the photographic images included in the report.

Please contact Dan Saunders if you have any questions regarding historic districts, buildings, and structures (phone 609 633 2397 or dan.saunders@dep.state.nj.us) or Deborah Fimbel regarding archaeological sites (phone 609 984-6019 or deborah.fimbel@dep.state.nj.us).

Sincerely,

Dorothy P. Guzzo
Deputy State Historic
Preservation Officer

DPG:DS:DRF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278–0090

REPLY TO
ATTENTION OF

May 19, 2005

Environmental Assessment Section
Environmental Analysis Branch

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404

Dear Ms. Guzzo:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with the final copy of the report entitled *Phase 1 Cultural Resources Investigation, Passaic River Floodway Buyouts Project, Pompton and Ramapo Rivers, Wayne Township and Borough of Pompton Lakes, Passaic County, New Jersey* by Carissa (DeRooy) Scarpa and a CD containing digital photographic images (Enclosures). The report has been accessioned into your library under designation Passaic A 232. As part of this investigation, historical research and the collection of background material was conducted for the project areas of Hoffman Grove, Wayne Township and River Edge Drive, Pompton Lakes, New Jersey. The project consists of the removal of twenty houses in Hoffman Grove and ten houses along River Edge Drive as a floodway clearing effort. Because of the nature of the project, no subsurface testing was performed at this time.

In a letter dated March 29, 2005, your office provided comments on the findings of this cultural resources survey. In concurrence with your comments, the Corps has altered the recommendations in the following way:

1) It is believed that there exists a reasonable potential for prehistoric cultural resources to exist in undisturbed deposits in the Hoffman Grove and River Edge Drive project areas. Therefore, when the individual houses have been selected for demolition, a determination will be made at that time as to the extent of present ground disturbance and the amount of additional disturbance that will be generated during demolition. We will coordinate with your office at that time regarding archaeological testing that may be required or, if necessary, the monitoring of demolition activities by a qualified archaeologist.

2) The report finds that the houses that remain in Hoffman Grove do not represent a well preserved or significant example of the summer bungalow type and therefore are not eligible for listing on the NRHP. The Corps recommends that no additional evaluation of these houses will be necessary prior to demolition.

Please review the final report and provide any additional comments in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended. The Corps will continue to update and coordinate with your office as the project plans are developed. We appreciated receiving the Section 106 comments that you provided on the draft report. If you or your staff require additional information or have any questions, please contact Carissa (DeRooy) Scarpa, Project Archaeologist at (917) 790-8612. Thank you for your assistance.

Sincerely,

Enclosures

Leonard Houston,
Chief, Environmental Analysis Branch

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278–0090

REPLY TO
ATTENTION OF

May 19, 2005

MAY 23 2005
HISTORIC PRESERVATION OFFICE

Environmental Assessment Section
Environmental Analysis Branch

05 05 76-205
HPO-F2005-16

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404
Trenton, New Jersey 08625-0404

Dear Ms. Guzzo:

The U.S. Army Corps of Engineers, New York District (Corps), is pleased to furnish you with the final copy of the report entitled *Phase 1 Cultural Resources Investigation, Passaic River Floodway Buyouts Project, Pompton and Ramapo Rivers, Wayne Township and Borough of Pompton Lakes, Passaic County, New Jersey* by Carissa (DeRooy) Scarpa and a CD containing digital photographic images (Enclosures). The report has been accessioned into your library under designation Passaic A 232. As part of this investigation, historical research and the collection of background material was conducted for the project areas of Hoffman Grove, Wayne Township and River Edge Drive, Pompton Lakes, New Jersey. The project consists of the removal of twenty houses in Hoffman Grove and ten houses along River Edge Drive as a floodway clearing effort. Because of the nature of the project, no subsurface testing was performed at this time.

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Sincerely,

Enclosures

Leonard Houston,
Chief, Environmental Analysis Branch

JUN 01 2005

Appendix E

Fish and Wildlife Coordination Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
http://njfieldoffice.fws.gov

In Reply Refer to:

FP-05/016

JUN 2 3 2005

Leonard Houston, Chief
Environmental Analysis Branch, CENAN-PL-E
New York District, U.S. Army Corps of Engineers
26 Federal Plaza
New York, New York 10278-0090

Dear Mr. Houston:

The U.S. Fish and Wildlife Service (Service) has reviewed project information for the U.S. Army Corps of Engineers, New York District's (Corps) Passaic River Floodway Buyout Study (U.S. Army Corps of Engineers, 2004) located in the Borough of Pompton Lakes and the Township of Wayne, Passaic County, New Jersey. The Service provides this final Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) (FWCA) Section 2(b) report pursuant to an Interagency Agreement dated November 3, 2004.

As described in various project materials and communications from Corps staff, the proposed study entails government purchase of residential properties and removing up to 30 homes located within the floodplains of the Ramapo River in the Borough of Pompton Lakes (Enclosure 1) and the Pompton River in the Township of Wayne (Enclosure 2) as a non-structural flood-control alternative. Upon removal of the residential structures, the properties would be restored to provide habitats for wildlife.

The Service conducted a site visit on January 27, 2005 and noted dominant vegetation and other general conditions of the study sites and surrounding area. The Service has coordinated this review with the New Jersey Department of Environmental Protection (NJDEP), Division of Engineering and Flood Control, Bureau of Dam Safety; the NJDEP Division of Fish and Wildlife (NJDFW); and the NJDFW Endangered and Nongame Species Program. Further, we have searched our Geographic Information System (GIS) database for known locations of federally listed species, wetlands, and other important habitat types within or near the study area. We also searched for State-listed species and State priority species in the area using available GIS database information.

A draft FWCA report was provided to the Corps and the NJDFW on April 5, 2005. The NJDFW provided the Service with a letter of concurrence dated April 11, 2005 (Enclosure 3). The Corps

provided the Service with comments on the draft by letter dated May 18, 2005 (Enclosure 4). This final FWCA report is revised accordingly.

AUTHORITY

The following comments are provided pursuant to Section 2(b) of the Fish and Wildlife Coordination Act. Comments are also provided under the authority of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) and the Migratory Bird Treaty Act of 1918 (40 Stat. 755, as amended; 16 U.S.C. 703-712), and are consistent with the intent of the Service's Mitigation Policy (Federal Register, Vol. 46, No. 15, Jan. 23, 1981).

NATURAL RESOURCES

Soils

Soils at both the Borough of Pompton Lakes and Wayne Township study sites are classified and mapped as Urban land-Riverhead complex (UrB) according to the Soil Conservation Service (SCS) (1975). The UrB soil units generally consist of areas with anthropogenically-altered soil, areas of Riverhead soils, and small inclusions of Otisville and Pompton soils. Urban land comprises 40 to 80 percent of each mapped area and Riverhead soils make up 20 to 60 percent. Riverhead soils consist of deep, well-drained, moderately coarse-textured soils.

Soil maps indicate that alluvial land (Ae) (comprised of somewhat-poorly-drained to poorly-drained soils on floodplains 3 to 8 feet above normal stream level) exists immediately upstream of the Wayne study site in an undeveloped area. Site conditions indicate the Wayne study site probably contains a significant amount of Ae soils. Preakness silt loam (Px) soils, which are deep, nearly level, poorly drained, loamy soils, abut the Pompton Lakes site. Site conditions indicate significant portions of the Pompton Lakes study site may be comprised of Px soils but are covered with fill.

Vegetative Cover Types

Observations made during the January 27, 2005 site visit, review of the above-mentioned SCS (1975) soil maps, and a review of the Service's GIS database indicate that the Wayne and Pompton Lakes study sites were originally part of a forested wetland floodplain. In fact, palustrine forested wetlands (PFO), as classified by Cowardin *et al.* (1979), still exist on and surround the Wayne study site. Areas immediately north, south, and along the opposite bank of the Ramapo River at the Pompton Lakes study site consist of PFO. The Wayne study site contains a shrub understory and many large, mature trees that form a significant forest canopy over the site. The Pompton Lakes study site also contains some mature trees, but the majority of the site is open to sunlight. Trees common to riparian corridors in suburban areas, such as red maple (*Acer rubrum*), silver maple (*A. pensylvanicum*), black locust (*Robinia pseudoacacia*), green ash (*Fraxinus pennsylvanica*), northern red oak (*Quercus rubra*), American sycamore (*Plantanus occidentalis*), and exotic Norway spruce (*Picea abies*), occur at both sites. Multiflora rose (*Rosa multiflora*), an exotic, invasive species, was also noted within both study sites. Multiflora rose and Japanese honeysuckle (*Lonicera japonica*), another invasive species, were

noted in a municipal park in the City of Lincoln Park, located directly across the Pompton River from the Wayne study site.

Federally Listed Species

The federally listed (endangered) Indiana bat (*Myotis sodalis*) is known to hibernate in Morris County within 11.3 miles of the Wayne study site and 11.5 miles of the Pompton Lakes study site. Indiana bats from this hibernaculum may summer or forage within the study sites, particularly at Wayne. During a site visit, a Service biologist identified potential roosting trees and foraging habitat for the Indiana bat at both study sites. The Service, therefore, recommends that trees 6 inches or greater in diameter at breast height (dbh) not be cleared between April 1 and September 30 if any tree-clearing activities are required for demolition purposes. If clearing trees in these areas cannot be avoided during this time period, further consultation pursuant to the ESA will be required to ensure protection of the Indiana bat.

Except for the above-mentioned species and an occasional transient bald eagle (*Haliaeetus leucocephalus*), no other federally listed or proposed endangered or threatened flora or fauna under Service jurisdiction are known to occur within the vicinity of the study areas. If any other federally listed species or their habitats are documented in the study area during project planning, the Corps must reinitiate consultation with the Service pursuant to Section 7 of the ESA. The Service then will make recommendations to avoid adverse effects through the informal Section 7 consultation process. Current information regarding federally listed species and candidate species occurring in New Jersey is enclosed (Enclosure 5).

State-listed Species

Wayne Study Site

Fowler's toad (*Bufo woodhousii fowleri*), a priority species for the NJDFW, occurs within the PFO cover type on and surrounding the Wayne study site. Other species on the State priority list occur in upland forest within 0.25 mile south of the Wayne study site. These priority species include spotted turtle (*Clemmys guttata*), carpenter frog (*Rana virgatipes*), fowler's toad, Baltimore oriole (*Icterus galbula*), eastern towhee (*Pipilo erythrophthalmus*), eastern wood-peewee (*Contopus virens*), gray catbird (*Dumetella carolinensis*), hairy woodpecker (*Picoides villosus*), red-eyed vireo (*Vireo olivaceus*), rose-breasted grosbeak (*Pheucticus ludovicianus*), scarlet tanager (*Piranga olivacea*), veery (*Catharus fuscescens*), and wood thrush (*Hylocichla mustelina*). Another stand of upland forest within 0.7 mile east of the Wayne study site contains the State priority species, eastern box turtle (*Tarrapene carolina carolina*).

Pompton Lakes Study Site

The areas of PFO that border the Pompton Lakes study site contain known occurrences of Fowler's toad. The State-listed (endangered) butterfly Appalachian grizzled skipper (*Pyrgus Wyandot*) historically occurred within 0.26 mile upstream of the study site in Pompton Lakes. The NJDFW Endangered and Nongame Species Program has indicated that no other State-listed

species or species of concern are known to occur within the vicinity of the study areas. A list of State-listed wildlife species is enclosed (Enclosure 6).

Other Fish and Wildlife Resources

Fish and wildlife species that may be found on both study sites are those tolerant of urban-suburban areas. Bird species likely include American robin (*Turdus migratorius*), European starling (*Sturnus vulgaris*), northern cardinal (*Cardinalis cardinalis*), black-capped chickadee (*Poecile atricapillus*), gray catbird (*Dumetella carolinensis*), American crow (*Corvus brachyrhyncos*), and tufted titmouse (*Baeolophus bicolor*). A pair of common mergansers (*Mergus merganser*) was observed flying along the Ramapo River in Pompton Lakes during the January 27 site visit. White-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), and gray squirrel (*Sciurus carolinensis*) are also likely to occur at the study sites. Smallmouth bass (*Micropterus dolomieu*), white sucker (*Catostomus commersoni*), redbreast sunfish (*Lepomis auritus*), and tessellated darter (*Etheostoma olmstedi*) are known to use the rivers along both study sites.

SERVICE COMMENTS AND RECOMMENDATIONS

The Service and NJDFW (Didun, pers. comm., 2005) support Corps efforts to remove impervious surface and to restore wildlife habitats within the Passaic River watershed as a non-structural alternative to reduce flooding. A buyout of the properties located within the flood-prone areas of concern and restoration of the floodplain to its pre-disturbance condition will undoubtedly improve habitats for wildlife and flood storage capacity while potentially offering recreational opportunities (*e.g.*, fishing and bird watching) for local residents.

The Corps has reviewed the following recommendations in the Service's draft FWCA Section 2(b) report and provided comments in the enclosed letter dated May 18, 2005, as noted above. In italics, below the Service's original recommendations, are the Corps comments on each recommendation and the Service's response to those comments, as appropriate.

General Recommendations for Site Restoration

1. Consult the scientific literature and use the best available information regarding planting elevation, depth, soil type, existing soil nutrients, and seasonal timing to ensure best results when revegetating sites. Include subsurface conditions such as soil and sediment geochemistry and physics, groundwater quantity and quality, and infauna when designing riparian, wetland, grassland, and stream bank restoration.

The Corps (letter of May 18, 2005) indicates that the authority through which this project is funded only allows for the purchase and removal of homes located on the floodway of the Passaic River and its tributaries. Additionally, the Corps states that its operating authority does not include provisions to conduct any aquatic ecosystem restoration measures or land use management within the buy-out areas. The land will be owned, managed, and maintained by the State of New Jersey, the non-federal sponsor, after the structures are removed. The Service maintains the above recommendation and advises the Corps to coordinate with the NJDEP to

ensure that best efforts are made to implement the recommendation to restore the floodway areas, including forested wetlands and open, grass fields, to natural conditions that will provide wildlife habitat and reduce flooding.

2. Maintain mature trees during demolition of the structures on site. The Service is available to help mark trees that should be retained. Shade produced by mature trees along the stream is critical to maintaining summer water temperature regimes and dissolved oxygen favorable to fisheries. In addition, the vertical structure and canopy provided by mature trees is a critical component of habitat for migratory birds, providing food, cover, and nesting structure. If any trees must be removed, preferential protection should be afforded to large, native, mast or fruit producing species.

The Corps indicates that only vegetation located within the immediate vicinity and blocking access to the structures to be removed will be cleared.

3. Implement timing restrictions on demolition activities and use best management practices (*e.g.*, hay bales, silt curtains) during demolition and habitat restoration work to avoid adverse impacts to terrestrial and aquatic species at proposed sites. The State's requirements regarding sediment management and erosion control for the project are supported by the Service.

The Corps concurs.

4. Incorporate site remediation for contamination. The Service has reviewed the Hazardous, Toxic, and Radiological Waste (HTRW) information for the Passaic River Buyout study. The Service has no objections or recommended modifications to the plans for identification, removal, and storage of contaminated sediment and debris found on buyout sites as currently stated in the HTRW. However, the Service would likely support any additional actions the State may require of the Corps or its contractors for identifying, removing, and storing contaminated sediment and debris.

The Corps indicates that if any HTRW is found, the NJDEP, as the non-federal sponsor, will be responsible for any required remediation as per the Project Cooperation Agreement between the Corps and NJDEP.

5. Remove impervious surfaces for restoration. Significant portions of the study sites are covered with impervious surface (*e.g.*, homes, roads, driveways, and bulkheads along the river bank at the Wayne study site). Removing impervious surfaces will improve floodwater storage capacity and infiltration, reduce surface water runoff, and provide a suitable substrate to establish desired vegetation on the lots. All artificial structures should be removed from the lots, including garages, storage units, fencing, docks, retaining walls, bulkheads, impervious walkways, and utility poles that do not service occupied dwellings. Once all homes have been demolished along a road, the road should be removed as well. Any trash or other human-generated debris on a lot purchased by the Corps should be removed as part of the demolition process.

The Corps indicates that demolition is currently limited to homes and associated structures on individual properties per coordination with NJDEP and will not include roads or other features still in use. The Service recommends the Corps coordinate with the non-federal sponsor and/or other stakeholders to help ensure that all impervious surfaces within the restoration area that are not currently in use or become abandoned should be removed.

6. Till and/or work soils to reduce compaction in conjunction with removal of impervious surfaces. Tilling will further improve the hydrology, flood storage capacity, and growth of desirable vegetation on the study sites. Moist soils, which likely comprised the majority of the soil horizon at both study sites before development, are most susceptible to compaction. In cases of very shallow soil compaction (*i.e.*, 5 inches below grade), a few cycles of freeze and thaw during winter may be sufficient to remove compaction. However, compaction that occurs deeper in the soil column requires excavating, tilling, or disking to be removed.

See discussion under General Recommendation No. 1 above.

7. Remove fill from the sites to reduce soil compaction and to return sites to more natural elevations and grades. Removal of fill would help restore the natural hydrology and promote re-establishment of wetlands on the sites.

See discussion under General Recommendation No. 1 above.

8. Evaluate basements and foundations for removal. The Service understands that the Corps intends to fill in basements and sub-grade foundations as part of the demolition process. The Service recommends removing foundation and basement walls and concrete slabs as part of the demolition to help restore natural hydrology and to further reduce impervious surface at the sites. If removing these structures is not economically feasible, we recommend perforating the structures to increase permeability and water percolation into the soil.

The Corps indicates that, per the NJDEP, basements and foundations will be demolished and removed to four feet below grade. The remaining foundation will be broken up, left in place, and filled to grade. Although the Service would prefer removal of all impervious material, we concur that breaking up the remaining materials would improve permeability and water percolation into the soil over present conditions.

9. Fill basement and sub-grade foundation sites just below pre-development elevation and grade. These depressions may then serve as isolated wetlands or vernal pools for wildlife species.

The Service maintains the recommendation to create depressions where appropriate. Based on the Corps' response to General Recommendation 8, creating these depressions is within the Corps' scope and authority. The Service recommends the Corps coordinate with the NJDFW to determine the most appropriate, if any, areas to create these depressions.

10. Eradicate or control exotic, invasive species, particularly multiflora rose and Japanese honeysuckle, to enhance wildlife habitats and improve stream bank stability and water storage capacity at the study sites. The January 27, 2005 site visit revealed that multiflora rose and Japanese honeysuckle occur within and near the study sites. Though not surveyed, other areas upstream and surrounding the study sites undoubtedly are infested with these and other undesirable species not identified due to prevailing winter conditions at the time of the January 27 site visit. Homeowners have planted many ornamental plants at both sites. Plant species marked for removal should include any ornamentals known to be invasive or undesirable to wildlife.

See discussion under General Recommendation No. 1 above.

11. Implement control measures in all phases of demolition and restoration to minimize reburial of undesirable plant species and the import / export of these undesirable species from project sites. Afterward, regular surveys should be conducted at each site to identify and remove any undesirable plants beginning to re-colonize. A variety of measures exist for removing undesirable species. For sites with few invasive plants, physical removal may be the least expensive method if the entire plant (including root system) can be extracted and if there is a sufficient number of personnel to carry out the task. In cases where undesirable species have gained a substantial foothold, a glyphoshate-based herbicide engineered for wetland sites, such as *Rodeo* or *Gly-Pro*, is appropriate. Either of the above techniques would be effective at the study sites.

See discussion under General Recommendation No. 1 above.

Specific Recommendations for Forested Wetland and Floodplain Restoration

1. Incorporate restoration of forested wetland and floodplain cover types into the project plan. Soil and vegetative surveys suggest that both the Pompton Lakes and Wayne study sites contained PFO cover types and provided habitats for forested floodplain species prior to development. Consequently, the Service recommends restoration to forested floodplains when lots have been cleared of artificial structures and soil compaction reduced. Floodplain restoration would connect similar habitat types near the study sites and reduce habitat fragmentation along the Pompton and Ramapo Rivers.

See discussion under General Recommendation No. 1 above.

2. Plant species used by Indiana bat and State priority-list species on the restoration sites to enhance habitats for these species. The federally listed Indiana bat as well as several State priority species that use forested floodplains may benefit from restoration of both sites to pre-development conditions. Indiana bats could roost in existing and future mature trees and forage along the nearby rivers and in the forest understory following restoration. As mentioned previously, numerous State priority herptile and avian species use areas near the study sites (*e.g.*, Fowler's toad, spotted turtle, eastern wood-peewee, rose-breasted grosbeak, and veery). Therefore, the Service recommends planting a variety of native tree and shrub species common to PFO and area floodplains. Such species should be shade-tolerant

(particularly for the Wayne study site) and tolerant of moist conditions. The Service encourages the Corps or its partners to plant tree species commonly used by Indiana bats, such as shagbark hickory (*Carya ovata*), northern red oak, white oak (*Quercus alba*), and post oak (*Q. stellata*) for the dry sites and bitternut hickory (*C. cordiformis*), silver maple, green ash, American elm (*Ulmus Americana*), and black locust for the moist sites. A typical planting density is about 300 trees and shrubs per acre if small, containerized plants are used.

See discussion under General Recommendation No. 1 above.

3. Re-establish the forest understory cover at both study sites to improve wildlife habitats. A healthy forest requires an understory to provide multiple canopy layers (thus increasing wildlife diversity), to provide replacement trees and shrubs as the forest matures and older trees die, and to reduce sunlight on the forest floor. Shading the forest floor decreases chances for certain invasive species to become established. Species common to a forest understory are typically shade-tolerant, such as sheep-laurel (*Kalmia angustifolia*), swamp azalea (*Rhododendron viscosum*), winterberry (*Ilex verticillata*), dogwood (*Cornus* spp.), willow (*Salix* spp.), alder (*Alnus* spp.), meadowsweet (*Spiraea* spp.), juneberry (*Amelanchier* spp.), and gooseberry (*Ribes* spp.).

See discussion under General Recommendation No. 1 above.

4. Incorporate grasslands into the restoration planning. If restoring the study sites or portions of the study sites to PFO or forested floodplain is not economically or otherwise feasible, the Service recommends seeding a mixture of native cool-season grasses and wildflowers for the restored sites. The Wayne study site in particular should also be seeded with grasses and wildflowers that are shade-tolerant. A mixture containing native wet meadow species may work best due to the wet conditions found on portions of the study sites.

See discussion under General Recommendation No. 1 above.

5. Employ bioengineering techniques and soft structures to stabilize and restore stream banks at the Wayne study site, as opposed to maintaining the hard structures currently installed along the river bank. Preferred techniques are described in Muhlenberg and Moore (1998). Bioengineering techniques include regrading banks, using erosion control fabrics and biologs, and planting native trees and shrubs along the banks.

The Corps indicates that the identification and removal of existing bulkheads is outside the current scope of the project. Additionally, the Corps indicates that removal of any bulkhead will be at the discretion of the NJDEP. The Service recommends that the Corps coordinate with NJDEP to ensure that the best efforts are made to stabilize and restore the natural stream banks at the Wayne study site and consideration is given to the feasibility of removing hard structures along the stream banks.

Recommendations for Long-term Management and Planning

1. Coordinate with the local municipalities, Passaic County, and the State to ensure achievement of common goals and to prevent any duplication of effort. The Service understands that the Township of Wayne has received funds from the State to perform its own buyout activities (Gillman, pers. comm., 2005).

The Corps indicates that coordination with the appropriate local municipalities and the State has been ongoing and will continue throughout the duration of the project.

2. Appoint a land-use manager to oversee the study sites after project completion. The Service understands that such an appointment has not been made (Gillman, pers. comm., 2005).

See discussion under General Recommendation No. 1 above.

3. Do not allow further development of these restored sites once purchased by the Corps. For instance, the Service noted a basketball court on land previously purchased by the State for flood control at the Pompton Lakes site. Such land use is counter-productive to restoring wildlife habitat, reducing impervious surface, and improving flood control. However, the Service has no objection to structures that involve little or no impervious surfaces and promote passive recreation or do not significantly degrade wildlife habitat (*e.g.*, educational signs, construction of boardwalks, or foot/bike paths delineated with wood chips).

See discussion under General Recommendation No. 1 above.

4. Develop and implement a long-term management and monitoring plan for the project. The plan should provide criteria to adequately evaluate the success of habitat restoration at the sites. The plan should also provide for any necessary corrective actions, as part of an adaptive management strategy, to be implemented in coordination between the Corps and project sponsors. Such contingencies may include re-grading, re-planting, or other actions to correct for post-restoration deficiencies, including deposition, erosion, failure of vegetation to establish, and / or invasion of undesirable species such as multiflora rose or Japanese honeysuckle.

See discussion under General Recommendation No. 1 above.

5. Include measures in the long-term management plan to reduce potential illegal dumping on the buyout sites. The Service noted a significant amount of trash at the Wayne study site. Measures that might be implemented with the local sponsor include restricting public access and emphasizing law enforcement efforts.

See discussion under General Recommendation No. 1 above.

Concluding Remarks

The Service supports the Corps' proposed floodplain restoration as an alternative to structural flood control measures. The Service understands that the scope and authority through which the Corps is pursuing this project only allows for the purchase and removal of homes located on the floodway of the Passaic River and its tributaries, and does not include provisions to implement measures for additional ecosystem restoration or land use management within the buy-out areas. The Service and the NJDFW have developed the recommendations listed above to assist the Corps in avoiding adverse impacts and maximizing potential benefits to fish and wildlife resources. The Service advises the Corps to coordinate with all non-federal sponsors and interested stakeholders to ensure that best efforts are made to implement the recommendations provided above to restore the floodway areas, including forested wetlands and open grass fields, to a natural state that would both provide wildlife habitat and reduce flooding.

To summarize, fish and wildlife will undoubtedly benefit at both the Pompton Lakes and Wayne study sites from retaining mature trees and restoring the floodplain to a forested wetland cover type. Note that any unavoidable removal of trees greater than 6 inches dbh between April 1 and September 30 will require further consultation pursuant to the ESA with the Service to ensure protection of the Indiana bat. To benefit native wildlife, the Service recommends that the Corps encourage the non-federal sponsor to remove exotic invasive plants and revegetate using native canopy and understory species that provide food and cover. For example, shagbark hickory, when mature, will provide potential roosting sites for the Indiana bat. If forested wetland restoration is not economically or otherwise feasible in a specific area, the Service concurs with the Corps' proposal to plant native grassland species as an alternative. Removal of impervious surfaces and fill material and tilling the soil to reduce soil compaction will enhance floodwater storage and to support revegetation. Fish and wildlife will benefit further from the use of bioengineering for any necessary erosion control and from follow-up monitoring and long-term management by the non-federal sponsor and/or other interested stakeholders to ensure stream bank stabilization and successful establishment of a native plant community.

The Service appreciates the opportunity to comment on the proposed plan and is pleased to submit this final FWCA Section 2(b) report as technical input into the Passaic River Buyout Study. Should you have any questions, please contact John Staples of my staff at (609) 646-9310, extension 12, or Darren Harris at extension 44.

Sincerely,

John C. Staples

for Clifford G. Day
Supervisor

Enclosures

REFERENCES

Literature Cited

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. Laroe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS 79/31. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 103 pp.

Muhlenberg and Moore. 1998. Streambank Revegetation and Protection, *a guide for Alaska*. Alaska Department of Fish and Game. Technical Letter No. 98-3. 57 pp.

Soil Conservation Service. 1975. United States Department of Agriculture, Soil Conservation Service, *in cooperation with* New Jersey Agricultural Experiment Station and Cook College, Rutgers University. National Cooperative Soil Survey. 69 pp. + ill.

U.S. Army Corps of Engineers. 2004. Passaic River Basin Flood Management (Floodway Buy-out) New Jersey. Fact Sheet. U.S. Army Corps of Engineers, New York District. New York, New York.

Personal Communications

Didun, A. 2005. Biologist. New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Office of Environmental Review. Trenton, New Jersey.

Gillman, C. 2005. Chief Engineer. New Jersey Department of Environmental Protection, Division of Engineering and Flood Control, Bureau of Dam Safety. Trenton, New Jersey.

Borough of Pompton Lakes Study Site



0 0.125 0.25 0.5 0.75 1 Miles

Enclosure 2

Wayne Township Study Site



Enclosure 3

State of New Jersey

Department of Environmental Protection

I. Codey
overnor

Bradley M. Campbell
Commissioner

Division of Fish and Wildlife
P.O. Box 400
Trenton, NJ 08625-0400
Martin J. McHugh, Director

April 11, 2005

Clifford G. Day, Administrator
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Bldg. D
Pleasantville, NJ 08232

Dear Mr. Day:

This serves to inform you that the NJ Division of Fish and Wildlife [DFW] concurs with the *Draft Fish and Wildlife 2 (b) Coordination Act Report* for the U.S. Army Corps of Engineers, New York District's, proposed *Passaic River Floodway Buy-out Study*, Borough of Pompton Lakes and Township of Wayne, Passaic County, New Jersey. This document constitutes the USFWS' draft report regarding effects on fish and wildlife that can be expected to result from the Army Corps of Engineers [ACOE] proposed plan.

Sincerely,

Martin J. McHugh, Director
NJ Division of Fish and Wildlife

c. A. Didun, OER

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF
Environmental Analysis Branch

May 18, 2005

Mr. John Staples
Field Supervisor
U.S. Fish and Wildlife Service
New Jersey Field Office
927 N. Main St.
Building D
Pleasantville, NJ 08232

Dear Mr. Staples:

This letter serves as a response to your 5 April 2005 Fish and Wildlife Coordination Act Report (FWCAR). We would like to make two important clarifications regarding the buy-out process and project scope. First, we are cost sharing the purchase of the properties with the non-federal sponsor, New Jersey Department of Environmental Protection (NJDEP). Once the structures are removed, the land will be owned, managed and maintained by the State of New Jersey. Second, the authority through which this project is funded only allows for the purchase and removal of homes located from the floodway of the Passaic River and tributaries. The authority does not include provisions to conduct any aquatic ecosystem restoration measures or land use management within the buy-out areas.

To that extent, as a general response to your recommendations for site restoration, we cannot conduct any studies or activities related to aquatic ecosystem restoration, invasive species control or land use management subsequent of house demolition. Following structure removal, the area will be brought to existing grade and seeded with a mix of native grass species. The following are specific responses to your recommendations:

1) Indiana Bat: As construction activities will be restricted to the immediate area of the structures, driveways and storage tanks that are identified to be removed, only vegetation that may impede access to the structure and associated infrastructure will be removed. Although we do not believe Indiana bat habitat will be adversely impacted as a result of project implementation, we will assess site conditions as the homes to be demolished are identified and will coordinate with your staff as necessary.

2) General Recommendation 2, *Maintain mature trees during demolition of structures:* As stated above, only vegetation located within the immediate vicinity of the structures to be removed will be cleared should it block access to the structures.

3) General Recommendation 3, *Implement timing restrictions and use best management practices*: Concur.

4) General Recommendation 4, *Incorporate site remediation for contamination*: Currently no Hazardous, Toxic, and Radioactive Waste (HTRW) is known to exist within the study area. If HTRW is found, then the NJDEP, as the non-federal sponsor will be responsible for any required remediation as per the Project Cooperation Agreement between the Corps and NJDEP.

5) General Recommendation 5, *Remove impervious surfaces*: As per our coordination with NJDEP, demolition is currently limited to homes and associated structures on individual properties and will not include roads or other features.

6) General Recommendation 8, *Evaluate basements and foundations for removal*: As per the NJDEP basements and foundations will be demolished and removed to four feet below grade. The remaining foundation will be broken up, left in place and filled to grade.

7) Recommendations for Long-Term Management and Planning 1, *Coordination with local municipalities, Passaic County and the State.* Coordination with the appropriate local municipalities and the State has been ongoing and will continue throughout the duration of the project.

8) Specific Recommendation 5, *Employ bioengineering techniques and soft structures to stabilize and restore stream banks.* The identification and removal of existing bulkheads is currently outside the purview of the project scope and may have to be dealt with on a case by case basis. We will take our direction from the NJDEP, the non-Federal sponsor.

We look forward to continued coordination your office on this project. Should any questions arise, or additional information is needed, please contact Ms. Kimberly Rightler at (917) 790-8722.

Sincerely,

L. Houston

Leonard Houston,
Chief, Environmental Analysis Branch

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN NEW JERSEY

An ENDANGERED species is any species that is in danger of extinction throughout all or a significant portion of its range.

A THREATENED species is any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

	COMMON NAME	SCIENTIFIC NAME	STATUS
FISHES	Shortnose sturgeon*	*Acipenser brevirostrum*	E
REPTILES	Bog turtle	*Clemmys muhlenbergii*	T
	Atlantic Ridley turtle*	*Lepidochelys kempii*	E
	Green turtle*	*Chelonia mydas*	T
	Hawksbill turtle*	*Eretmochelys imbricata*	E
	Leatherback turtle*	*Dermochelys coriacea*	E
	Loggerhead turtle*	*Caretta caretta*	T
BIRDS	Bald eagle	*Haliaeetus leucocephalus*	T
	Piping plover	*Charadrius melodus*	T
	Roseate tern	*Sterna dougallii dougallii*	E
MAMMALS	Eastern cougar	*Felis concolor couguar*	E+
	Indiana bat	*Myotis sodalis*	E
	Gray wolf	*Canis lupus*	E+
	Delmarva fox squirrel	*Sciurus niger cinereus*	E+
	Blue whale*	*Balaenoptera musculus*	E
	Finback whale*	*Balaenoptera physalus*	E
	Humpback whale*	*Megaptera novaeangliae*	E
	Right whale*	*Balaena glacialis*	E
	Sei whale*	*Balaenoptera borealis*	E
	Sperm whale*	*Physeter macrocephalus*	E

	COMMON NAME	SCIENTIFIC NAME	STATUS
INVERTEBRATES	Dwarf wedgemussel	*Alasmidonta heterodon*	E
	Northeastern beach tiger beetle	*Cicindela dorsalis dorsalis*	T
	Mitchell's satyr butterfly	*Neonympha m. mitchellii*	E+
	American burying beetle	*Nicrophorus americanus*	E+
PLANTS	Small whorled pogonia	*Isotria medeoloides*	T
	Swamp pink	*Helonias bullata*	T
	Knieskern's beaked-rush	*Rhynchospora knieskernii*	T
	American chaffseed	*Schwalbea americana*	E
	Sensitive joint-vetch	*Aeschynomene virginica*	T
	Seabeach amaranth	*Amaranthus pumilus*	T

STATUS:			
E	endangered species	PE	proposed endangered
T	threatened species	PT	proposed threatened
+	presumed extirpated**		

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

** Current records indicate the species does not presently occur in New Jersey, although the species did occur in the State historically.

Note: for a complete listing of Endangered and Threatened Wildlife and Plants, refer to 50 CFR 17.11 and 17.12.

For further information, please contact:

U.S. Fish and Wildlife Service
New Jersey Field Office
927 N. Main Street, Building D
Pleasantville, New Jersey 08232
Phone: (609) 646-9310
Fax: (609) 646-0352

Revised 12/15/04

FEDERAL CANDIDATE SPECIES IN NEW JERSEY

CANDIDATE SPECIES are species that appear to warrant consideration for addition to the federal List of Endangered and Threatened Wildlife and Plants. Although these species receive no substantive or procedural protection under the Endangered Species Act, the U.S. Fish and Wildlife Service encourages federal agencies and other planners to give consideration to these species in the environmental planning process.

SPECIES	SCIENTIFIC NAME
Bog asphodel	*Narthecium americanum*
Hirsts' panic grass	*Dichanthelium hirstii*

Note: For complete listings of taxa under review as candidate species, refer to Federal Register Vol. 69, No. 86, May 4, 2004 (Endangered and Threatened Wildlife and Plants; Review of Species that are Candidates or Proposed for Listing as Endangered or Threatened).

Revised June 2004

FEDERAL CANDIDATE AND STATE-LISTED SPECIES

Candidate species are species under consideration by the U.S. Fish and Wildlife Service (Service) for possible inclusion on the List of Endangered and Threatened Wildlife and Plants. Although these species receive no substantive or procedural protection under the Endangered Species Act, the Service encourages federal agencies and other planners to consider federal candidate species in project planning.

The New Jersey Natural Heritage Program maintains the most up-to-date information on federal candidate species and State-listed species in New Jersey and may be contacted at the following address:

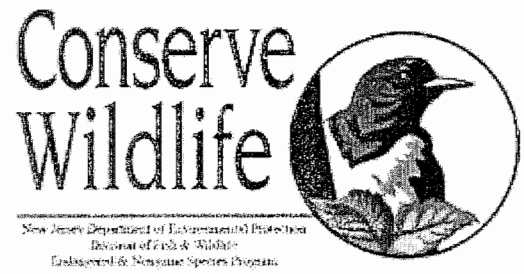
Coordinator
Natural Heritage Program
Division of Parks and Forestry
P.O. Box 404
Trenton, New Jersey 08625
(609) 984-0097

Additionally, information on New Jersey's State-listed wildlife species may be obtained from the following office:

Dr. Larry Niles
Endangered and Nongame Species Program
Division of Fish and Wildlife
P.O. Box 400
Trenton, New Jersey 08625
(609) 292-9400

If information from either of the aforementioned sources reveals the presence of any federal candidate species within a project area, the Service should be contacted to ensure that these species are not adversely affected by project activities.

Revised 07/03



New Jersey's Endangered and Threatened Wildlife

Endangered Species are those whose prospects for survival in New Jersey are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance or contamination. Assistance is needed to prevent future extinction in New Jersey.

Threatened Species are those who may become endangered if conditions surrounding them begin to or continue to deteriorate.

There are other classifications for wildlife as well, including Stable, Species of Special Concern Special Concern and Undertermined.

Species names in the below tables link to PDF documents containing identification, habitat and status and conservation information. Additionally, in 2003 twelve species were highlighted as part of the celebration of the 30th anniversary of the NJ Endangered Species Conservation Act. See the "2003 Species of the Month" page for more information.

BIRDS			
Endangered		**Threatened**	
Bittern, American	*Botaurus lentiginosos* BR	Bobolink	*Dolichonyx oryzivorus* BR
Eagle, bald	*Haliaeetus leucocephalus* BR **	Eagle, bald	*Haliaeetus leucocephalus* NB **
Falcon, peregrine	*Falco peregrinus*	Hawk, Cooper's	*Accipiter cooperii*
Goshawk, northern	*Accipiter gentilis* BR	Hawk, red-shouldered	*Buteo lineatus* NB
Grebe, pied-billed	*Podilymbus podiceps**	Night-heron, black-crowned	*Nycticorax nycticorax* BR
Harrier, northern	*Circus cyaneus* BR	Night-heron, yellow-crowned	*Nyctanassa violaceus*
Hawk, red-shouldered	*Buteo lineatus* BR	Knot, red	*Calidris canutus* BR
Owl, short-eared	*Asio flammeus* BR	Osprey	*Pandion haliaetus* BR
Plover, piping	*Charadrius melodus***	Owl, barred	*Strix varia*
Sandpiper, upland	*Batramia longicauda*	Owl, long-eared	*Asio otus*
Shrike, loggerhead	*Lanius ludovicianus*	Rail, black	*Laterallus jamaicensis*
Skimmer, black	*Rynchops niger* BR	Skimmer, black	*Rynchops niger* NB
Sparrow, Henslow's	*Ammodramus henslowii*	Sparrow, grasshopper	*Ammodramus savannarum* BR
Sparrow, vesper	*Pooecetes gramineus* BR	Sparrow, Savannah	*Passerculus sandwichensis* BR
Tern, least	*Sterna antillarum*	Sparrow, vesper	*Pooecetes gramineus* NB

Tern, roseate	*Sterna dougallii***	Woodpecker, red-headed	*Melanerpes erythrocephalus*
Wren, sedge	*Cistothorus platensis*		
**Federally endangered or threatened			
BR - Breeding population only; NB - non-breeding population only			

REPTILES			
Endangered		**Threatened**	
Rattlesnake, timber	*Crotalus h. horridus*	Snake, northern pine	*Pituophis m. melanoleucus*
Snake, corn	*Elaphe g. guttata*	Turtle, Atlantic green	*Chelonia mydas***
Snake, queen	*Regina septemvittata*	Turtle, wood	*Clemmys insculpta*
Turtle, bog	*Clemmys muhlenbergii***		
Atlantic hawksbill	*Eretmochelys imbricata***		
Atlantic leatherback	*Dermochelys coriacea***		
Atlantic loggerhead	*Caretta caretta***		
Atlantic Ridley	*Lepidochelys kempi***		
**Federally endangered or threatened			

AMPHIBIANS			
Endangered		**Threatened**	
Salamander, blue-spotted	*Ambystoma laterale*	Salamander, eastern mud	*Pseudotriton montanus*
Salamander, eastern tiger	*Ambystoma tigrinum*	Salamander, long-tailed	*Eurycea longicauda*
Treefrog, southern gray	*Hyla chrysocelis*	Treefrog, pine barrens	*Hyla andersonii*

INVERTEBRATES			
Endangered		**Threatened**	
Beetle, American burying	*Nicrophorus mericanus***	Elfin, frosted (butterfly)	*Callophrys irus*
Beetle, northeastern beach tiger	*Cincindela d. dorsalis***	Floater, triangle (mussel)	*Alasmidonta undulata*
Copper, bronze	*Lycaena hyllus*	Fritillary, silver-bordered (butterfly)	*Bolaria selene myrina*
Floater, brook (mussel)	*Alasmidonta varicosa*	Lampmussel, eastern (mussel)	*Lampsilis radiata*
Floater, green (mussel)	*Lasmigona subviridis*	Lampmussel, yellow (mussel)	*Lampsilis cariosa*
Satyr, Mitchell's (butterfly)	*Neonympha m. mitchellii***	Mucket, tidewater (mussel)	*Leptodea ochracea*
Skipper, arogos (butterfly)	*Atrytone arogos arogos*	Pondmussel, eastern (mussel)	*Ligumia nasuta*
Skipper, Appalachian grizzled (butterfly)	*Pyrgus wyandot*	White, checkered (butterfly)	*Pontia protodice*
Wedgemussel, dwarf	*Alasmidonta heterodon***		
**Federally endangered or threatened			

MAMMALS	
Endangered	
Bat, Indiana	*Myotis sodalis***
Bobcat	*Lynx rufus*
Whale, black right	*Balaena glacialis***
Whale, blue	*Balaenoptera musculus***
Whale, fin	*Balaenoptera physalus***
Whale, humpback	*Megaptera novaeangliae***
Whale, sei	*Balaenoptera borealis***
Whale,sperm	*Physeter macrocephalus***
Woodrat, Allegheny	*Neotoma floridana magister*
**Federally Endangered	

FISH	
Endangered	
Sturgeon, shortnose	*Acipenser brevirostrum***
**Federally Endangered	

List updated 3/11/04

The lists of New Jersey's endangered and nongame wildlife species are maintained by the DEP's Division of Fish and Wildlife's Endangered and Nongame Species Program. These lists are used to determine protection and management actions necessary to ensure the survival of the state's endangered and nongame wildlife.

This work is made possible through voluntary contributions received through Check-off donations to the Endangered Wildlife Conservation Fund on the New Jersey State Income Tax Form, the sale of Conserve Wildlife License Plates, and donations. For more information about the Endangered and Nongame Species Program or to report a sighting of endangered or threatened wildlife, contact the Endangered and Nongame Species, NJ Division of Fish and Wildlife, P.O. Box 400, Trenton, NJ 08625-0400, or call 609-292-9400.

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Department of Environmental Protection
P. O. Box 402
Trenton, NJ 08625-0402

Last Updated: November 8, 2004

Appendix F

Mailing List

Draft Notice of Availability

Release Letter

PASSAIC RIVER FLOOD MANAGEMENT (FLOODWAY BUY-OUT), NJ
MAILING LIST

NJDEP

Mr. John Moyle, Section Chief
New Jersey Department of Environmental Protection
Division of Engineering and Construction
Bureau of Dam Safety and Flood Control
501 E. State Street, P.O. Box 419
Trenton, NJ 08625

Wayne

Honorable Scott T. Rumana
Mayor, Wayne Township
475 Valley Road
Wayne, New Jersey 07470-3586

Mr. George Holzapfel, P.E.
Wayne Township
475 Valley Road
Wayne, New Jersey 07470-3586

Pompton Lakes

Honorable John L. Murrin
Mayor, Borough of Pompton Lakes
25 Lenox Avenue
Pompton Lakes, New Jersey 07442

Ed Merrill
Municipal Building
Borough of Pompton Lakes
25 Lenox Avenue
Pompton Lakes, New Jersey 07442

Other

Ella Fillipone
Passaic River Coalition

246 Madisonville Road
Basking Ridge, NJ07920
Congressional Representatives

Honorable Jon Corzine
502 Hart Senate Office Building
Washington, DC 20510

Honorable Jon Corzine
Attn: Ms. Mada Liebman
One Gateway Center, 11th Floor
Newark, NJ 07102

Honorable Bill Pascrell, Jr.
2464 Rayburn House Office Building
Washington, DC 20515-3008

Honorable Bill Pascrell, Jr.
Attn: Ms. Lisa Martinez, Field Director
200 Federal Plaza Suite 500
Paterson, New Jersey 07505

Honorable Frank Lautenberg
324 Hart Senate Office Builidng
Washington, DC 20510

Honorable Frank Lautenberg
Attn: Ms Lisa Plevin
One Gateway Center, 23rd Floor
Newark, NJ 07102

Honorable Rodney Frelinghuysen
Attn: Ms. Valerie Jewett
2442 Rayburn House Office Building
Washington, DC 20515

Send all Washington correspondence for Frelinghuysen to the local office, they will forward to DC office.

Honorable Rodney Frelinghuysen
Attn: Ms. Holly Kunzman
30 Schuyler Place, 2nd Floor
Morristown, NJ 07960

Grace Musumeci
Environmental Review Section
U.S. EPA, Region II
290 Broadway
New York, NY 10007-1866

Robert Hargrove,
US. EPA, Region II
Strategic Planning and Multimedia Programs Branch
290 Broadway
New York, NY 1007-1866

Attn: John Staples
U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street, Building D
Pleasantville, NJ 08232

Ms. Dorothy P. Guzzo
Deputy State Historic Preservation Officer
Historic Preservation Office
New Jersey Department of Environmental Protection
CN 404

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Notice of Availability of Draft Environmental Assessment

The U.S. Army Corps of Engineers, New York District (District) announces the availability of the *Draft Environmental Assessment for the Passaic River Floodway Buyout.*

The District is proposing to buy and remove 10 homes along River Edge Drive in Pompton Lakes and 20 homes in the Hoffman Grove area of Wayne Township. These homes are located within the State defined floodway and sustain damages during flood events. Subsequent to demolition and removal activities, the area will be reseeded with native herbaceous vegetation and will be allowed to revert back to a more natural floodplain environment. The proposed action is authorized in Section 1148 of the Water Resources Development Act of 1996 (WRDA 1996) and Section 327 of WRDA 2000.

For further project information contact: Paul Tuminello
Project Manager
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To request a copy of the Draft Environmental Assessment and submit written comments, contact:

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Your written comments to the Draft Environmental Assessment (DEA) are due 30 calendar days from the date of publication release and will be addressed in the Final EA for this project.

Date of publication release: Monday, July 11, 2005

Comments due by: Tuesday, August 09, 2005

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Programs and Project Management Division, Room 2127

The U.S. Army Corps of Engineers and our non-Federal sponsor, the New Jersey Department of Environmental Protection are pleased to announce the release of the draft report for the Passaic River Flood Management (Floodway-Buy-out), New Jersey project.

The report documents the analyses, findings, environmental assessment, costs, and recommendations for the acquisition of homes in the Passaic River Floodway in Hoffman Grove, Wayne, NJ and along the Ramapo River, Pompton Lakes, NJ. The report has been prepared under the authority of Section 1148 of the Water Resources Development Act (WRDA) of 1996 as amended in Section 327 of WRDA 2000 and subsequent Congressional appropriations of funds.

The enclosed public notice indicates the review period. The enclosed summary fact sheet provides a brief overview of the recommendations of the report. If you are interested in a full copy of the report, it is available on the U.S Army Corps of Engineers, New York District Web Page at:
http://www.nan.usace.army.mil/project/newjers/njflood.htm.

Upon completion of the public review, a final report will be issued, a project cooperation agreement executed with the New Jersey Department of Environmental Protection, and acquisition of homes initiated subject to available funding.

Questions relating to the project should be directed to the attention of Paul A. Tumminello, P.E., Project Manager at 917-790-8210 or via e mail to: paul.tumminello@usace.army.mil Written correspondence may be sent to the above address.