



PHILIP D. MURPHY  
Governor  
SHEILA Y. OLIVER  
Lt. Governor

State of New Jersey  
THE PINELANDS COMMISSION  
PO Box 359  
NEW LISBON, NJ 08064  
(609) 894-7300  
www.nj.gov/pinelands



SEAN W. EARLEN  
Chairman  
NANCY WITTENBERG  
Executive Director

General Information: Info@njpines.state.nj.us  
Application Specific Information: AppInfo@njpines.state.nj.us

## MEMORANDUM

To: CMP Policy & Implementation Committee

From: Susan R. Grogan   
Chief Planner

Date: July 18, 2018

Subject: July 27, 2018 Committee meeting

---

Enclosed please find the agenda for the Committee's upcoming meeting on July 27, 2018. We have also enclosed the following:

- The minutes from the Committee's May 18, 2018 meeting;
- A copy of the 2004 Memorandum of Agreement between the Commission and the South Jersey Transportation Authority (SJTA) related to short-term development projects at the Atlantic City International Airport. Please note that representatives of SJTA will be attending the Committee meeting to provide an update on development and mitigation activities pursuant to the MOA and discuss proposed amendments to the agreement;
- A draft resolution and report on the Egg Harbor Township ordinances listed on the agenda; and
- A memorandum providing background information on the Pinelands Infrastructure Trust Fund

/CS15  
cc: All Commissioners (agenda only)



State of New Jersey  
THE PINELANDS COMMISSION  
PO Box 359  
NEW LISBON, NJ 08064  
(609) 894-7300  
www.nj.gov/pinelands



PHILIP D. MURPHY  
Governor  
SHEILA Y. OLIVER  
Lt. Governor

General Information: [Info@pinelands.nj.gov](mailto:Info@pinelands.nj.gov)  
Application Specific Information: [AppInfo@pinelands.nj.gov](mailto:AppInfo@pinelands.nj.gov)

SEAN W. EARLEN  
Chairman  
NANCY WITTENBERG  
Executive Director

## **CMP POLICY & IMPLEMENTATION COMMITTEE MEETING**

Richard J. Sullivan Center  
Terrence D. Moore Room  
15 C Springfield Road  
New Lisbon, New Jersey

July 27, 2018

9:30 a.m.

### **Agenda**

1. Call to Order
2. Pledge Allegiance to the Flag
3. Adoption of minutes from the May 18, 2018 CMP Policy & Implementation Committee meeting
4. Discussion of the 2004 Memorandum of Agreement between the Pinelands Commission and the South Jersey Transportation Authority related to short-term development projects at the Atlantic City International Airport
5. Executive Director's Reports  
  
Egg Harbor Township Ordinances 12-2018 and 19-2018, amending Chapter 225 (Zoning) of the Township's Code by adopting requirements for the provision of affordable housing in the RG-4 and RG-5 (Residential) Districts, within the Pinelands Regional Growth Area
6. Briefing on the Pinelands Infrastructure Trust Fund
7. Public Comment

**CMP POLICY & IMPLEMENTATION COMMITTEE MEETING**

**Richard J. Sullivan Center  
Terrence D. Moore Room  
15 C Springfield Road  
New Lisbon, New Jersey  
May 18, 2018- 9:30 a.m.**

**MINUTES**

**MEMBERS IN ATTENDANCE:** Chairman Sean Earlen, Robert Barr, Paul E. Galletta (via telephone), Jordan Howell, and Richard Prickett

**MEMBERS ABSENT:** Candace Ashmun and Ed Lloyd

**OTHER COMMISSIONER PRESENT:** Mark Lohbauer (*as a non-member of this Committee, Commissioner Lohbauer did not vote on any matter*)

**STAFF PRESENT:** Executive Director Nancy Wittenberg, Susan R. Grogan, Brad Lanute, Gina Berg, Paul Leakan and Betsy Piner. Also present was Craig Ambrose, with the Governor's Authorities Unit.

**1. Call to Order**

Chairman Earlen called the meeting of the Comprehensive Management Plan (CMP) Policy and Implementation (P&I) Committee to order at 9:30 a.m.

**2. Pledge Allegiance to the Flag**

All present pledged allegiance to the Flag.

**3. Adoption of minutes from the April 27, 2018 CMP Policy & Implementation Committee Meeting**

Commissioner Prickett moved the adoption of the April 27, 2018 meeting minutes. Commissioner Howell seconded the motion. The minutes were adopted with all Committee members voting in the affirmative except for Commissioner Barr .who abstained.

**4. Executive Director's Reports**

**Mullica Township Ordinance 6-2018, amending Chapter 144 (Land Development) of the Township's Code by revising permitted uses, water quality standards and zoning boundaries applicable to the WV (Weekstown Village) District.**

Ms. Grogan said Mullica Township Ordinance 6-2018 adds a portion of one lot to the Pinelands Village of Weekstown and expands the permitted uses to include boat building repair and sales.

On the SmartBoard, Mr. Leakan displayed the maps included in the meeting packet (*Exhibits #1 and #2*) identifying the facility, the subject property, the portion of the lot to be rezoned and the extensive wetlands in the area.

Ms. Grogan said the subject lot, currently in the Preservation Area (PA) is the site of Viking Yachts, formerly Ocean Yachts, a boat building operation established in 1977, thus pre-dating the CMP. Ms. Grogan said it is unknown why an establishment of this magnitude was not included within the boundaries of Weekstown Village at the time Mullica came into conformance in 1984. She said boat building is a nonconforming use in the PA and the facility was allowed to continue operations as a pre-existing use with a limit of 50% expansion of floor area or capacity.

Ms. Grogan said, over the years, as the Commission has dealt with a number of approvals for the facility, it has become increasingly apparent that the Township should consider a rezoning to deal with the fact that the operation has reached the 50% expansion limit yet wishes to expand by adding more employees and additional cover over existing impervious surfaces. She said due to the heavy presence of wetlands, there is virtually no opportunity for Viking to expand outward and, as the portion of the lot to the north of the facility is vacant wetlands, only the portion of the lot containing the active facility will be rezoned. Through this rezoning, Viking would no longer be limited to the 50% expansion permitted for a pre-existing non-conforming use in the PA.

Ms. Grogan said the issue of split zoning normally would create a problem with septic dilution calculations as lands used for septic dilution purposes must be in the same zone in order to make sure water quality standards are met. The ordinance is written to allow Viking Yachts to use the entire lot, both that in portion now in the Pinelands Village as well as the remainder in the PA, in calculating septic dilution. She said this provision is so narrowly written it is unlikely that it will apply to any structure elsewhere in Weekstown. She said this is a classic example of municipal flexibility.

Ms. Grogan said three written comments were received, one of which was critical of adding the facility site to the Pinelands Village. She said if the parcel were vacant, staff would agree with this criticism and would not recommend the proposed rezoning.

Commissioner Lohbauer said the proposal seems clear and reasonable and asked for confirmation that the business would not be allowed to expand its septic field into wetlands.

Ms. Grogan confirmed that the septic field would not expand into wetlands; rather the vacant portion of the parcel would be used for calculations based on the septic dilution model.

In response to Commissioner Prickett's questions, Ms. Grogan said once the facility is located in the PV, if a proposal did not meet water quality standards, an alternate design septic system could be used to allow for an increase in the number of employees. She said the presence of wetlands will limit the expansion of parking areas or additional impervious surfaces, perhaps only to the area immediately adjacent to existing buildings. She said any expansion will require an

application to the Commission and, at that point, issues related to wetlands buffers, parking etc. will be evaluated.

Ms. Grogan said this rezoning has been a joint effort by the municipality, the new owners and Pinelands staff.

Commissioner Barr moved the recommendation to the Commission to certify Mullica Township Ordinance 6-2018. Commissioner Prickett seconded the motion and all voted in favor.

## **5. Update on the Long-Term Economic Monitoring Program: reexamination and recommendations**

Mr. Lanute delivered a PowerPoint presentation on the Long Term Economic Monitoring (LTEM) Program's Reexamination Process. *See Attachment A to these minutes and also posted on the Commission's web site at*

<http://www.nj.gov/pinelands/home/presentations/0518%20economic%20monitoring.pdf>.

He reviewed the origins of the program, noting that both it and the Long Term Environmental Monitoring Program have been funded by the National Park Service (NPS) since 1996. He said the program's goal is to continually evaluate the economic health of the Pinelands in an objective and reliable manner. Mr. Lanute said the core program collects data within four general areas of economic monitoring: population, real estate, the economy and municipal finance. He added that these four core topics inform the selection of periodic special studies. He said that the program reports on these findings in annual reports that are in the format of a statistical compendium containing tables, graphs and text regarding core economic indicators as well as an associated municipal and county fact book.

Mr. Lanute described some of the challenges that had come up over the course of the program. They included: the selection of the segments of the economy to monitor; the challenge of the Pinelands Area crossing many administrative boundaries; and data availability. He also explained the challenges of selecting geographies when performing comparative evaluations of Pinelands Area municipalities compared to other South Jersey municipalities as well as the State as a whole.

Mr. Lanute said that upon the recommendation of NPS, staff had undertaken a reexamination process of the program over the last year in order to develop strategies and recommendations for improving the program. This reexamination process included two facilitated meetings, including a Public Users meeting on August 9, 2017 followed by an Expert Panel meeting on October 27, 2017 (lists of meeting participants were included in the meeting packet). He described the second element of the reexamination process that included contracting with a team of Rutgers University's Bloustein School faculty to participate in the meetings as well as to issue a report. He said that the report was to offer a review of the core program's economic indicators and provide recommendations for additional indicators, their evaluation and reporting in addition to potential special studies. Mr. Lanute said the Rutgers report is still under review by staff but among some

recommendations for special studies are quality of life; community services (the cost of providing fire, police, emergency services; tourism and hospitality in the Pinelands; the cost of development in the Pinelands; and the feasibility of rail-based transit-oriented development.

Mr. Lanute said staff is interested in promoting an enhanced web presence, one that could be interactive with data accessibility/direct data downloads by users. He said the staff has been exploring options in consultation with the New Jersey Office of Information Technology (OIT). Mr. Lanute concluded the presentation by describing upcoming steps, including more detailed recommendations regarding new indicators, special studies, reporting format and an enhanced website. He said that staff still needed time to assess the list of indicators provided by meeting participants and the Rutgers team. Given the quantity of indicators recommended, staff will necessarily need to parse the list given data availability, program objectives and staff resources.

*At 10:10 a.m., Commissioner Galletta disconnected from the conference call.*

Mr. Lanute asked for feedback from the Committee regarding future improvements.

Commissioner Lohbauer said he thought the LTEM was a wonderful program and thanked staff for allowing his participation at the Expert Panel meeting. He said he felt it particularly helpful for people to see the impact of the CMP. He said making the data available online and available for others to use would be fantastic. He said he supported looking at quality of life issues as they go hand-in-hand with property values and taxes.

Commissioner Prickett said he too supported a study of quality of life issues due to the desirability of clean air and water and having a healthy environment. He suggested when the annual report is issued, that not just a link to the report, but a direct link to the respective page in the municipal fact book, be sent to each municipality to draw their interest. He noted that the August stakeholders meeting had been attended chiefly by planners and suggested that for future meetings, zoning and planning board chairpersons be included in an attempt to involve more municipal officials.

Mr. Lanute said, in the past, hard copies of the report had been sent to the municipal and county clerks and noted that perhaps the reports were not getting to the most appropriate audiences. He said staff is interested in further investigating quality of life indicators and that a special study could be one potential avenue for determining appropriate indicators of “quality of life.”

Commissioner Barr said he thought the studies were valuable but that 36 indicators, as recommended by Rutgers for future reports, were too many, given the limit of staff resources. He said they were all good and valuable but would be very time consuming to process.

Mr. Lanute responded that staff has had an internal dialogue regarding finding efficiencies. He said typically a single staff member is responsible for the report.

Commissioner Barr said the Commission needs to increase awareness of the report and how it might be used. He said the report needs to provide people with the information they need.

Commissioner Howell said suggested that staff consider the development of a few headline indices for the LTEM Program. He described it as something that could aggregate multiple indicators that could be reported on by municipality. He said that it is important to consider the intended audience and the frequency of the data. He said that if a lot of the indicators are coming from the decennial census, reporting less frequently should be considered.

Ms. Wittenberg said NPS likes the annual report particularly because the Pinelands National Reserve is the only park with a considerable population and economic activity. She said she uses the report frequently and it should be valuable to the municipalities. She said that she is hesitant to adopt all-encompassing indices such as a quality of life index as it would inevitably be ranking Pinelands Area communities. She said that we need be conscious about the Pinelands Commission creating a negative designation.

In response to Chairman Earlen's question as to what constitutes South Jersey, Ms. Berg said the eight counties (seven Pinelands counties plus Salem County).

Chairman Earlen asked about the comparison between a town in the northern Pinelands, e.g., Jackson Township, vs. a small town in South Jersey.

Ms. Berg responded that is the question in a nutshell; what is quality of life.

Chairman Earlen said it is an issue that is different to every person in this room.

Mr. Lanute said in the early days of the LTEM program, two economic experts helped the Commission determine the nature of the comparisons. He said comparing the Pinelands with North Jersey is even more difficult than comparing it with South Jersey. Similarly, he said, the level of data collection varies with other areas of the country because their data are collected/measured differently.

Chairman Earlen said he thought the divisions were not just North and South Jersey, but also Central Jersey.

## **6. Public Comment**

Ms. Katie Smith, with the Pinelands Preservation Alliance (PPA), said she appreciated the thorough staff presentation on the LTEM program and her organization found the information provided by the report very useful. She said she was excited to hear the Commission was considering putting the data online and suggested that information about the program be shared with universities and their interested staff. Also, she said that she hoped to hear more about the proposed CMP amendment to protect the Black Run.

Commissioner Prickett thanked Ms. Smith for the letter and her presence at the public hearing on Mullica Township Ordinance 6-2018.

Mr. Jay E. Mounier, a resident of Franklinville, said the value of development rights should be considered alongside the value of land. He said there is a vast difference between the two.

## **7. Other Items of Interest**

Ms. Wittenberg raised a matter concerning South Jersey Transportation Authority (SJTA) and the Atlantic City Airport. She referenced the 2004 Memorandum of Agreement (MOA) <http://www.nj.gov/pinelands/infor/moa/State%20Agencies/SJTA/SJTA%20-%20ACY%20-%20February%202004.pdf> and said this MOA allowed some development in exchange for the creation of some 300 acres of grassland bird habitat. She said the Federal Aviation Authority (FAA) no longer supports the presence of that habitat so close to the runway due to concerns with bird strikes and aircraft safety. The FAA wants the habitat moved elsewhere. She said the process of amending an MOA is somewhat lengthy and would require finding another suitable habitat location. She said the 2004 Federal Environmental Impact Statement had been quite lengthy, that SJTA has expressed an urgency for this to be done, but that the FAA has not yet applied any pressure on the Commission to act. She said this is nesting season and if the habitat were to be removed now, it would be devastating to the bird population.

In response to Chairman Earlen's question if the Commission refused to relocate the habitat, Ms. Wittenberg said if the request is due to a safety issue, the Commission would need to abide by it. She said Commission staff was going to the site next week along with representatives from FAA, the New Jersey Department of Environmental Protection (NJDEP) and possibly the federal Fish and Wildlife Service.

In response to Commissioner Barr's question if she had yet received a letter instructing her to move the habitat, she said she had not but had been told it was forthcoming.

Ms. Wittenberg said, although the habitat is preserved for small birds, their presence attracts other species. Also, she said, the Commission has a good relationship with the FAA.

Commissioner Prickett said it was important that the Commission work with the other agencies.

There being no other items of interest, Commissioner Prickett moved the adjournment of the meeting and Commissioner Barr seconded the motion. The meeting was adjourned at 10:40 a.m.

Certified as true and correct:

  
\_\_\_\_\_  
Betsy Piner,  
Principal Planning Assistant

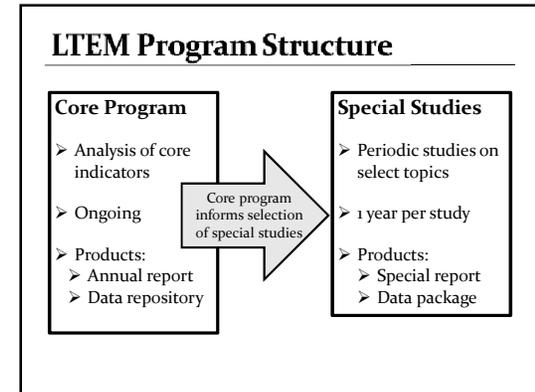
Date: May 30, 2018

## Pinelands Long-Term Economic Monitoring Program

---

Policy and Implementation Committee  
May 18, 2018





- ### Agenda
- 
- LTEM Program overview
  - Identified challenges
  - Reexamination process
  - Process outcomes
  - Next steps

### LTEM Program Background

- Origins date back to 2<sup>nd</sup> Plan Review
- Funded by the National Park Service since 1996
- Program Goal: to continually evaluate the economic health of the Pinelands in an objective and reliable manner.



- ### LTEM Core Program
- 
- General Areas of Economic Monitoring**  
(23 indicators total)
- Population
  - Real Estate
  - Economy
    - Employment
    - Income
    - Establishments
    - Agriculture
  - Municipal Finance

**LTEM Core Program**

---

**Report Format: Statistical Compendium**

- Each indicator reported on
  - Tables, graphs, text descriptions
- County/Municipal Fact Book

**Primary Methods: Comparative Evaluation**

- Aggregation of data into comparison groups
  1. Pinelands Municipalities
  2. Other S. Jersey Municipalities
  3. State of New Jersey

**LTEM Program Challenges**

---

**Methodological Considerations**

- Determining economic segments to monitor
- Geography and data availability
- Evaluation methods

**Programmatic Considerations**

- Who is the target audience? What are their informational needs?
- Economic monitoring vs. economic development
- Selection of special studies
- Cost-effectiveness

**Reexamination Process**

---

Public Users Meeting	Expert Panel Meeting
<ul style="list-style-type: none"> <li>➢ August 9, 2017</li> <li>➢ 20 participants</li> <li>➢ Participants selected from various government and non-governmental organizations involved in economic development and planning</li> </ul>	<ul style="list-style-type: none"> <li>➢ October 27, 2017</li> <li>➢ 10 participants</li> <li>➢ Participants selected from various government organizations that have special expertise or familiarity with LTEM data sources and subject matter</li> </ul>



**Identified Challenges**



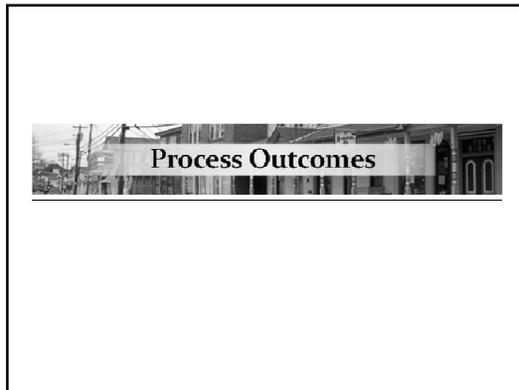
**Reexamination Process**

**Reexamination Process**

---

**Rutgers Expert Support and Review**

1. Participate in both meetings
2. Produce review report
  - Review Core Program's economic indicators
    - Selection
    - Evaluation
    - Reporting
  - Recommended special studies



### Outcomes: Users Meeting

- Approximately 20 suggested indicators/topics
- Suggested special studies topics
  - Quality of life
  - Community services
  - Tourism and hospitality industry
  - Cost of "development"
  - Feasibility of rail-based transit-oriented development
- Suggestion that Commission partner with other organizations when doing special studies

### Outcomes: Expert Panel

- Greater awareness of data sources and availability
  - Public and commercial data sources
  - Special data requests
- Contacts within state and federal agencies for acquiring data
- Further discussion on recommended indicators and special studies

### Outcomes: Users Meeting

#### Feedback on LTEM Annual Report:

- Source of useful information
- Unknown to many prior to invitation
- Well-designed
- Municipal Fact Book of particular usefulness
- Online availability of data would be useful
- Preference to maintain hard-copy of report

### Outcomes: Users Meeting

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>➢ Household demographics</li> <li>➢ More age distribution data (dependency ranges of 0-14 and 65+)</li> <li>➢ Educational attainment</li> <li>➢ Workforce information</li> <li>➢ Occupational data</li> <li>➢ Commuter data</li> <li>➢ Public transportation</li> <li>➢ Quarterly Census of Employment and Wages (QCEW)</li> <li>➢ Types of jobs as well as quantities</li> <li>➢ Tourism, medical, financial, retail, industrial centers</li> <li>➢ Tourism and hospitality</li> <li>➢ Quantity of new businesses formed</li> <li>➢ Municipal services provided</li> <li>➢ Land value, and improvement value</li> </ul> | <ul style="list-style-type: none"> <li>➢ Commercial ratables (non-residential square footage)</li> <li>➢ Bank foreclosures and tax sales</li> <li>➢ School district data (teacher-student ratio; high school graduation rates)</li> <li>➢ Pinelands Development Credit data</li> <li>➢ More data on economies of Regional Growth Areas</li> <li>➢ Off-base housing location</li> </ul> |
|---|--|

### Outcomes: Rutgers Report

- Under review by staff
- 36 indicators recommended for future reports
  - 10 focal indicators
    - Average home price
    - Volume of real estate transactions
    - Effective property tax
    - Per capita spending by municipality
    - Residential housing permits
  - Certificates of Occupancy
  - Ratio of land to improvement value
  - Permits issued for alterations/additions
  - Equalized property value per acre
  - Value of construction permitted

Not currently monitored

## Outcomes: Rutgers Report

---

### Special studies recommended for consideration

- Tourism (ecotourism/agrotourism)
- Spending patterns in the Pinelands
- Relative costs of doing business
- Natural capital
- Value/feasibility of fast passenger rail service
- Municipal fiscal stress index & public services
- Quality of life comparative study



## Outcomes: Website Options

---

### Exploration of options for enhanced web presence

- Reporting
- Interactive data explorer
- Data downloads

## Next Steps

---

### Staff Actions

- Review/finalize Rutgers Report
- Augment format of LTEM Program reporting
- Continue to develop plan for enhanced LTEM Program website

### Recommendations Forthcoming to Committee

- Additional indicators to add/drop from core program
- Special study selection for FY'19

**MEMORANDUM OF AGREEMENT  
BETWEEN  
THE NEW JERSEY PINELANDS COMMISSION  
AND  
THE SOUTH JERSEY TRANSPORTATION AUTHORITY**

**I. PURPOSE**

This Memorandum of Agreement (MOA) is entered into between the New Jersey Pinelands Commission (the "Commission") and the South Jersey Transportation Authority (the "Authority"). The Authority as the owner and operator of the Atlantic City International Airport (the "ACY") located in Egg Harbor Township, Atlantic County. The Commission is an independent political subdivision of the State of New Jersey created pursuant to Section 4 of the Pinelands Protection Act, N.J.S.A. 13:18A-1, et seq., and charged with the implementation of the Act and the Pinelands "Comprehensive Management Plan" (the "CMP"), N.J.A.C. 7:50. The Commission is also the planning entity authorized under Section 502 of the National Parks and Recreation Act of 1978.

The Authority has developed a Comprehensive Land Use Plan for the Atlantic City International Airport dated September, 2003 (the "Plan") (attached hereto as Attachment 1), which consists of short-term and long-term development projects to be constructed at and affecting the ACY. This MOA is intended to facilitate the implementation of the short-term development projects (referred to as "near-term" projects in Attachment 3) contained within that Plan, including the implementation of a Grassland Conservation and Management Plan and Forest Preservation Plan. No part of this MOA is intended to address or authorize any of the Authority's long-term development projects identified in the Plan.

**II. BACKGROUND**

**A. The ACY Property**

The Atlantic City International Airport property is comprised of approximately 2,100 acres. The Authority owns approximately 84 of these acres on which the terminal building and associated airport support facilities are located, and leases an additional 2,000 acres from the owner of the remaining land, the United States of America. The Plan and this MOA pertain solely to the 2,100 acres (the "Property") owned or leased by the Authority.

The property is located within a Pinelands Regional Growth and a Pinelands Military and Federal Installation land management area as defined in the CMP.

B. The Comprehensive Land Use Plan for the Atlantic City Airport

The Plan consists of both short-term and long-term projects. The short-term projects were identified in the Final Environmental Impact Statement (FEIS) prepared for the property as projects that could be implemented immediately or in the foreseeable future, subject to any conditions stated within the Record of Decision of the Federal Aviation Administration. Although long-term projects were also discussed in the FEIS, these projects were included for informational purposes so that the cumulative impacts of all projects contained within the Plan could be evaluated. These long-term projects will require additional environmental analysis before they will be ripe for decision.

1. Short-Term Development Projects

a. Terminal Area Development

In order to accommodate existing and future passenger and airline needs, the Authority plans to develop new or expanded terminal area facilities. The following activities are included in this short-term development project:

1. Expansion of Terminal Building and Gates including Relocation of the apron and Taxiway H
2. Public Parking Garage
3. Rental Car Maintenance Facility
4. Airline Cargo Warehouses
5. General Aviation Hangars
6. Deicing Apron

b. Auxiliary Area Development

In order to advance the airlines' interest in establishing maintenance and cargo facilities at ACY, the Authority plans to develop an area of the airport for aviation-related light industry. The following activities are included in this short-term development project:

1. Aircraft Maintenance Hangars
2. Air Freight Warehouses
3. Full-length Parallel Taxiway west of Runway 4-22
4. Aircraft Parking Apron and Taxiways
5. Access Roadway and Parking

c. Hotel/Conference Center

In response to the demand for on-site lodging and meeting facilities, the Authority plans to allow a third-party developer to construct a hotel/conference center on airport property. The following activities are included in this short-term development project:

1. One Three-story Building for 150 Suites
  2. Lobby area and Amenities
  3. Swimming Pool and Outbuildings
  4. Auto Parking
- d. Runway 13-31 ILS Upgrade

In order to improve the utility of Runway 13-31, the primary runway that runs east/west, the Authority plans to install electronic navigational aids on Runway 31. This instrument landing system, or ILS, would increase airfield efficiency and operational safety when pilots have to land on Runway 31 during inclement weather. The following activities are included in this short-term development project:

1. Localizer Antenna
  2. Glide Slope Antenna
  3. Medium Intensity Approach Light System (MALS)
  4. Marker Beacons
- e. Holding Aprons
- To increase taxiway efficiency and operational safety, the Authority plans to construct holding aprons at each end of Runway 13-31.
- f. Grassland Conservation and Management Area

2. Long Term-Projects

- a. Direct Airport Access from A.C. Expressway
- b. Runway 4-22 Extension (the alternative north/south runway)
- c. High Speed Taxiway Exits
- d. Non-Aviation Development along the White Horse Pike

C. The Final Environmental Impact Statement

As mandated by the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.* ("NEPA") the FAA prepared a Final Environmental Impact Statement ("FEIS") and approved its circulation on October 24, 2003 (the Executive Summary of the FEIS dated September 2003 is attached hereto as Attachment 2. A copy of the complete FEIS is available for review at the Pinelands Commission's offices) to document and assess the environmental impacts of the Plan. The FEIS also includes recommendations as to the appropriate development alternatives that were consistent with providing public service, specifically safe, efficient and reliable air transportation service to the Southern New Jersey region. The FEIS included specific environmental commitments to be undertaken by the Authority to ensure that the proposed short-term projects would not result in significant environmental harm (see Attachment 3).

D. The Basis of the MOA

The CMP (N.J.A.C. 7:50-4.52(c)2) authorizes the Commission to enter into intergovernmental memoranda with any agency of the Federal, State or local government which authorizes such agency to carry out specified development activities that may not be fully consistent with the provisions of the CMP, specifically N.J.A.C. 7:50-5 and 6. The agency must demonstrate, and the Commission must find, that any proposed development that is not fully consistent with the standards of the CMP is accompanied by measures that will, at a minimum, afford an equivalent level of protection of the resources of the Pinelands as would be provided through strict application of the CMP's standards.

As part of the FEIS, the Authority has developed mitigation measures to address the environmental impacts associated with its short-term development projects. These measures include development of a Grassland Conservation and Management Plan with Environmental Commitments, to create and enhance habitat to compensate for the loss of critical habitat for grassland species of concern; a Stormwater Management plan that includes on-site retention, pre-treatment and infiltration systems, to reduce the volume of chemicals currently flowing to the edge of pavement and into ditches and swales toward receiving waters; and a Soil Erosion and Sediment Control Plan. In addition, to compensate for impacts to wetlands and wetland buffers the Authority is proposing to preserve an existing wetlands ecosystem by establishing a Forest Preservation Area, to protect the wetlands complex associated with the North Branch Absecon Creek. The Authority has added to the lands designated as the Forest Preservation Area to include a portion of the property on the White Horse Pike, previously designated for non-aviation development, which is a part of this wetland complex. These measures will, at a minimum, afford an equivalent level of protection of the resources of the Pinelands as would be provided through strict application of the CMP standards for short-term development projects.

In accordance with N.J.A.C. 7:50-4.52(c)1, the Commission also may enter into intergovernmental memoranda with any agency of the Federal, State or local government which authorizes such agency to carry out specified development activities without securing individual development approvals from the Commission, provided that the specified development activities are consistent with the provisions of N.J.A.C. 7:50-5 and 6. As discussed above, the Authority, as part of this MOA, is proposing measures that will afford an equivalent level of protection of the resources of the Pinelands. As a result, entry of a MOA authorizing alternative application procedures is warranted.

III. AGREEMENTS

A. The Authority agrees that:

1. It will provide notice to the Pinelands Commission Staff fifteen (15) days prior to undertaking the Runway 13-31 ILS Upgrade and Grassland Conservation and

Management Area short-term development projects described in Paragraph IIB1 of this MOA. Such notice shall include the following:

- a. A narrative description of the proposed project;
  - b. A copy of the U.S.G.S. quadrangle and airport map on which the location of the development project has been identified; and
  - c. A description of any changes in the scope, design, impacts, etc., of the project from what was described in the FEIS.
2. For the proposed Terminal Area development project, Auxiliary Area development project, Hotel/Conference Center development project and Holding Aprons project, it will provide the following information to the Commission staff at least forty-five (45) days prior to undertaking any of these short-term development projects:
- a. A copy of the detailed plans for each short-term project, including wetlands mapping, that complies with the requirements of N.J.A.C. 7:50-6.3.
  - b. A plan depicting: i) all wetlands in close proximity to the Hotel/Conference Center development project site and ii) delineating an appropriate wetlands buffer on the site for these wetlands in accordance with N.J.A.C. 7:50-6.14 and demonstrating that clearing in wetlands buffers has been minimized to the maximum extent possible.
  - c. A detailed Stormwater Management Plan for each short-term project that complies with the standards set forth in N.J.A.C. 7:50-6.84.
  - d. A detailed analysis demonstrating compliance with all ambient air quality standards in N.J.A.C. 7:27 for carbon monoxide for the Terminal Area development project and the Hotel/Conference Center development project.
  - e. A copy of a plan denoting the extent of and justification for upland forest to be cleared for the Hotel/Conference Center development project in accordance with N.J.A.C. 7:50-6.23 and demonstrating that clearing in wetlands buffers has been minimized to the maximum extent possible.
  - f. A statement demonstrating that the project complies with the terms and conditions of the MOA;
  - g. A list of other permits and approvals required prior to commencement of any construction activity.



- c. Preserve State or CMP listed threatened or endangered plant species, including Narrow-leaved Vervain (*Verbena simplex*).
  - d. Continually manage the Grassland Conservation and Management Area for grassland species.
  - e. Continually monitor, on a regular basis, the progress made towards maintaining the Environmental Commitments (see Attachment 3).
  - f. Minimize the extent of clearing to upland-forest. In addition, any temporary clearing at any project site will be reforested after construction is complete to the maximum extent practicable.
7. In addition to the added Environmental Commitments set forth in Paragraph IIIA6, the Authority shall undertake the following:
- a. The property, comprising approximately 124 acres, located along Route 30 in the vicinity of the North Branch of the Absecon Creek excluding lands within 100 feet of the White Horse Pike, which are retained for future expansion or improvements to the White Horse Pike shall be designated as a "Forest Preservation Area" and will not be developed. In accordance with Paragraph IIIA4, the Authority will obtain FAA approval for a revised Airport Layout Plan (ALP) that designates this area as "Forest Preservation Area – to be Held in Reserve. No Development Shall Occur". No development activity shall be permitted within the Forest Preservation Area without the prior consent and approval of the Pinelands Commission. Within 60 days of execution of this MOA by all parties, the Authority shall request written agreement from the FAA indicating its agreement that no development shall occur within the Forest Preservation Area. In addition, should the property be transferred to or acquired by the Authority, its successor or assigns, in the future, within 60 days of transfer or acquisition of the property, the Authority, its successor or assigns, shall execute a deed restriction, on behalf of the Pinelands Commission, restricting development on this site, with the exception of future expansion of the White Horse Pike. This deed restriction shall run with the land and shall be referenced in the deed for the property.
  - b. The property, comprising approximately 290 acres, located in the northwest portion of the airfield, will be designated as a "Grassland Conservation and Management Area" and will not be developed. In accordance with Paragraph IIIA4, the Authority will obtain FAA approval for a revised Airport Layout Plan (ALP) that designates this area as "Grassland Conservation and Management Area – to be Held in Reserve. No Development Shall Occur". No development activity shall be permitted within the Grassland Conservation and Management Area without the prior consent and approval of the Pinelands Commission.

Within 60 days of execution of this MOA by all parties, the Authority shall request written agreement from the FAA indicating its agreement that no development shall occur within the Grassland Conservation and Management Area. In addition, should the property be transferred to or acquired by the Authority, its successor or assigns, in the future, within 60 days of transfer or acquisition of the property, the Authority, its successor or assigns shall execute a deed restriction, on behalf of the Pinelands Commission, restricting development on the site of the 290 acre Grassland Conservation & Management Area. This deed restriction shall run with the land and shall be referenced in the deed for the property.

- c. The property, comprising approximately 283 acres, located in the northeastern portion of the airport, will be designated as a "Forest Preservation Area" and will not be developed. In accordance with Paragraph IIIA4, the Authority will obtain FAA approval for a revised Airport Layout Plan (ALP) that designates this area as "Forest Preservation Area – to be Held in Reserve. No Development Shall Occur". No development activity shall be permitted within the Forest Preservation Area without the prior consent and approval of the Pinelands Commission. Within 60 days of execution of this MOA by all parties, the Authority shall request written agreement from the FAA indicating its agreement that no development shall occur within the Forest Preservation Area. In addition, should the property be transferred to or acquired by the Authority, its successor or assigns, in the future, within 60 days of transfer or acquisition, the Authority, its successors or assigns, shall execute a deed restriction, on behalf of the Pinelands Commission, restricting development on the site of the 283 acre Forest Preservation Area. This deed restriction shall run with the land and shall be referenced in the deed for the property.
  - d. Include representatives from the Pinelands Commission on all monitoring and evaluation groups established in accordance with the requirements of the Environmental Commitments. An Advisory Committee will be formed that includes two members at large from a non-government conservation organization or academic institution.
8. Any activity not specifically identified in Paragraph IIB1 will require a formal application to the Commission in accordance with the CMP (N.J.A.C. 7:50-4.52(b)) and that proposed development may not occur until an application has been completed and the Commission has approved the project.
  9. To the extent that either new information becomes available or changes are made to the scope or design of a short-term project that result in more than a de minimis change to the impacts associated with any of the projects identified in Paragraph IIB1, from what was described in the FEIS (i.e. materially change such impacts), such information or changes shall be submitted to the Pinelands Commission staff

for review for a consistency determination by the Executive Director. In accordance with Paragraph IIIB6. In accordance with Paragraph IIIA1c, the Authority shall notify the Pinelands Commission of any changes in scope, design, impact, etc., including those changes that do not materially change the impacts associated with any project, from what was identified in the FEIS.

10. No part of this MOA shall release the Authority from its responsibility to obtain all other required local, State and/or Federal approvals.

B. The Pinelands Commission agrees that:

1. It will not require the filing of formal public development applications in accordance with the CMP (N.J.A.C. 7:50-4.52(b)) for the short-term development activities set forth in Paragraph IIB1 above.
2. Based on its review of the FEIS, the provisions of the CMP and this MOA, the proposed Grassland Conservation and Management Area project is consistent with the minimum requirements of the CMP. No further action by the Commission, or its staff, shall be required.
3. Based on its review of the FEIS, the provisions of the CMP and this MOA, the proposed Runway 13-31 ILS Upgrade project is consistent with the minimum requirements of the CMP. No further action by the Commission, or its staff, shall be required, unless new information becomes available or there is a material change as defined in Paragraph IIIA9 above.
4. Based on its review of the FEIS, the provisions of the CMP and this MOA, the remaining short-term projects (the proposed Terminal Area development project, Auxiliary Area development project, Hotel/Conference Center development project and Holding Aprons project) are consistent with the minimum requirements of the CMP, except for those aspects of these projects for which additional information is required to be submitted pursuant to Paragraph IIIA2 or IIIA9 above.
5. Within thirty (30) days of receipt of the information submitted pursuant to Paragraphs IIIA2 or IIIA9, the Commission staff will provide written authorization in accordance with Paragraph IIIB7 or a written explanation of inconsistencies in accordance with Paragraph IIIB6 below.
6. If the Executive Director determines that any portion of a proposed short-term project is inconsistent with the MOA and/or the provisions of the CMP, then the Commission staff shall provide a written explanation of the deficiencies and identify specific actions that must be taken by the Authority to remedy such deficiencies.

7. If the Commission staff determines, after review of information submitted in accordance with Paragraphs IIIA2 or IIIA9 and/or in response to any deficiency letter issued by the Commission pursuant to Paragraph IIIB6, that a proposed short-term project is consistent with this MOA and the provisions of the CMP, it shall issue a written authorization to the Authority setting forth this determination. This written authorization shall constitute a public development approval and no further action by the Commission shall be required.
8. It will consult with the New Jersey Department of Environmental Protection regarding the wetlands mitigation measures that the Authority is planning to undertake in furtherance of this MOA and in order to satisfy both the CMP's wetlands requirements and the requirements of the NJ Freshwater Wetlands Protection Act at N.J.A.C. 7:7A et seq..
9. Should the New Jersey Department of Environmental Protection require the Authority to provide additional freshwater wetlands mitigation, the Commission will review any additional mitigation in accordance with the time frames established in Paragraph IIIB4 of this MOA and will work with the NJDEP and the Authority to develop mitigation that is consistent with the requirements of the CMP.

C. The Commission and the Authority agree:

1. To meet at least annually to discuss this MOA, the status of specific short-term development projects and other issues of mutual concern.
2. Work cooperatively in the future to investigate the environmental and facility impacts of the long-term development projects discussed in the Plan and FEIS.

IV. EFFECTIVE DATE AND DURATION

1. In accordance with N.J.S.A. 13:18A-5(h), this MOA and any subsequent amendments shall take effect following the conclusion of the Governor's review period and/or approval of the Pinelands Commission meeting minutes authorizing entry of this MOA and then upon approval and signature by the authorized representative of both parties.
2. This MOA shall remain in effect unless amended by written consent of both parties or otherwise terminated by either party upon sixty (60) days written notice.

V. SIGNATURES

NEW JERSEY PINELANDS COMMISSION

Date 2/26/04

By:   
John C. Stokes, Executive Director

Approved as to form by:

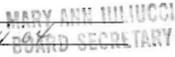
Date 2/26/04

  
Valerie Haynes, Deputy Attorney General  
State of New Jersey

SOUTH JERSEY TRANSPORTATION AUTHORITY

Date 2-11-04

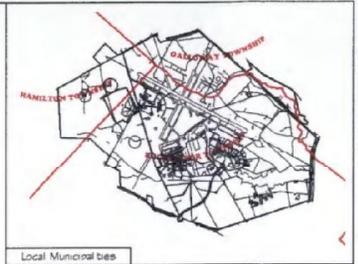
By:   
James A. Crawford, Executive Director

Attested:   
Date 2-11-04  
BOARD SECRETARY

  
Secretary, South Jersey Transportation Authority

**LEGEND:**

-  Site Boundary
-  Near-Term Projects
-  Long-Range Projects
-  Streams
-  Lands leased/owned by SJTA
-  Grassland Conservation & Management Area
-  Forest Preservation Area
-  Developed Land
-  Upland Forest
-  Grassland/Shrub Complex
-  Water
-  Freshwater Wetlands



600 0 600 1200 1800 2400 Feet

**Atlantic City International Airport**  
Hamilton, Egg Harbor and Galloway Townships  
Atlantic County, New Jersey

**COMPREHENSIVE LAND USE PLAN WITH  
NEAR-TERM & LONG-RANGE PROJECTS**

Amy S. Greens  
Environmental Consultants, Inc.  
4 Walter E. Foran Blvd. Flemington, NJ 08822

December 06, 2003

**Source:**  
Amy S. Greens Environmental Consultants, Inc., Grassland Conservation and Management Area, Forest Preservation Area, and Land Use Digital GIS coverage, were generated based upon field investigations conducted in May and June of 1999 and 2001.

**Map-sets and Landscape Projects** were created by DIGN, Atlantic, 1999-2001.

**The base map is based upon the work of the Federal Aviation Administration, William J. Hager, Technical Center, Environmental Branch, 1477-149 Atlantic City International Airport, Atlantic City, NJ 08403. Any secondary products or reviews produced using this information cannot have been verified or are uncorroborated by the Center's Environmental Branch.**

**Note:**  
Long-Range Projects are Preliminary.

Memorandum of Agreement between  
the South Jersey Transportation Authority and  
the New Jersey Pinelands Commission  
FINAL VERSION  
**Attachment 2**



US Department  
of Transportation  
Federal Aviation  
Administration

Cooperating Agency

US Environmental  
Protection Agency

Atlantic City International Airport  
Final Environmental Impact Statement  
for Airport Layout Plan Approval

# EXECUTIVE SUMMARY

September 2003



## Acronyms

ACY	Atlantic City International Airport
ALP	Airport Layout Plan
AOC	Area of Concern
ASGECI	Amy S. Greene Environmental Consultants, Inc.
BMPs	Best Management Practices
DEIS	Draft Environmental Impact Statement
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEIS	Final Environmental Impact Statement
HEP	Habitat Evaluation Procedures
HUs	Habitat Units
ILS	Instrument Landing System
NEPA	National Environmental Policy Act of 1969
NJANG	New Jersey Air National Guard
NJDEP	New Jersey Department of Environmental Protection
NOI	Notice of Intent
ROD	Record of Decision
SJTA	South Jersey Transportation Authority
USCG	United States Coast Guard
USDA	US Department of Agriculture
USFWS	US Fish & Wildlife Service

## Acknowledgments

The Federal Aviation Administration would like to acknowledge the help of several independent contractors that facilitated this work. The prime contractor is *DMJM Aviation*, a nationally-recognized airport planning and engineering firm with more than 20 years experience preparing environmental documents for airports and the FAA. In addition, *Amy S. Greene Environmental Consultants, Inc.* conducted field studies and prepared impact assessments and mitigation plans for threatened and endangered species, biotic communities, and wetlands. *Orion International Technologies* prepared technical support documents for airport noise, air quality, and secondary (induced) development. *Ruetter Engineering* provided engineering support and prepared the traffic analysis and utility assessments. *Metcalf & Eddy* conducted the hydrogeologic analysis and prepared the groundwater assessment. *P&D Aviation* updated the aviation activity forecasts. And finally, *Parsons Brinckerhoff-FG* provided additional technical assistance and facilitated agency coordination.

The FAA would also like to recognize the federal, state, regional, and local agencies that regularly attended the monthly Interdisciplinary Team meetings and/or provided assistance on regulatory and compliance-related matters. In particular, the US Department of Agriculture (USDA), US Environmental Protection Agency (EPA), US Fish & Wildlife Service (USFWS), NJ Air National Guard (NJANG), NJ Department of Environmental Protection (NJDEP), NJ Pinelands Commission, and the FAA William J. Hughes Technical Center were instrumental in providing expert opinion on issues related to the airport and the protection of its surrounding environment.

Finally, the FAA sincerely appreciates the support and cooperation of the South Jersey Transportation Authority (SJTA) and the staff at the Atlantic City International Airport (ACY) during the preparation of this document.

# Contents

Acronyms .....	4
Acknowledgments .....	4
<b>Foreword</b> .....	<b>5</b>
<b>Background</b> .....	<b>6</b>
<b>Purpose and Need for Action</b> .....	<b>7</b>
<b>Alternatives</b> .....	<b>10</b>
Terminal Area Development .....	10
Auxiliary Area Development .....	15
Hotel/Conference Center .....	20
Runway 13-31 ILS Upgrade .....	24
Other Long-Range Projects .....	29
<b>Environmental Consequences</b> .....	<b>30</b>
Aircraft Noise .....	30
Compatible Land Use .....	31
Social Impacts .....	31
Secondary (Induced) Development .....	32
Air Quality .....	32
Water Resources .....	33
Cultural Resources .....	34
Biotic Communities: Vegetation and Wildlife .....	34
Wetlands .....	40
Floodplains .....	41
Traffic and Transportation .....	42
Energy Supply and Utilities .....	42
Light Emissions .....	42
Solid Waste .....	43
Hazardous Materials and Waste .....	43
Other (Section 4(f), Farmland/Soils, Coastal Zone Management, Coastal Barriers, and Wild/Scenic Rivers) .....	44
Construction Impacts .....	44
Cumulative Effects .....	45
Summary of Key Issues and Measures to Minimize Harm .....	47
<b>Agency and Public Involvement</b> .....	<b>52</b>

## Foreword

This document summarizes the Final Environmental Impact Statement (FEIS) for the proposal to further develop ACY for commercial aviation purposes. The EIS process has been conducted according to the President's Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act of 1969 (NEPA). The FAA's Order 5050.4A, *Airport Environmental Handbook*, has been used to ensure that the conduct and preparation of this FEIS complies with CEQ and NEPA requirements.

The process officially began on September 28, 2000 when the FAA published a Notice of Intent (NOI) in the Federal Register to advise the public that a Draft Environmental Impact Statement (DEIS) would be prepared and that agency and public scoping meetings were going to be held. The purpose of the scoping meetings was to determine which project-related issues would be addressed and emphasized in the DEIS and to establish the work plan to be followed. In addition to the NOI, public notices were placed in local newspapers in advance of the scoping meetings. A notice was also placed on the NJ Department of Transportation's (NJDOT) Consumer Advocacy and Public Outreach website. Fliers were posted in visible, public places such as the township municipal buildings and the ACY passenger terminal building. A *Scoping Information Package* (with invitation/notification letters) was sent to approximately 75 federal, state, and local agencies and government officials, including those agencies or persons involved earlier in the environmental assessment (EA) process.

Two key points from the scoping process set the tone for the preparation of the DEIS. First, the surrounding land uses are highly compatible with normal airport operations and, as a result, there has not been a great deal of public controversy regarding development projects at ACY. Second, there are a variety of natural resources on the property, e.g., surface and groundwater features, vegetation and wildlife (including several state- and Pinelands-listed threatened and endangered species), and wetlands; there are also a number of hazardous waste sites of varying levels of importance. Consequently, the EIS process devoted considerably more time and effort to the potential adverse effects on the natural environment than on the human environment. The environmental impact categories identified as being potentially significant during the EIS scoping process are as follows: noise, secondary (induced) impacts, air quality, water resources, biotic communities, threatened and endangered species, wetlands, hazardous waste, and cumulative impacts.

Once the DEIS was complete, it was circulated for review and comment. During this period, a public hearing was held in an open forum on October 15, 2002 to answer questions about the proposed action, its alternatives, and the environmental consequences. Agencies and the public were invited to comment on the documents and/or the merits of the project alternatives. After that, additional meetings were held **to further address** and resolve agency issues and concerns. Finally, the FAA revised the DEIS by incorporating responses to the comments received. Now that the FEIS has been issued, a Record of Decision (ROD) is expected to follow.

Of note, the FEIS also incorporates several changes that could not be addressed in the draft document. For example, a rare species of butterfly (the frosted elfin, *Collophrys [Incisalia] irus*) became a state-listed threatened species; therefore, additional habitat mapping was prepared so the potential impacts to this newly-listed species could be quantified and evaluated in greater detail. Also, the NJDEP created a new special status classification, "Species of Special Concern." These species are now addressed in the FEIS. In addition, the SJTA added aircraft holding aprons (for Runway 13-31) to the list of proposed projects. Overall, however, these are relatively minor changes that did not substantially alter the findings and conclusions presented in the DEIS.

## Background

ACY has a diverse history that dates back to the mid-1940s. The airport is located ten miles northwest of Atlantic City, in Atlantic County, New Jersey. The entire property consists of approximately 5,200 acres of land within Egg Harbor, Hamilton, and Galloway Townships. This land (save for 84 acres) is owned by the FAA and operated as the William J. Hughes Technical Center, an aviation research and development facility. The SJTA owns the 84-acre parcel of land (on which the commercial passenger terminal is situated) and leases another 2,000 acres of land that comprises the airfield and future development areas. In addition to the FAA and SJTA, the NJANG and the US Coast Guard (USCG) have base operations at ACY. Thus, today, ACY is a vast, joint-use aviation facility serving government, military, and civilian aviation uses.

- **What is the history of this proposal? What previous decisions have already been made about developing ACY?**

In 1983, the FAA concluded that the Technical Center could satisfy its research and development mission without having to operate ACY or maintain the entire 5,000-plus-acre property. In effect, the Technical Center was obligated to transfer the airport to a state/local governmental unit or authority. Once established, that authority could use the Technical Center's surplus land to meet the airport's development needs (provided this development would not interfere with the mission of the Technical Center or the NJANG).

In 1992, the SJTA was created to pursue transportation-related economic development projects throughout Southern New Jersey. The SJTA immediately purchased the 84-acre passenger terminal complex from the City of Atlantic City and, over the next six years, leased some 2,000 acres of land from the Technical Center for airport operations and aviation-related development. Today, the SJTA has full managerial and operational control of the commercial and general aviation facilities as well as the airfield.

In 1993, the FAA issued a federal grant to assist the SJTA with preparing two important planning studies: 1) an airport master plan, which included an airport layout plan (ALP) and 2) an environmental assessment. The *Atlantic City International Airport Master Plan Update (1996)* identifies the facilities and improvements needed for ACY to fulfill its role not just as the primary commercial service airport in the southern New Jersey region but also as a significant component in the FAA's National Airspace System. Based on the Master Plan recommendations, the ALP depicts the existing and ultimate airport facilities and their location on the airport.

While preparing the Master Plan and the ALP, the SJTA also conducted an environmental assessment that identified and evaluated the potential adverse effects likely to occur as a result of the proposed projects – namely, the loss of habitat for state-listed threatened and endangered species. After meeting with regulatory agencies and the public about the consequences of the airport's plans, the FAA concluded that a "finding of no significant impact" (FONSI) could not be issued and that an EIS should be prepared. On this basis, the FAA conditionally approved the ALP in 1999, pending environmental review and approval of the projects addressed in this FEIS.

## Purpose and Need for Action

This section of the FEIS addresses the reasons why the FAA is considering the proposed projects for approval as well as why the SJTA is proposing these particular projects.

- **What is the underlying purpose and need for action?**

The objective is to transform an airfield that existed primarily as a government installation for nearly 50 years into a self-sustaining commercial airport capable of serving the air transportation needs of Southern New Jersey while, at the same time, helping the SJTA resolve aviation, environmental, and socioeconomic issues within the community.

- **Why is the FAA considering the proposed projects for approval?**

There are two principle reasons. First, the FAA Technical Center was obligated to turn over the airport to a non-federal agency, and the SJTA was created, in large part, for that purpose. When the FAA transferred control of the airport to the SJTA, one of the conditions of the agreement was that the FAA would support the Authority's future development and operation of ACY.

Second, an existing need is not being met, and it will not be unless the proposed improvements are made. The FAA is facing a major capacity problem at nearby Newark and Philadelphia airports. These are two of the busiest and most congested airports in the country; yet, most Southern New Jersey residents and visitors use *them* because ACY does not have the facilities or airlines needed to make *it* a viable travel option. The FAA is responsible for maintaining and improving the efficiency of the aviation system; making better use of ACY would help accomplish this task.

Thus, by considering the proposed projects for approval, the FAA is supporting the SJTA's mission to develop and promote ACY for air transportation and commerce – which, in turn, advances the FAA's interest in having ACY play a more meaningful and productive role in the National Airspace System.

- **Why is the SJTA proposing to undertake these particular improvements?**

*The SJTA needs to improve air service for travelers in Southern New Jersey.* Under the current situation, the vast majority of South Jersey's residents and visitors have to rely on Newark and Philadelphia airports when they require air transportation. This is because ACY does not have sufficient terminal space, gates, and other facilities to accommodate additional airlines and, therefore, offers a limited range of flights and destinations. The proposed action would permit the SJTA to expand the airport's facilities to meet the airlines' needs, thereby creating opportunities for new air service and improving air transportation for the entire South Jersey region.

*The SJTA needs to foster economic development in the South Jersey region.* When South Jersey's residents and visitors use Newark and Philadelphia airports, they are subsidizing improvements and economic growth in those communities rather than in South Jersey. The proposed action would permit the SJTA to construct and operate new facilities for additional airlines and passengers, as well as for the aviation-related businesses wanting to locate at ACY. These development activities would be expected to increase employment, earnings, and spending in the local community – thus contributing to South Jersey's economy.

The SJTA needs to enhance efficiency and safety at ACY. Many of the airport's existing facilities become heavily congested during busy periods, and a major effort is necessary to correct existing deficiencies and to enhance operational safety. The proposed action would increase the capacity of the passenger terminal building, aprons, and adjunct facilities; improve air access to the airport in all weather conditions; and improve taxiway efficiency and flow.

The SJTA needs to encourage revenue-producing land uses that support aviation-oriented infrastructure. Now that the federal, state, and local governments have transferred the airport to the SJTA, the management and operation of ACY must be financially self-sufficient, which has not been possible given the limited facilities and means available to generate airport income. The proposed projects would give the SJTA the ability to establish new revenue sources by developing the airport's land for aviation-related business purposes.

If no action is taken, then there are no other foreseeable sources of new or additional income for the airport; thus, the SJTA would not be able to finance the improvements needed. Consequently, South Jersey's air service would not be improved, local jobs and spending would not be increased, and airport safety and efficiency would not be enhanced. Furthermore, given the substantial costs associated with operating and maintaining the airport's infrastructure, it is not even certain whether the SJTA would be able to balance the airport's annual operating budget and pay existing debt. The need for ACY to be self-supporting is simply a necessary component in order for the SJTA to meet its (and the FAA's) goals and objectives and to operate ACY in a safe and efficient manner.

- **What are the projects that are included as part of this FEIS?**

First, the FEIS includes projects for which the SJTA has requested the FAA take environmental action. If the FAA approves the proposed projects, they could be implemented immediately or in the foreseeable future, subject to any conditions stated in the ROD. Therefore, these proposed projects are categorized as *near-term actions ripe for decision*. They include

- Terminal Area Development
- Auxiliary Area Development
- Hotel/Conference Center
- Runway 13-31 ILS Upgrade
- Holding Aprons

Second, the Master Plan and ALP present several long-range projects which are included in this FEIS only for information purposes.<sup>1</sup> They are not proposed at this time because 1) the justification and/or timing for them is not clearly established, and 2) no environmental action has been requested by the SJTA. Therefore, they are categorized as *long-range projects not ripe for decision*. These long-range projects will require additional environmental analysis when they become ripe for decision (i.e., at a later date) and would only be conditionally approved by the FAA on the ALP at this time. They include

- Direct Airport Access Roadway
- Runway 4-22 Extension
- High-Speed Taxiway Exits
- Non-Aviation Development along the White Horse Pike

---

<sup>1</sup>Projects that are not foreseeable are normally not included in an EIS. However, in response to agency scoping comments, long-range projects and the impacts associated with them are briefly described in this FEIS so the agencies and public may have a clear understanding of the entire airport layout development plan and the environmental consequences associated with it. No environmental action is being taken at this time for the long-range projects.

- Is the purpose and need for action a controversial issue? Did the FAA receive comments pertaining to this section of the DEIS and, if so, how did the FAA respond?

Yes, the FAA did receive several letters expressing opposing views – “for” and “against” the proposed action. Comments on the DEIS and the FAA’s responses are included in Appendix I of this FEIS.

Generally, those comments supporting the proposal stress the important role ACY plays in the community and how the improvements would enhance the airport, which is viewed as an important source for job creation and regional growth. Those comments opposing the proposal advocate that potential economic benefits should not override threatened and endangered species protection, and they maintain that the negative environmental effects are not warranted.

In addition to seriously considering *those* arguments, the FAA must also consider whether ACY has adequate facilities to accomplish the underlying purpose and need for action. The SJTA has stated throughout the planning process that the existing facilities do not accommodate existing demand, so there is no allowance for growth. To verify this, the FAA commissioned supplemental studies to ensure that the facility requirements are based upon approved FAA forecasts, and the following conclusions were made:

- Each project responds to a specific problem or deficiency
- Each project (or at least the initial construction phase) is supported by approved activity forecasts or third-party plans/proposals
- The near-term projects being considered for approval at this time are reasonable and necessary
- The overall scope and magnitude of development shown on the ALP is appropriate for planning purposes

As a result, this section of the FEIS includes additional technical information taken from the supplemental studies. It also includes new information pertaining to the purpose and need for aircraft holding aprons.

## Alternatives

The *Alternatives* section is the heart of this FEIS. It considers a wide range of alternatives to achieve the project purpose and need. It also presents the environmental consequences of the reasonable alternatives in comparative form.

- What range of alternatives was considered?

The alternatives range *from* exploring various on- and off-airport locations *to* using other modes of transportation *to* taking no action at all. Some of the alternatives considered fall within the FAA or SJTA's jurisdiction, while others do not. A screening process was used to identify alternatives that would not accomplish the project objectives as well as to identify those likely to cause greater environmental harm than the proposed action. Those alternatives were dismissed from further consideration.

- What is a "preferred alternative," and why have preferred alternatives been designated?

Preferred alternatives have been designated because the FEIS is required to identify the environmentally-preferred alternatives and the FAA/SJTA's preferred alternatives.

For each project, the environmentally-preferred alternative is the build alternative that results in the least amount of habitat loss and fragmentation when compared to the other build alternatives for that same project. These alternatives are located in the least environmentally constrained areas and are most likely to meet the strict Pinelands development standards because they are designed to avoid adverse impacts and offer mitigation to offset impacts that cannot be avoided. The FAA's preferred alternative is the one depicted on the ALP and is the alternative that the FAA/SJTA proposes to implement.

For all of the near-term projects, the environmentally-preferred alternatives and the FAA/SJTA's preferred alternatives are one and the same.

### *Terminal Area Development*

In order to accommodate existing and future passenger and airline needs, the SJTA proposes to develop new or expanded terminal area facilities.

- What are the major aspects of this proposal?

- |                               |   |
|-------------------------------|---|
| - Terminal building and gates | Phased development of new or expanded passenger handling facilities totaling 240,000 square feet, 16 jet gates and 8 commuter gates |
| - Public parking garage       | Construct a multi-level parking structure for 1,500 vehicles  |
| - Rental car maintenance      | Construct a vehicle service center and a surface parking lot  |
| - Airline cargo               | Phased development of freight storage/handling facilities totaling 106,000 square feet  |
| - General aviation            | Phased development of an aircraft storage hangars totaling 56,000 square feet, and additional aircraft parking                      |
| - Deicing apron               | Phased development of an apron for three jet aircraft, and a collection and storage system for contaminated runoff                  |

In addition, because there are several environmental concerns associated with the Build Alternative, mitigation measures are being incorporated early on – in an effort to provide solutions to potential environmental problems. These added projects or plans would avoid, minimize, rectify, reduce, or compensate for adverse environmental impacts should the Build Alternative be implemented. The proposed mitigation measures include, but are not limited to, the following:

- Grassland Conservation and Management Plan with Environmental Commitments
- Stormwater Management Plan
- Soil Erosion and Sediment Control Plan

- **What alternatives are being considered? Were any other alternatives dismissed from further consideration; if so, why?**

Two alternatives are evaluated in the FEIS: one build alternative and the No-Action Alternative. Originally, there were five on-airport build alternatives, discussed below. Three off-airport alternatives were also considered but were dismissed early on because they would not accomplish the project objectives and/or would result in greater environmental harm.

Five different locations on the airport were identified as candidate sites for terminal area development. Four of the concepts involved the construction of an entirely new terminal complex elsewhere on the airport – three of which would require hundreds of acres of open space to be developed (including land that may not be available to the SJTA). The fourth concept required relocation of the existing NJANG alert hangars and aircraft parking apron. Therefore, these four build alternatives were dismissed as being unreasonable because they result in greater environmental harm or interfere with the mission of another stakeholder, or both.

The remaining concept is to expand the existing terminal area facilities to meet the current and projected needs of the airport (see Figure ES-1). In this case, approximately half of the expansion would occur within areas currently mapped as developed land, barren land, or abandoned pavement. Approximately 66 acres could be redeveloped for the proposed project if this alternative is selected. It was determined that expansion of the existing facilities would require the least amount of open space to be developed, thereby reducing the potential loss of grassland and forest habitat. This alternative also avoids interfering with the FAA Technical Center or NJANG facilities and/or activities.

As required by NEPA, the FEIS also considers the No-Action Alternative. In this case, if no action is taken, the proposed terminal area development would not go forward, its objectives would not be met, and the environmental impacts that would have resulted from the Build Alternative would not occur. The No-Action Alternative represents the existing condition, including existing adverse environmental impacts that might continue if this alternative is selected.

- **What are the major environmental differences between the Build and No-Action Alternatives?**

The major environmental consequences associated with the Terminal Area Development alternatives are summarized in Table ES-1. Most notably, 50 acres of grassland would be developed and 9 acres of forest would be removed. Almost all of the grassland is classified as critical habitat for two state-listed birds: the upland sandpiper and grasshopper sparrow. To compensate for this loss of critical habitat, a Grassland Conservation and Management Plan has been developed. The plan provides sufficient suitable habitat in the northwest quadrant of the airport to sustain these species and ensures there would be no net loss in habitat value.

In terms of water resources, the Build Alternative would create 43 acres of new impervious cover, thus causing additional stormwater runoff volume and increasing the potential for pollutant loading. To reduce the potential for harmful effects on water resources, stormwater management BMPs have been incorporated into the proposed project. These BMPs include on-site retention, pretreatment, and infiltration systems to control the quantity and improve the quality of the stormwater runoff. There would also be preventative measures taken, as well as continued water quality monitoring in accordance with NJDEP permit requirements. The Build Alternative also includes a remote deicing apron designed and equipped for applying deicing and anti-icing chemical agents to aircraft during snow and freezing conditions. Runoff fluids from deicing/anti-icing activities would be collected by a drainage system and disposed of, thereby reducing the volume of chemicals currently permitted to flow to the edge of pavement into ditches and swales and toward the receiving waters.

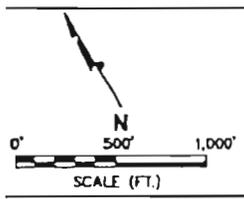
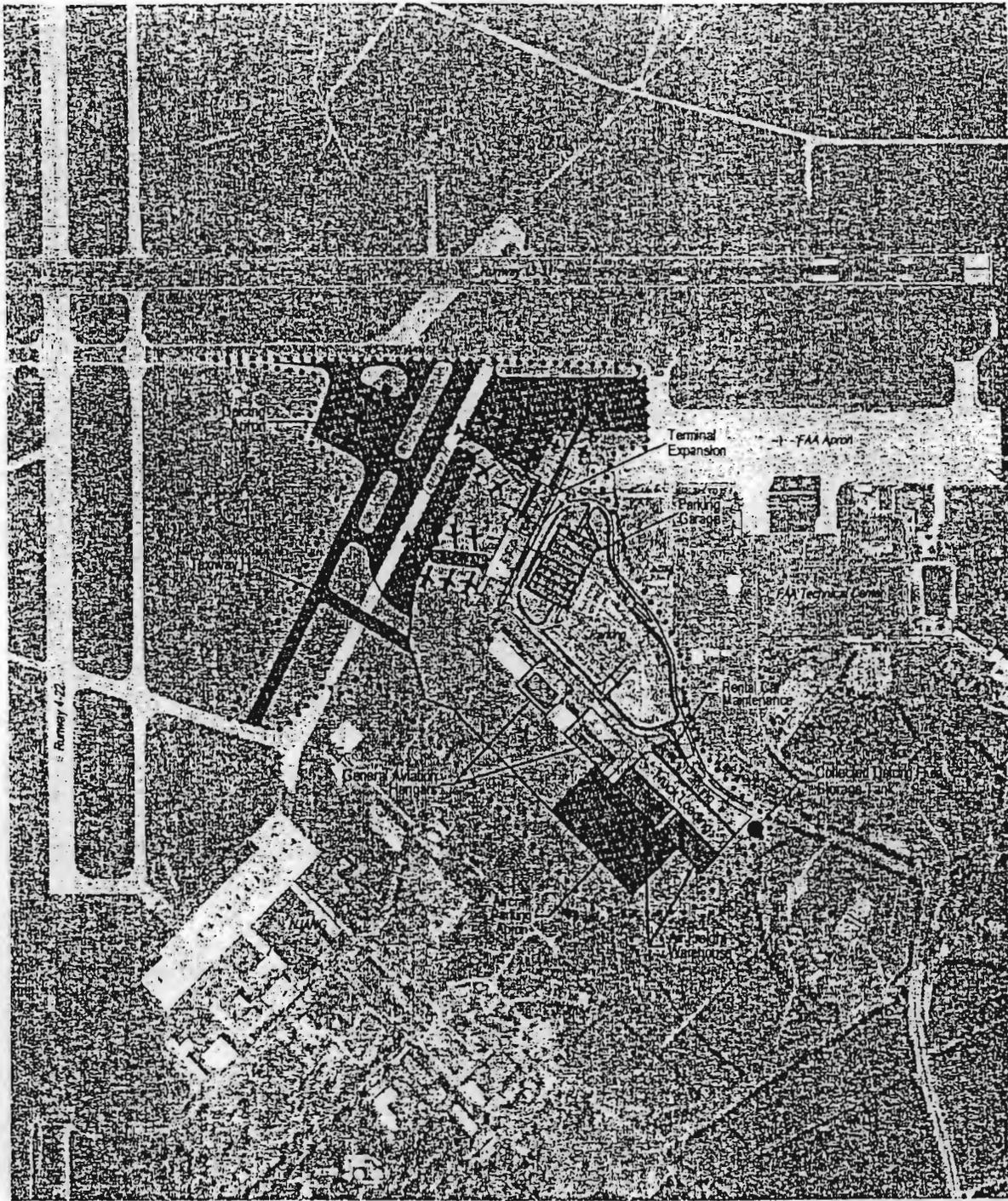
The Build Alternative would increase airport-related employment. An estimated 130 additional on-airport jobs are directly attributable to the proposed improvements (not including temporary construction employment). Furthermore, if one off-airport job is generated by every on-airport job, then the secondary (or induced) employment potential would be an additional 130 new jobs created.

The remaining environmental impacts associated with the Build Alternative (namely noise, air quality, wetlands, and hazardous waste) were determined to be manageable, or of little or no consequence.

The No-Action Alternative avoids taking open space for development purposes and preserves the existing critical habitat. However, it does not offer the potential benefits of the stormwater management system or the deicing facility associated with the Build Alternative; nor does the No-Action Alternative offer any economic benefits in terms of job creation and growth.

- Which is the FAA's preferred alternative?

The No-Action Alternative fails to meet the project's objectives. Therefore, the FAA proposes to implement the Build Alternative, with mitigation measures that reduce adverse environmental impacts to the extent practicable.



- LEGEND:**
- ..... LIMIT OF DISTURBANCE
  - ▬ PROPOSED PAVEMENT
  - ▬ PROPOSED BUILDINGS

**Figure ES-1**  
**Terminal Area Development**  
**Build Alternative**

Source: Prepared by OIA at Amherst. Mapping provided by the South Jersey Transportation Authority based on information from the 1996 Airport Master Plan Update. Aerial photography dated September 24, 1999.

Table ES-1  
Terminal Area Development Alternatives  
Decision Support Matrix

Impact Categories – Issues and/or Concerns		No-Action Alternative	Build Alternative 1 - Expand Existing Terminal Area
Noise & Land Use	Airport Operations	Takeoffs and landings remain at current levels (no change)	Takeoffs and landings increase up to 5.4 percent annually until 2020
	Residential Noise	0 residents cumulatively affected by incompatible noise levels in 2020	5 residents cumulatively affected by incompatible noise levels in 2020; no mitigation is needed, but a Part 150 Noise Compatibility Plan is being prepared by the SJTA voluntarily
Induced Development	Employment	No new jobs created	260 new jobs created (direct and indirect), most of which would likely be filled by existing Atlantic County residents
	Housing Demand	No change	No appreciable difference
Air Quality	Emissions Inventory of Pollutants of Concern and EPA Conformity Analysis	No impact	Additional mobile and stationary sources increase emissions of ozone precursors (VOCs and NOx); however, 2005 and 2020 cumulative ozone emissions are below federal and state standards
Water Resources	Impervious Cover	No change	43 acres of new impervious cover increases stormwater runoff and the potential for pollutant loading
	Stormwater Management	No improvement	Stormwater infiltration BMPs control the quantity and improve the quality of storm runoff
	Deicing Runoff Containment	No improvement	New deicing facilities collect, store, and properly dispose of spent deicing fluids (reducing biodegradation)
Biotic Communities	Grassland Areas	No impact	50 acres of grassland habitat developed; mitigation improves other grassland/shrub areas
	Forested Areas	No impact	9 acres of forest are removed
State-Listed Species	Upland Sandpiper Critical Habitat	No impact	34 acres of habitat lost; mitigation results in no net loss in habitat value
	Grasshopper Sparrow Critical Habitat	No impact	23 acres of habitat lost; mitigation results in no net loss in habitat value
	Frosted Elfin Sutable Habitat	No impact	Impact negligible
Wetlands	Low Quality Wetlands	No impact	1.07 acres of wetlands filled in; mitigation in accordance with NJDEP requirements
	High Quality Wetlands	No impact	No impact
Hazardous Waste	CERCLA Hazardous Waste Sites	No impact	2 listed sites affected; human health and environmental risks are low
	NJDEP Hazardous Waste Sites	No impact	2 listed sites affected; human health and environmental risks are low

## Auxiliary Area Development

To advance the airlines' interest in establishing maintenance and cargo facilities at ACY, the SJTA proposes to begin developing an area of the airport for aviation-related light industry.

- **What are the major aspects of this proposal?**

- Airline maintenance      Phased development of aircraft maintenance hangars for six jet aircraft
- Air freight warehouses      Phased development of freight storage/handling facilities totaling 47,000 square feet
- Full-length parallel taxiway      Construct a 75-foot wide taxiway on the west side of Runway 4-22
- Aircraft parking      Phased development of aircraft parking apron and connector taxiways as necessary
- Access roadway and parking      Establish point-of-access, construct a connector roadway, loading docks, and auto parking

- **What alternatives are being considered? Were any other alternatives dismissed from further consideration; if so, why?**

Three alternatives are evaluated in the FEIS: two build alternatives and the No-Action Alternative. One other build alternative was considered and dismissed because it was a much larger area than needed and would cause greater environmental harm. No other viable alternatives were identified.

Build Alternative 1 utilizes the northwest quadrant of the airport for auxiliary development (see Figure ES-2). This was the recommended concept in the Airport Master Plan, and, as such, it was identified as the SJTA's preferred alternative in the Environmental Assessment. The northwest quadrant is an ideal location from an airport planning perspective because there is enough open space to meet all the near-term facility requirements, plus there is long-range expansion potential for unanticipated growth. However, during the Environmental Assessment, it was determined that this alternative would result in substantial habitat loss and fragmentation and would severely impact several listed species. With the permit feasibility of Build Alternative 1 in doubt, another build alternative – one with fewer environmental impacts – was needed to meet the project's objectives.

Build Alternative 2 utilizes the undeveloped portion of the southwest quadrant of the airport (see Figure ES-2). It was developed by the SJTA for the sole purpose of reducing the adverse impacts associated with Build Alternative 1. In doing so, the SJTA also introduced a significant environmental protection strategy, which is to preserve the north side of Runway 13-31 as open space to be used to mitigate for this and other near-term actions. This southwest site is much smaller, which means there would be less grassland disturbance. Further, it is centrally located amidst other development (NJANG, Tilton Road, Runway 4-22), which means there would be less habitat fragmentation. ACY's near-term facility requirements can be met with this alternative; however, this smaller site is more restrictive in terms of site planning options and is not expandable like Build Alternative 1 in terms of long-range development.

The No-Action Alternative was also considered. In this case, the proposed auxiliary area development would not go forward, its objectives would not be met, and the environmental impacts resulting from the build alternatives would not occur. The No-Action Alternative essentially represents the existing condition.

• What are the major environmental differences between the two build alternatives and the No-Action Alternative?

The major environmental consequences associated with the Auxiliary Area Development alternatives are summarized in Table ES-2. By comparison, Build Alternative 2 (in the southwest area) causes far less environmental harm than Build Alternative 1 (in the northwest area). That is, Build Alternative 1 would cause greater impacts to grassland habitat on an acre-by-acre basis than would Build Alternative 2, and it would contribute to substantial fragmentation of the airfield by placing the facility in a remote location instead of concentrating development to the south of Runway 13-31. Even with Build Alternative 2, however, adverse effects cannot be avoided if the project objectives are to be met, so those effects would be mitigated to the extent practicable.

More specifically, Build Alternative 1 (northwest quadrant) requires 70 acres of grassland to be developed compared with 39 acres for Build Alternative 2 (southwest quadrant). However, the added impacts are not limited solely to the size of the affected area; the impacts would be greater in terms of habitat value too. This is because the northwest quadrant of the airport is entirely undeveloped and is one of the largest contiguous grassland/shrub complexes on the airfield. The diverse cover type in the northwest quadrant provides optimum nesting, breeding, and foraging habitat for grassland birds; foraging habitat for their predators; and suitable habitat for butterflies and moths. By comparison, the southwest quadrant is substantially developed, and the remaining vacant area is dominated by a mixed grass cover. Thus, the overall habitat value of the Build Alternative 2 site is less than optimal due to the existing development and fragmentation that has already occurred in this area. The fact that Build Alternative 2 requires five acres of forest to be cleared is not a major concern because that area was determined to have no habitat value for threatened and endangered species and forest interior birds.

Because most of the grassland affected by the two proposed build alternatives has been designated as critical habitat for state-listed and Pinelands-listed threatened and endangered species (namely the upland sandpiper and grasshopper sparrow), the adverse impacts to threatened and endangered species are significant with both build alternatives.

Build Alternative 1 (which includes the Runway 4-22 parallel taxiway) results in the loss of 19 acres of upland sandpiper critical habitat and 51 acres of grasshopper sparrow critical habitat. Furthermore, the extensive fragmentation caused by the proposed buildings, aprons, taxiways, and the access road would render the remaining habitat less suitable for both species. A population of narrow-leaved vervain (a state-listed plant) would be partially eliminated, and the frosted elfin (a state-listed butterfly) would also be adversely affected.

In contrast, Build Alternative 2 (which also includes the Runway 4-22 parallel taxiway) results in the loss of 40 acres of upland sandpiper critical habitat and 34 acres of grasshopper sparrow critical habitat. Although these impacts are still substantial on a per-acre basis, the location and design of this alternative minimizes the adverse effects of fragmentation by avoiding development in the more valuable northwest quadrant. Adverse impacts to the frosted elfin are unlikely with this alternative, and the narrow-leaved vervain would be avoided.

However, the most important difference between the two build alternatives is that the loss of this critical grassland habitat can be mitigated with Alternative 2 but not with Alternative 1. Alternative 1 conflicts with the proposed *Grassland Conservation and Management Plan*. According to that plan, the northwest quadrant of the airport is the only area (available to the SJTA) that is capable of providing sufficient, suitable grassland habitat for the two state-listed bird species adversely affected by the proposal. This means that if Build Alternative 1 were to be selected,

then the northwest area would be used for auxiliary development rather than for mitigation. Thus, a different mitigation plan would have to be prepared – and a viable alternative may not exist.<sup>2</sup>

In terms of water resources, Build Alternative 1 results in 65 acres of new impervious cover compared with 35 acres for Build Alternative 2. The difference is the southwest site is more compact, the access road is shorter, and there is less need for taxiway development. Although it was determined that both sites could be designed and built to comply with state and local stormwater management requirements, the magnitude of the facilities needed to meet these requirements are proportionately less with Build Alternative 2.

The remaining environmental impacts associated with the build alternatives (namely noise, air quality, wetlands, and hazardous waste) were determined to be manageable, or of little or no consequence. Both build alternatives offer the opportunity for near-term increases in employment.

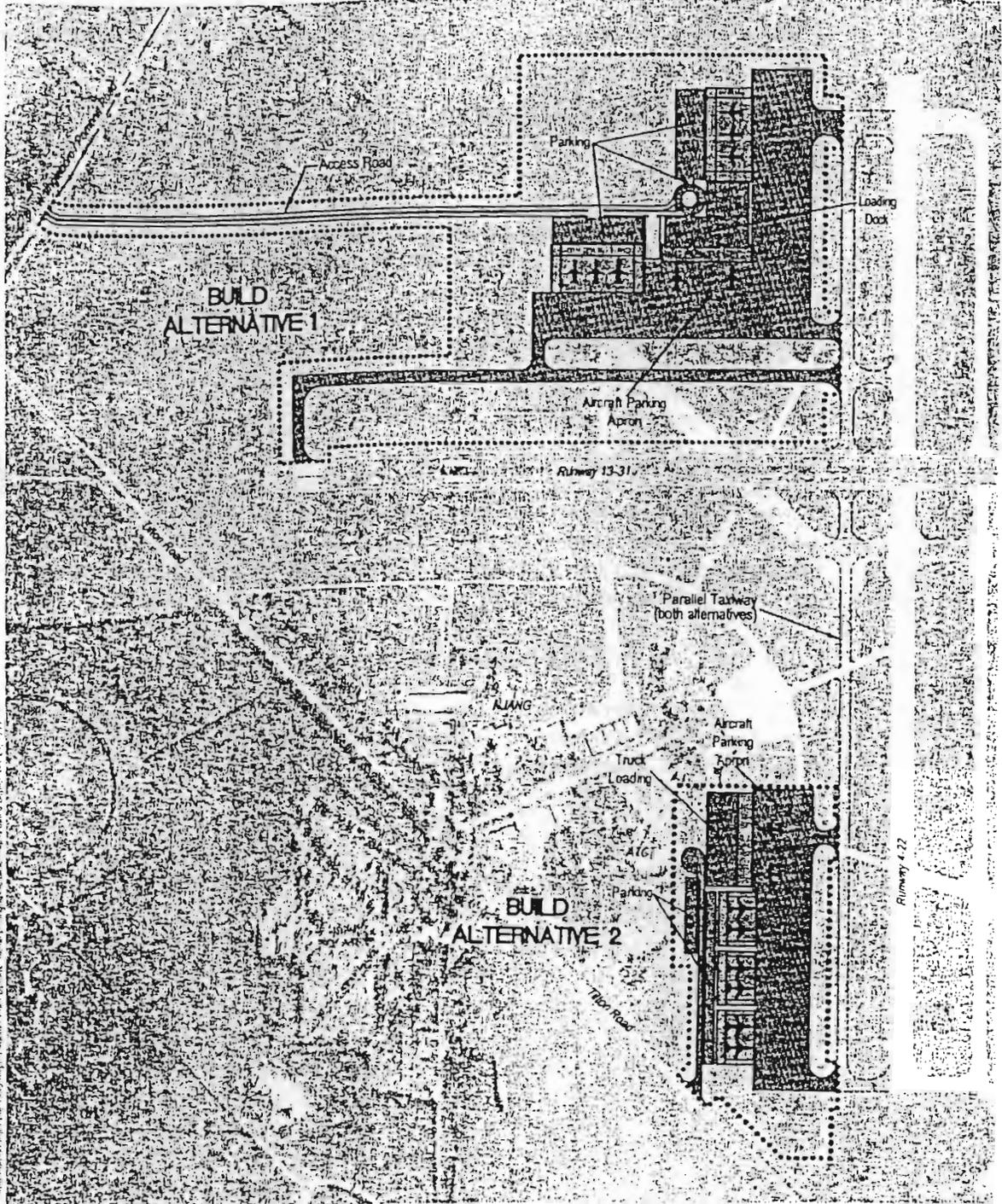
The No-Action Alternative avoids using open space for development purposes and preserves existing critical grassland habitat, thereby avoiding adverse impacts to the natural environment. However, the No-Action Alternative does not result in any positive effects to the human environment because there would be no job creation, regional economic growth, or added land-use revenues for ACY (revenue that is critical to the SJTA's continued maintenance, operation, and overall enhancement of the airport).

- **Which is the FAA's preferred alternative?**

The No-Action Alternative fails to meet the project's objectives. Therefore, the preferred alternative is Build Alternative 2, with mitigation measures to reduce adverse environmental impacts to the extent practicable.

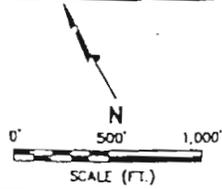
---

<sup>2</sup>Other on-site and off-site locations for grassland mitigation were examined, but a viable alternative could not be identified.



Source: Prepared by DTM/JM Aviation. Mapping provided by the San Joaquin Transportation Authority to assist in information from the 1985 Airport Master Plan Update. Aerial photograph base map is dated September 24, 1989.

Note: Full build-out of A/P projects shown for analysis and descriptive purposes.  
 The Proposed Parallel Taxiway is required to either build Alternative



- LEGEND**
- ..... LIMIT OF DISTURBANCE
  - - - - AIRPORT PROPERTY BOUNDARY
  - ▨ PROPOSED PAVEMENT
  - ▭ PROPOSED BUILDINGS

Figure ES-2  
 Auxiliary Area Development  
 Build Alternatives 1 & 2

**Table ES-2  
Auxiliary Area Development Alternatives  
Decision Support Matrix**

Impact Categories – Issues and/or Concerns		No-Action Alternative	Build Alternative 1 - Northwest Quadrant	Build Alternative 2 - Southwest Quadrant
Induced Development	Employment	No impact	190 new jobs created (direct and indirect); potential for expansion	190 new jobs created (direct and indirect); no potential for expansion
	Housing Demand	No impact	No appreciable difference	No appreciable difference
Water Resources	Impervious Cover	No change	65 acres of new impervious cover increases stormwater runoff and the potential for pollutant loading	35 acres of new impervious cover increases stormwater runoff and the potential for pollutant loading
	Stormwater Management	No change	Stormwater BMPs effectively control the quantity and quality of stormwater runoff	Stormwater BMPs effectively control the quantity and quality of stormwater runoff
Biotic Communities	Grassland Areas	No impact	70 acres of grassland developed; mitigation may not be feasible	39 acres of grassland developed; mitigation by improving other grassland areas
	Forested Areas	No impact	0.1 acre of forest is removed	4 acres of forest are removed
State-Listed Species	Upland Sandpiper Critical Habitat	No impact	19 acres of habitat lost; extensive fragmentation of habitat; mitigation may not be possible	40 acres of habitat lost; limited fragmentation of habitat; mitigation results in no net loss in habitat value
	Grasshopper Sparrow Critical Habitat	No impact	51 acres of habitat lost; extensive fragmentation of habitat; mitigation may not be possible	34 acres of habitat lost; limited fragmentation of habitat; mitigation results in no net loss in habitat value
	Frosted Elfyn Suitable Habitat	No impact	56 acres of suitable habitat lost and 2 documented sightings disturbed	No impact from auxiliary development, but 4 acres of suitable habitat removed for the parallel taxiway
	Narrow-leaved Vervain	No impact	0.2 acres of local population eliminated	No impact
Wetlands	Low Quality Wetlands	No impact	1.52 acres of wetlands filled in; mitigation in accordance with NJDEP requirements	No impact from auxiliary development, but 0.24 acres of wetlands filled in for the parallel taxiway; mitigation in accordance with NJDEP requirements
	High Quality Wetlands	No impact	No impact	No impact
Hazardous Waste	CERCLA Hazardous Waste Sites	No impact	One listed site affected by development but is avoided until CERCLA-approved for use	One listed site affected by mitigation but is avoided until CERCLA- approved for use
	NJDEP Hazardous Waste Sites	No impact	No impact	No impact

NOTE: The quantities associated with Build Alternatives 1 and 2 include the parallel taxiway for Runway 4-22, a connected action.

## Hotel/Conference Center

In response to the demand for on-site lodging and meeting facilities, the SJTA proposes to allow a third-party developer to construct a hotel/conference center on airport property.

- What are the major aspects of this proposal?

- One three-story building for 150 suites
- Lobby area and amenities
- Swimming pool and outbuildings
- Auto parking

- What alternatives are being considered?

Three alternatives are evaluated in the FEIS: two build alternatives and the No-Action Alternative. Build Alternative 1 places the facility along Amelia Earhart Boulevard, while Build Alternative 2 places the facility at the Airport Circle intersection (see Figure ES-3). No other viable build alternatives were identified. If no action is taken, then the hotel/conference center would not be constructed on airport property.

- What are the major environmental differences between the two build alternatives and the No-Action Alternative?

The major environmental consequences associated with the Hotel/Conference Center alternatives are summarized in Table ES-3. Most important are the potential adverse effects that the build alternatives would have on upland forests, forest interior species, and habitat for the state-listed Cooper's hawk and barred owl.

Build Alternative 1, along Amelia Earhart Boulevard, was modified between the draft and final EIS in an attempt to minimize adverse environmental consequences to forested areas. The new, modified alternative requires 8.3 acres of pine-oak forest to be cleared and 1.0 acre of internal forest roads to be redeveloped. In total, there would be a direct loss of 9.3 acres of Cooper's hawk nesting territory.

Build Alternative 2, at the Airport Circle intersection, requires 13.9 acres of pine-oak forest to be removed from two NJDEP-designated protected habitat zones – one for the Cooper's hawk and the other for the barred owl. Although these protected areas do not presently contain nest sites, they may still provide suitable breeding habitat, and the NJDEP recommends that such areas be set aside for habitat protection. However, the results of supplemental Cooper's hawk and barred owl surveys and field investigations determined that Cooper's hawk do not nest in the vicinity of the project and the site does not contain nesting or foraging habitat for the barred owl.

In terms of other impacts, both build alternatives increase impervious cover by approximately three acres; therefore, they each include stormwater management BMPs to control the quantity and quality of stormwater runoff. The potential adverse effects upon wetlands would be avoided through stormwater BMPs. Build Alternative 1 is located near two hazardous waste sites with ongoing remedial activities, but these sites could be avoided. The potential for traffic-related effects was also considered, and in that respect, Build Alternative 1 would be preferable because this location is not likely to lower the level of service at the Airport Circle intersection (as Build Alternative 2 likely would).

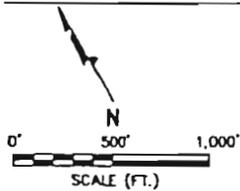
The No-Action Alternative avoids clearing wooded areas for development and preserves existing forest habitat areas; it avoids the potential for adverse impacts to wetlands, water resources, hazardous waste sites, and traffic on the local roadways. However, adverse environmental impacts cannot be avoided if the project objectives are to be met. The No-Action Alternative does not result in a positive effect on the human environment because the proposed hotel/conference center would generate approximately 60 jobs for the community and revenue for the airport – while providing a much needed service to the airlines, passengers, and the FAA Technical Center.

- Which is the FAA's preferred alternative?

The No-Action Alternative fails to meet the project objectives. Build Alternative 2 is considered to be the environmentally preferable alternative because it avoids a direct loss of Cooper's hawk nesting territory. In response to agency concerns with respect to the DEIS, the FAA and SJTA have now selected Build Alternative 2 (rather than Build Alternative 1 as stated in the DEIS) as their preferred alternative as well, with mitigation measures to reduce adverse environmental impacts to the extent practicable.

Figure 2-3  
The Conference Center  
Build Alternative 2

Source: Prepared by DUDJ Aviation Mapping provided by the South Jersey Transportation Authority. Aerial photographic base map is dated September 21, 1999.



**LEGEND**

- LIMIT OF DISTURBANCE
- - - - AIRPORT PROPERTY BOUNDARY

Figure ES-3  
Hotel/Conference Center  
Build Alternatives 1 & 2

Table ES-3  
 Hotel / Conference Center Alternatives  
 Decision Support Matrix

Impact Categories – Issues and/or Concerns		No-Action Alternative	Build Alternative 1 along Amelia Earhart Blvd	Build Alternative 2 at Airport Circle
Induced Development	Employment	No new jobs created	60 new jobs created	60 new jobs created
	Housing Demand	No change	No appreciable change	No appreciable change
Water Resources	Impervious Cover	No change	3 acres of new impervious cover increases stormwater runoff and the potential for pollutant loading	3 acres of new impervious cover increases stormwater runoff and the potential for pollutant loading
	Stormwater Management	No change	Stormwater BMPs effectively control the quantity and quality of stormwater runoff	Stormwater BMPs effectively control the quantity and quality of stormwater runoff
Biotic Communities	Grassland Areas	No impact	No impact	No impact
	Forested Areas	No impact	8.3 acres of pine-oak forest are removed 1.0 acres of internal forest roads would be developed	13.9 acres of pine-oak forest are removed
State-Listed Species	Cooper's Hawk Habitat	No impact	9.3 acres of Cooper's hawk nesting territory lost; <sup>3</sup> proposed mitigation would restrict construction activities during breeding season	13.9 acres of NJDEP-protected habitat lost; surveys determined that the species does not nest in the vicinity; mitigation would restrict construction activities during breeding season
	Barred Owl Habitat	No impact	No impact	13.9 acres of NJDEP-protected habitat lost; surveys determined that nesting and foraging habitat is not present; proposed mitigation would restrict construction activities during breeding season
Wetlands	Low Quality Wetlands	No impact	No impact	No impact
	High Quality Wetlands	No impact	No impact	No impact
Hazardous Waste	CERCLA Hazardous Waste Sites	No impact	In proximity of 2 listed sites; adverse impacts are not anticipated	No impact
	NJDEP Hazardous Waste Sites	No impact	No impact	No impact

<sup>3</sup>The nesting territory includes one acre of dirt roads.

## Runway 13-31 ILS Upgrade

To improve the utility of Runway 13-31, the SJTA proposes to install electronic navigational aids on Runway 31. This instrument landing system, or ILS, would increase airfield efficiency and operational safety when pilots have to land on Runway 31 during inclement weather.

- What are the major aspects of this proposal?

- Localizer antenna
- Glide slope antenna
- Medium intensity approach light system (MALSR)
- Marker beacons

- What alternatives are being considered?

Three alternatives are evaluated in the FEIS: two build alternatives and the No-Action Alternative. Build Alternative 1 would install a new Category I ILS on Runway 31. Build Alternative 2 would move the existing Category I ILS from Runway 13 to Runway 31; then a new, upgraded Category II ILS would be installed on Runway 13. If no action is taken, then an ILS would not be installed on either runway end. No other alternatives were identified.

- What are the major environmental differences between the two build alternatives and the No-Action Alternative?

The major environmental consequences associated with the Runway 13-31 ILS Upgrade alternatives are summarized in Table ES-4. The potential impacts associated with the two build alternatives are virtually the same. Build Alternative 2, which, by definition, includes Build Alternative 1, increases the direct loss of biotic communities, but the total is just slightly greater than one acre. The same is true for loss of habitat for the upland sandpiper and grasshopper sparrow (the loss of habitat is approximately one-third acre and would be mitigated under the *Grassland Conservation and Management Plan*). Both build alternatives would result in a minor loss of suitable habitat for the frosted elfin; however, restoration of 0.8 acres of forest to be removed would benefit the species by providing a net increase in suitable habitat. Both alternatives would result in the removal of 0.8 acres of forest designated as protected habitat for the barred owl and Cooper's hawk by the NJDEP. Barred owl would not be adversely affected because foraging and nesting habitat is not present in the project area. The Cooper's hawk is not documented to breed in the vicinity of the project but may use the area for foraging, thus the removal of 0.8 acre of forest would not adversely affect the Cooper's hawk. Both build alternatives would increase light emissions, but there are no incompatible land uses in the area.

Under the No-Action Alternative, the build alternative would not be implemented and the project objectives would not be met. An ILS would not be installed on Runway 31, and the airport would have to continue to rely solely on the existing Runway 13 ILS.

- Which is the FAA's preferred alternative?

The No-Action Alternative fails to meet the project objectives. The preferred alternative is Build Alternative 2.

Table ES-4  
Runway 13-31 ILS Upgrade Alternatives  
Decision Support Matrix

Impact Categories – Issues and/or Concerns		No-Action Alternative	Build Alternative 1 Install an ILS on RW31	Build Alternative 2 Upgrade ILS on RW13 and Install an ILS on RW31
Biotic Communities	Grassland Areas	No impact	0.3 acre of grassland/shrub habitat removed; minimal impact on grassland species	0.4 acre of grassland/shrub habitat removed; minimal impact on grassland species
	Forested Areas	No impact	0.8 acre of pine-oak forest habitat is removed; minimal impact on forest interior species	0.8 acre of pine-oak forest habitat is removed; minimal impact on forest interior species
State-Listed Species	Upland Sandpiper Critical Habitat	No impact	0.28 acre of habitat lost; mitigation results in no net loss in habitat value	0.37 acre of habitat lost; mitigation results in no net loss in habitat value
	Grasshopper Sparrow Critical Habitat	No impact	0.06 acre of habitat lost; mitigation results in no net loss in habitat value	0.19 acre of habitat lost; mitigation results in no net loss in habitat value
	Frosted Elfín Habitat	Suitable No impact	0.007 acre of suitable habitat lost; restoration of 0.8 acres of removed forest results in a net increase in suitable habitat	0.007 acre of suitable habitat lost; restoration of 0.8 acres of removed forest results in a net increase in suitable habitat
	Cooper's Hawk and Barred Owl Habitat	No impact	0.08 acre of NJDEP-designated protected habitat would be lost; barred owl nesting and foraging habitat not present  Impacts to Cooper's hawk unlikely	0.8 acre of NJDEP-designated protected habitat would be lost; barred owl nesting and foraging habitat not present  Impacts to Cooper's hawk unlikely
Light Emissions	Directional Lighting	No change	Approach lights would be re-introduced on the east end of the runway	Approach lights would be re-introduced on the east end of the runway; existing approach lights would be intensified on the west end of the runway
	Incompatible Land Uses	No impact	There are no incompatible land uses in the affected area	There are no incompatible land uses in the affected area

## Holding Aprons

To increase taxiway efficiency and operational safety, the SJTA proposes to construct holding aprons (or arm/de-arm pads) at each end of Runway 13-31. These holding aprons would separate military aircraft when arm/de-arm procedures are being performed so that bypass operations can occur.

- **What are the major aspects of this proposal?**

- Paved apron areas at each end of Runway 13-31 sufficiently sized and constructed to accommodate four (F-16) aircraft parking positions and a taxilane around them

- **What alternatives are being considered? Were any other alternatives dismissed from further consideration; if so, why?**

Two alternatives are evaluated in the FEIS: the No-Action Alternative and the Build Alternative. The Build Alternative would extend the existing run-up pads at each end of Runway 13-31 so they function as holding aprons instead (See Figure ES-4). If no action is taken, these holding aprons would not be constructed.

The FAA and SJTA relied on the NJANG to identify those alternatives that offered the *safest* military and civilian operations possible and with the least potential disruption to civilian air traffic. While the NJANG considered several other alternatives (in both central and decentral locations), they only recommended one for evaluation in the FEIS, finding the others to be less safe than the preferred alternative.

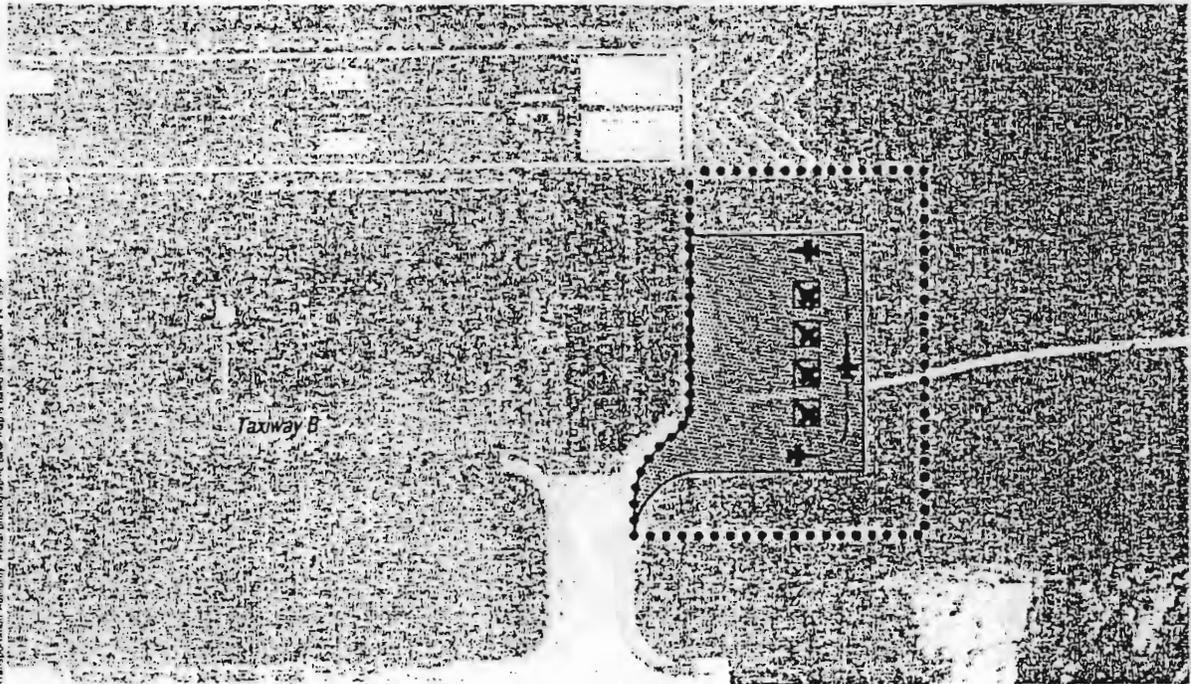
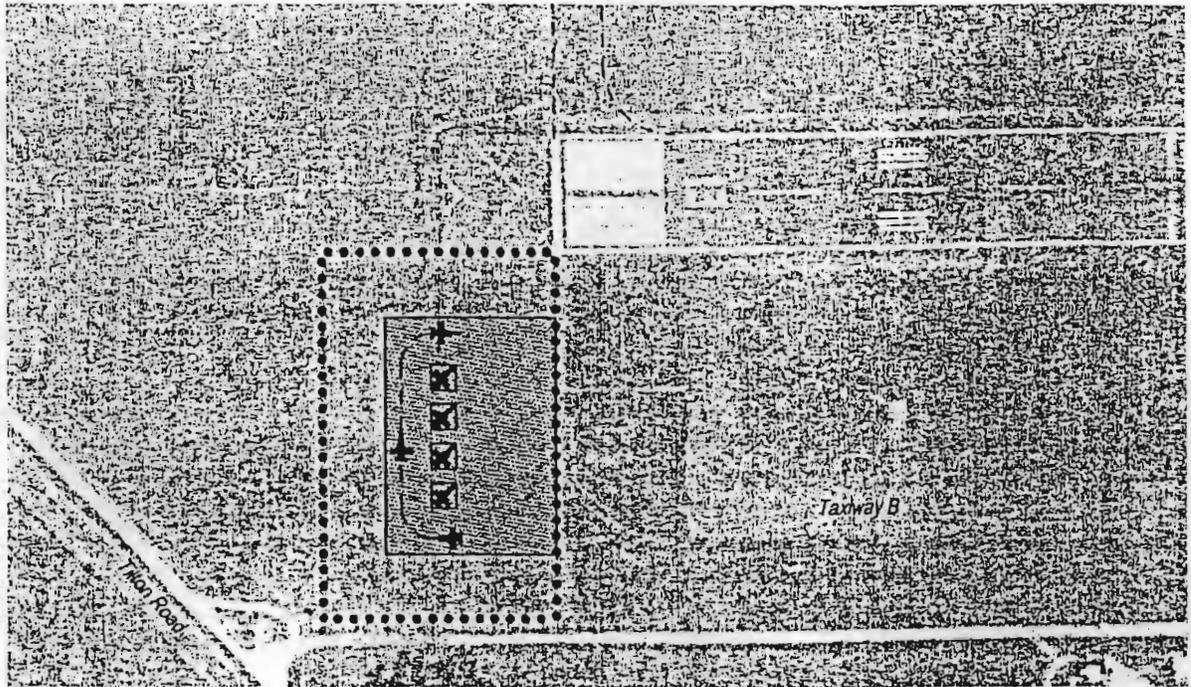
- **What are the major environmental differences between the Build and No-Action Alternatives?**

The major environmental consequences associated with the construction of holding aprons at each end of Runway 13-31 are summarized in Table ES-5. The Build Alternative would result in the removal of 4.36 acres of critical grassland habitat for the upland sandpiper and grasshopper sparrow. The loss of critical habitat would be offset by the *Grassland Conservation and Management Plan*. There would be no effect on the frosted elfin because suitable habitat for the species is not present in the project area. Less than one-tenth of an acre of wetland (ditch) would be filled as a result of grading activities. Wetland mitigation would be performed as necessary.

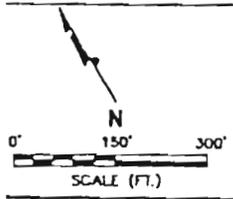
Under the No-Action Alternative, holding aprons would not be constructed at each end of Runway 13-31, and the project objectives would not be met. Civilian aircraft would continue to encounter delays while waiting for military aircraft to complete arm/de-arm procedures and quick-checks. In addition, these military procedures would continue to occur in close proximity to civilian aircraft.

- **Which is the FAA's preferred alternative?**

The No-Action Alternative fails to meet the project objectives. The preferred alternative is the Build Alternative.



Source: Prepared by DDU Aviation. Mapping provided by the South Jersey Transportation Authority. Aerial photographic base map is dated September 24, 1999.



**LEGEND**  
 ••••• LIMIT OF DISTURBANCE  
 [Cross-hatched box] PROPOSED PAVEMENT

**Figure ES-4**  
**Holding Apron**  
**Build Alternative**

Table ES-5  
Holding Apron Alternatives  
Decision Support Matrix

Impact Categories – Issues and/or Concerns		No-Action Alternative	Build Alternative 1 - Expand Run-up Pads at Each End of Runway 13-31
Water Resources	Impervious Cover	No change	4.6 acres of new impervious cover; the quality/quantity of stormwater runoff would not change appreciably
	Stormwater Management	No improvement	Stormwater BMPs control the quantity and improve the quality of stormwater runoff
Biotic Communities	Grassland Areas	No impact	4.36 acres of grassland developed; grassland conservation and management provides similar grassland habitat to that lost
	Forested Areas	No impact	No impact
State-Listed Species	Upland Sandpiper Critical Habitat	No impact	4.8 acres of habitat lost; grassland conservation and management results in no net loss in habitat value
	Grasshopper Sparrow Critical Habitat	No impact	3.3 acres of habitat lost; grassland conservation and management results in no net loss in habitat value
	Frosted Elfin Suitable Habitat	No impact	No impact
Wetlands	Low Quality Wetlands	No impact	0.8 acres of isolated (ditch) wetland at the 13 end of Runway 13-31
	High Quality Wetlands	No impact	No impact

*Other Long-Range Projects (Direct Airport Access Roadway, Runway 4-22 Extension, High-Speed Taxiway Exits, Non-Aviation Development along the White Horse Pike)*

Although there are four other long-range projects depicted on the ALP and discussed in the FEIS, no action is being taken on them at this time. They are presented for information purposes only, at the request of agencies wanting a clear understanding of the future development of the airport – beyond just the near-term projects. Further environmental analysis in accordance with NEPA will be required before any approval action can be taken on these projects.

- **What are the major aspects of the Direct Access Roadway project? What are the potential environmental issues or concerns?**

For long-range planning purposes, the ALP depicts a new interchange west of Exit 9 (on the Atlantic City Expressway) and a new road leading directly into the terminal area. The direct access roadway could reduce traffic volumes on local roadways, but constructing it could also adversely affect several environmental resources. The affected environment includes: surface water, biotic communities, threatened and endangered species, wetlands, floodplains, and hazardous waste sites. The curved alignment of the future roadway reflects the planner's attempt to avoid these resources, but that may not be possible if the project's objectives are to be accomplished.

- **What are the major aspects of the Runway 4-22 Extension project? Are the environmental consequences potentially significant?**

For long-range planning purposes, the ALP depicts Runway 4-22 at a full length of 8,000 feet. The extension could increase the safety and the utility of the runway, but constructing it could also adversely affect several environmental resources. The affected environment includes: surface water, biotic communities, threatened and endangered species, wetlands, floodplains, and hazardous waste sites. The FEIS identifies three build alternatives capable of accomplishing the project's objectives. Build Alternative 2, which extends the runway 1,578 feet to the north and 278 feet to the south, is the build alternative most likely to minimize adverse impacts as compared with the other two build alternatives.

- **What are the major aspects of the High-Speed Taxiway Exits project? Are the environmental consequences potentially significant?**

For long-range planning purposes, the ALP depicts acute-angled taxiways (also known as high-speed taxiway exits) along Runway 13-31. Constructing the taxiway exits could improve the operational efficiency and safety of the runway. This project would be relatively small, and the environmental impacts would likely be manageable because the affected environment includes only small amounts of grassland between the runway and the taxiway. The location of high-speed taxiway exits are fixed by function, so any alternatives would be limited to design variations and mitigation techniques.

- **What are the major aspects of Non-Aviation Development along the White Horse Pike? Are the environmental consequences potentially significant?**

For long-range planning purposes, the ALP depicts an area on the north side of the airport that the SJTA could use for non-aviation development. Using this area for light industrial or commercial use would generate additional revenue for the airport, but the development could also encroach upon several environmental resources. The affected environment includes: surface water, biotic communities, habitat for threatened and endangered species, wetlands,

floodplains, and hazardous waste sites. Depending on the location and size of the site needed to accommodate a future development proposal, those resources may be able to be avoided.

## Environmental Consequences

This section summarizes the potential impacts, both adverse and beneficial, to the human and natural environment. Where appropriate, it also describes the mitigation measures available to minimize or avoid adverse impacts resulting from the alternatives considered.

### *Aircraft Noise*

According to FAA policy, ACY generates sufficient daily jet aircraft operations to warrant consideration of noise as part of any development proposal. Therefore, aircraft noise was identified as a significant scoping issue to be addressed in the FEIS.

- **In general, is airport-related noise in the project study area expected to increase or decrease over time, and what changes are expected?**

The analysis indicates that noise levels in the vicinity of the airport are expected to diminish over the next ten years whether the proposed action is implemented or not. The anticipated noise reduction is due to the airline industry's ongoing replacement of older, noisier airplanes with newer, quieter ones. For this reason, even assuming the worst-case noise scenario, there would still be a substantial reduction in land area and population exposed to incompatible noise levels, as compared with existing conditions.

- **Are there near-term projects that would directly affect noise exposure in the vicinity of the airport?**

No. There are no proposed airfield or airspace modifications that would change the airport's operating characteristics in a manner that would introduce aircraft overflights (and noise) to a previously unaffected area. Thus, the "shape" of the noise contours would not change.

- **If there are no projects that would affect the noise contours, then on what basis was the noise analysis prepared?**

Taking into account the expected benefits of quieter commercial aircraft operations, the predicted noise levels associated with the future "Build" and "No-Build" conditions were compared. The assessment is based on the projected types of aircraft and aircraft operations. It was assumed that if no action is taken, aircraft operations would remain unchanged. Conversely, if a build alternative is selected, then it was assumed that aircraft operations would increase. On this basis, future noise contours were prepared for 2005, 2010, and 2020 for the Build and the No-Build conditions.

- **What did the noise analysis conclude? Is there a difference between the "Build" and "No-Build" alternatives? Are there proposed mitigation measures?**

If no action is taken, then no residents would be affected by incompatible noise levels in 2020. In contrast, five residents would be affected if a build alternative is selected. Therefore, implementation of the proposed action would result in five residents still being affected by incompatible noise levels in 2020, which is far less than the 26 residents that are affected by the same noise level today.

Noise mitigation measures are not proposed as part of this FEIS. However, the SJTA is voluntarily preparing a Noise Compatibility Plan for ACY. That plan will identify alternative methods to reduce the existing adverse effects of airport-related noise on incompatible land uses.

- Are there possible noise impacts associated with the long-range projects?

Three concepts for extending the secondary runway (Runway 4-22) are discussed in the FEIS. The noise analysis indicates that, regardless of the alternative, incompatible noise levels would not extend beyond airport property in either direction. Even so, no action is being taken on this project at this time.

#### **Compatible Land Use**

The proposed projects would occur on existing FAA Technical Center property and, for the most part, on land leased to the SJTA for airport development. Therefore, land use compatibility was not identified as a significant scoping issue.

- Are land uses on or around ACY likely to change as a result of either the near-term or long-range projects?

No major land use ramifications have been identified, on or off the airport. There would be no land acquisition, no business or residence relocations, and no need for zoning changes. The proposed projects are consistent with the applicable land use and transportation plans; except for the Pinelands Comprehensive Management Plan, for which a consistency determination is pending their review of the FEIS.

Furthermore, the proposed projects would not interfere with the missions of the FAA Technical Center, the NJANG, or the USCG. The FAA Technical Center's Master Plan Siting Board would continue to be responsible for resolving minor issues such as lease amendments, utility easements, etc.

#### **Social Impacts**

Although social impacts were not identified as a significant scoping issue, employment and environmental justice were two issues identified for further examination.

- Would the near-term and long-range projects cause employment to change?

The proposed action would generate new job opportunities for area residents, thereby increasing employment in the community. Approximately 550 new jobs would be directly and indirectly created (295 on-airport and 250 off-airport) by 2010. Nevertheless, this is only approximately one percent of Atlantic County's total employment, so the local (un)employment rates would not change appreciably as a result.

- In terms of environmental justice, would the projects disproportionately affect minority or low-income populations?

There would be no negative off-airport impacts to any individuals – regardless of their race or income status.

- Would the projects change the surrounding human and/or physical environment and the relationship of people with that environment?

There would be no relocation of residences or businesses, no division of established communities, and no alterations to surface transportation patterns. Regional and local planning agencies were consulted about planned development in the area, and no potential conflicts were identified.

#### **Secondary (Induced) Development**

The potential for airport development to cause unanticipated growth was identified as a significant issue. More specifically, the concern was whether or not the land demand for housing would increase appreciably as a result of the proposed action, and if so, whether the existing "regional growth area" would be able to accommodate that increase.

- Would the near-term or long-range projects stimulate housing development in the surrounding area?

In terms of demand, the analysis shows that it would be unlikely for Atlantic County to experience exponential growth as a result of the proposed action. In the case of ACY, the airport is a trailing indicator of the local economy, not a leading one. The analysis indicates that airport activity is not a major driver of land and resource demand. In terms of supply, Atlantic County housing data reveals that the current vacancy rate is nearly twice the New Jersey average, indicating a current housing surplus. Further, much of Atlantic County is designated as a Pinelands Regional Growth Area, meaning that development is allowed and encouraged because this area is experiencing development pressure and is capable of accommodating reasonable growth. It is estimated that there would be slightly more than 1,000 new hires in total (550 airport jobs associated with the proposed action and another 500 jobs associated with the FAA Technical Center) over a five-to-ten-year period. Even if every one of these positions were to be filled by someone relocating to Atlantic County, the projected increase is well within the Pinelands Commission's established growth rates for the County.

#### **Air Quality**

ACY is located in an area that does not meet federal or state air quality standards for ozone – in other words, this area is in "nonattainment" for ozone. Under FAA policy, airport actions that would permit an increase in aircraft or vehicle operations in a nonattainment area are considered potentially significant until analysis indicates otherwise. Therefore, air quality was identified as a significant scoping issue to be addressed in the FEIS.

- Would the near-term or long-range projects increase emissions of pollutants of concern; and, if so, would the increase exceed air quality standards?

Aircraft operations, motor vehicles, ground support equipment, and other facility improvements associated with the proposed action (including construction) would increase emissions of VOCs (volatile organic compounds) and NO<sub>x</sub> (oxides of nitrogen) – the two pollutants that combine to form ozone in the atmosphere.

The EPA's conformity review process was used to determine whether threshold emissions levels would be exceeded by the proposed action, triggering the need for further air quality analysis that incorporates mitigation techniques. Threshold emissions levels are based on the proposed action's net annual emissions (that is, build emissions levels minus the no-build emissions levels). For evaluation purposes, the build alternative is based on the high-growth forecast for

passenger enplanements and aircraft operations (this represents the air quality worst-case scenario). The results of the analysis indicate that the projected increases in VOC and NO<sub>x</sub> emissions are less than half of the threshold emissions levels for these two pollutants, and they would contribute less than one percent to the region's emissions inventory. Therefore, EPA's general conformity requirements would not apply to the proposed action, and no further analysis is needed.

### **Water Resources**

Surface and groundwater features in the project study area contribute to Atlantic City's drinking water supply, and the surface waters serve an important habitat function as well. Runoff from airport activities could have harmful effects on these water resources unless managed correctly. Therefore, the protection of water resources was identified as a significant scoping issue to be addressed in the FEIS.

- **What are the potential effects that the near-term and long-range projects would have on surface water and groundwater resources?**

If the proposed action is implemented, additional buildings and pavements would be constructed and used for commercial and industrial-type land uses.<sup>4</sup> In total, the preferred alternatives would increase impervious cover by approximately 86 acres (an increase of 2 percent – that is, from 8 to 10 percent of the 5,000-acre study area). As impervious cover increases, groundwater recharge is reduced because less precipitation is able to infiltrate the soils to the groundwater table below. As the volume of stormwater runoff increases, so does the risk of flooding.

Further, as runoff increases, so does the potential for stormwater pollution. Potential pollution sources include erosion and sedimentation from construction, wastes from fueling and cleaning operations, fuel and oil spills, wastes from chemicals used in snow and ice removal, and fertilizers and pesticides used for insect and vegetation control. Runoff that does not infiltrate to the groundwater table or evaporate at the surface eventually flows to the North and South Branches of Absecon Creek and then into the Upper Atlantic City Reservoir, which is the site for nine municipal drinking water wells.

On the other hand, the proposed deicing facility is intended to have a beneficial effect on water quality. If implemented, runoff fluids from aircraft deicing/anti-icing activities would be collected by a drainage system and disposed of, thereby reducing the volume of chemicals permitted to flow to the edge of pavement into ditches and swales and toward the receiving waters.<sup>5</sup>

**Which mitigation measures are proposed, and what beneficial effects do they offer?**

To minimize the adverse effects of the increased runoff and pollutant loading, stormwater BMPs have been incorporated into the proposed action. These specific measures include:

- *A Stormwater Management Plan* that would adequately control the quantity and quality of stormwater runoff. The increased volume of stormwater can be retained and

---

<sup>4</sup>There are no industrial process wastewater discharges associated with the proposed action.

<sup>5</sup>To remove and prevent the buildup of ice and snow on aircraft surfaces, the airlines must apply deicing or anti-icing agents to aircraft to ensure the safety of operations during freezing conditions. Deicing agents contain ethylene glycol which is highly soluble and rapidly biodegrades. When spent deicing fluids are mixed with stormwater and released into the environment, they cause oxygen depletion that can harm fish and other aquatic life.

infiltrated on site, thereby minimizing the potential for flooding. Underground infiltration systems (with or without detention or retention basins) are the most viable means of achieving the desired results.<sup>6</sup> The infiltrators would be coupled with pretreatment devices (such as oil/water separators) that decrease the pollution contribution to surface water and groundwater resources.

Although there are only conceptual plans available at this time, the engineer's evaluation indicates that the proposed action can be designed to conform with stringent Pinelands Comprehensive Management Plan requirements and NJDEP's regulations for stormwater management.

- A *Stormwater Pollution Prevention Plan* that identifies potential sources of runoff pollution and implements procedures to avoid, minimize, and/or control pollutants in stormwater discharges. This includes in it a *Spill Prevention, Control and Countermeasures Plan* that prescribes steps to be taken to avoid hazardous material spills and tells how to minimize the risk of harm to surface waters in the event of an accidental release or spill. ACY already has these plans in place for existing facilities and operations, so they would be revised to include the proposed projects and new operations.
- A *Soil Erosion and Sediment Control Plan* that would be implemented during the excavation, grading, and construction phases of each project to reduce surface water pollution occurring as a result of sedimentation (caused by the loss of natural upper soil horizons resulting from construction-related activities).

#### **Cultural Resources**

The FAA Technical Center recently completed a thorough investigation of the presence/absence of prehistoric and historic resources on their property, including ACY. Only a few small sites were determined potentially eligible for listing on the National Register of Historic Places; the Environmental Assessment concluded that these resources were located in remote areas and would not be affected by the proposed action. Therefore, the preservation of cultural resources was not identified as a significant scoping issue.

- **Would the near-term or long-range projects adversely affect cultural resources in the project study area?**

None of the build alternatives would adversely affect the potentially-eligible resources. Furthermore, there would be no impact to areas identified as having moderate-to-high potential for either prehistoric cultural resources or historic archeological cultural resources. The NJ State Historic Preservation Officer (SHPO) concurred with these findings.

#### **Biotic Communities: Vegetation and Wildlife**

The many habitat types at ACY support a wide-ranging list of terrestrial and aquatic species (including state-listed and Pinelands-listed threatened and endangered species, which are addressed in the following section entitled *Threatened and Endangered Species*). Generally, ACY has an extensive grassland/shrub complex associated with the runways and taxiways, and this grassland/shrub complex is surrounded by forested wetlands and uplands. The diverse landscape and large contiguous area has made the FAA Technical Center (which includes ACY) an important environmental resource within the

---

<sup>6</sup>Although detention basins are more commonly used in the New Jersey Pinelands, they can also act as an attractant for birds and other wildlife. Therefore, basins cannot be located on airports near runways or taxiways.

New Jersey Pinelands region. Therefore, the potential effects to vegetative and wildlife communities was identified as a significant scoping issue to be addressed in the FEIS.

- What major changes occurred between the draft and final EIS? How does the FEIS address them?

The NJDEP Division of Fish and Wildlife's Endangered and Nongame Species Program recently established a new wildlife species status classification (Species of Special Concern) and developed an accompanying list of designated species. The new designation and list was adopted subsequent to the completion of the DEIS. Comments received in response to the DEIS requested that certain Species of Special Concern be addressed. The FEIS addresses not only those species, but all Species of Special Concern reported at ACY and also provides an assessment of potential impacts upon an offsite great blue heron rookery.

- Would the proposed near-term projects adversely impact biotic communities?

Yes. Implementation of the near-term projects would result in construction of new facilities in undeveloped areas of the airport, thus permanently reducing the amount of open space and vegetative cover that provides habitat for resident and transient species alike. The loss of habitat is being minimized to the extent practicable in the development of project alternatives but cannot be avoided if the project objectives are to be accomplished.

The proposed projects would, for the most part, occur in the grassland communities with lesser impacts to forested areas. Up to 93 acres of grassland could be eliminated, depending on the alternatives selected. The grassland areas adjacent to proposed taxiways and aprons would be subject to a short grass mowing regime. Both the direct loss of habitat and secondary impacts such as edge effect and fragmentation would change the way grassland-dwelling species utilize the airport property.

The impacts to forests mostly involve areas that are already fragmented and offer only marginal habitat value. However, the build alternatives for the hotel/conference center would each impact a different forest complex, resulting in varying degrees of potential impacts to forest-dwelling and migratory species.

- Which mitigation measures are proposed?

As discussed in the next section, a grassland conservation and management plan has been developed to compensate for the impacts to the upland sandpiper and grasshopper sparrow – two state-listed, grassland-dependent bird species. However, implementation of the *Grassland Conservation and Management Plan* would benefit most of the wildlife species but particularly Species of Special Concern and several rare, but unlisted, Lepidoptera that utilize grassland habitat at ACY.

This plan would, in part, compensate for disturbances to vegetation by restoring existing unvegetated areas such as dirt roads, developed land, and barren land. In addition, grassland temporarily disturbed by construction-related activities (such as grading) would be restored. Disturbances to forests would constitute permanent losses of these upland communities.

Landscaping of developed areas would be accomplished by utilizing native species in accordance with the standards contained in the Pinelands Comprehensive Management Plan. Strict adherence to BMPs would also reduce disturbances to the extent practicable. BMPs include, but are not limited to, seasonal timing restrictions (for construction, mowing, etc.) to minimize impacts to breeding wildlife. Twenty-nine environmental commitments were

developed in consultation with the NJDEP, USFWS, USDA Wildlife Services, Pinelands Commission, and FAATC to ensure that all proposed development would minimize impacts upon sensitive natural resources.

- Are there major issues or impacts associated with the long-range projects?

Yes. Two of the long-range projects would adversely affect major vegetation communities and habitats: the direct access roadway would result in the direct loss and fragmentation of forest habitats, while the Runway 4-22 extension would impact both grasslands and forest communities. These communities provide habitat for many wildlife species, and the construction of these projects would result in displacement of a substantial number of species, particularly forest interior and Neotropical migratory species.

### ***Threatened and Endangered Species***

With the exception of one occasional transient species (bald eagle), there are no federally-listed threatened or endangered species recorded at ACY. However, over the past 20 years, surveys and research have identified the presence of 20 state-listed or Pinelands-listed threatened or endangered species, including seven documented breeding wildlife species (grasshopper sparrow, upland sandpiper, Cooper's hawk, barred owl, Pine Barrens treefrog, Northern pine snake, and frosted elfin) and four known plant populations (Pine Barrens gentian, narrow-leaved vervain, broom crowberry, and Pine Barrens reedgrass). Therefore, potential impacts to threatened and endangered species were identified during scoping as the most significant issue to be addressed in the FEIS.

- What new information is included in the FEIS either as the result of new species classifications or as the result of comments received on the DEIS?

The frosted elfin (*Callophrys [Incisalia] irus*) was an unlisted species during the scoping, research, and development phases of the DEIS. Because the frosted elfin was afforded no regulatory standing, *quantification* of habitat was not performed for the DEIS, although the species did receive special recognition owing to its regional importance and potential for future listing. Potential impacts upon this species were discussed qualitatively, based on several resources cited in the DEIS. It was not until after the DEIS was complete that the frosted elfin attained state-threatened status. In response to its newly-listed status, a Frosted Elfin Habitat Map was generated (in consultation with the NJDEP, USFWS, USDA Wildlife Services, FAATC, and an independent Lepidoptera expert) for the purpose of *quantifying* potential impacts to the species. The newly-prepared *Frosted Elfin Habitat Map and Impact Assessment Report (Appendix J)* confirms the findings of the DEIS, namely that the near-term projects would have minimal negative effect upon habitat supporting the frosted elfin. Furthermore, the *Grassland Conservation and Management Plan* with its environmental commitments would have no adverse effect upon the frosted elfin. The NJDEP recently issued a letter concurring with these findings.

Comments received in response to the DEIS assert that certain nonbreeding threatened and endangered species (vesper sparrow, Savannah sparrow, and Northern harrier) were not adequately addressed and requested that surveys be conducted for the vesper sparrow and Savannah sparrow. It was previously determined (during scoping) that rigorous analysis of impacts (including surveys) would be limited to known breeding species. Vesper sparrow and Savannah sparrow are not documented breeding species at ACY, and, therefore, additional surveys for these two species were not conducted, nor was a quantitative assessment of impacts performed. However, the FEIS expands the qualitative discussions presented in the DEIS for these species as well as additional nonbreeding threatened and endangered species reported to occur at ACY.

- How would the near-term projects adversely affect listed species, or how would those projects impact habitat that is critical to the survival of local populations of those species?

The proposed project alternatives are almost all located within the grassland/shrub complex. Development within this grassland area would reduce the amount of habitat available for several nonbreeding species, although the impacts would be appreciably greater to two *breeding species* of birds, namely the upland sandpiper and the grasshopper sparrow. Three of the proposed alternatives (both hotel/conference center alternatives and one of the ILS alternatives) require forested areas to be cleared, which would reduce the amount of habitat for one forest-dwelling bird, the Cooper's hawk. Methods to minimize impacts upon threatened and endangered species habitat are included for each alternative considered.

- How were the impacts to upland sandpiper and grasshopper sparrow assessed?

Two independent survey and modeling applications were used to establish baseline conditions and to quantify impacts upon upland sandpiper and grasshopper sparrow habitat: the 1993 critical habitat maps and Habitat Evaluation Procedures (HEP). The FEIS strives to best define existing conditions, assess impacts, evaluate alternatives, and mitigate for habitat loss. By making use of, where appropriate, the 1993 critical habitat maps and HEP, these objectives are accomplished.

HEP uses a habitat unit (HU) as the standard measurement, integrating both quality and quantity of the habitat being evaluated. Reductions in HUs represent negative impacts to habitat due to development. Conversely, increases in HUs represent improvements to existing habitat or the introduction of new (suitable) habitat resulting from mitigation. To demonstrate no net loss (neutral or positive effect), for every HU lost from development, there must be, at a minimum, a proportionate gain of HUs from mitigation.

In lieu of running the HEP analysis for each and every alternative considered, the impacts attributed to each alternative were quantified on a per acre basis according to the 1993 critical habitat maps. Thus, the 1993 critical habitat maps function as an environmental baseline from which to draw preliminary conclusions for the alternatives analysis. Once the preferred alternatives (listed below) were identified, the HEP was then used to reassess baseline conditions and to quantify the potential impacts of habitat changes affecting the upland sandpiper and grasshopper sparrow. The preferred alternatives assessed in the HEP analysis are

- Terminal Area Expansion (Build Alternative)
- Auxiliary Development in the Southwest Quadrant (Build Alternative 2)
- Parallel Taxiway for Runway 4-22 (Build Alternative)
- ILS Upgrades (Build Alternative 2)
- Holding Aprons (Build Alternative)

- Were there major points of controversy regarding the application of HEP, and, if so, how were they resolved?

In the DEIS, disparities between the results of a previous USFWS HEP Team analysis performed at ACY and the HEP analysis performed for the DEIS prompted the USFWS and NJDEP to request that the HEP be rerun between the draft and final EIS. In response to these comments, three interagency workshops were held to explain the key differences between the two HEP models and to gain consensus on proposed changes to the DEIS HEP. As a result of this interagency coordination, there is now a fundamental understanding between the USFWS, NJDEP, Pinelands Commission, and USDA Wildlife Services that the results of

the previous USFWS HEP Team analysis cannot be replicated. More importantly, these agencies concur with the approach and findings of the revised HEP analysis presented in the FEIS.

The results of the revised HEP analysis indicate that implementation of the preferred project alternatives for each of the above-mentioned projects would result in the reduction of 48.09 HUs for the upland sandpiper and 74.40 HUs for the grasshopper sparrow.

- **What grassland mitigation measures are proposed? How was the effectiveness of this mitigation assessed?**

Critical grassland habitat cannot be avoided and still achieve the project objectives, so a habitat protection plan has been developed to ensure there would be no net loss in habitat value as a result of the preferred alternatives. To compensate for the expected loss of grassland habitat, the northwest quadrant of the airport would be set aside as a grassland conservation and management area to benefit the upland sandpiper and grasshopper sparrow, and cover types would be converted to those that are more desirable for these two species.

Specifically, the *Grassland Conservation and Management Plan* provides for habitat creation and enhancement that would effectively offset the development of existing habitat. Habitat creation involves converting unsuitable habitat to optimum habitat for the target species, while enhancement involves modifying less suitable habitat to optimum habitat for the same target species. The management component establishes the long-term plan to maintain the created/enhanced habitat *as well as* the existing habitat in ways that benefit the upland sandpiper, grasshopper sparrow, and other grassland-dependent species at the airport. Additionally, a list of environmental commitments have been developed to ensure that project construction, implementation of the *Grassland Conservation and Management Plan*, and continued management of the 290-acre grassland conservation and management area are implemented as proposed and do not adversely affect threatened and endangered species.

The revised HEP analysis was applied to evaluate the effectiveness of the *Grassland Conservation and Management Plan* and to quantify its potential benefits. For the upland sandpiper, 77.06 HUs were gained, representing a 24 percent increase in habitat suitability (when only 48.09 HUs were needed to show no net loss). For the grasshopper sparrow, 86.79 HUs were gained, representing a 14 percent increase in suitable habitat (when only 74.40 HUs were needed to show no net loss). Thus, the HEP analysis demonstrates that the proposed *Grassland Conservation and Management Plan* for the upland sandpiper and grasshopper sparrow would offset the potential impacts due to the preferred project alternatives.

- **Does the *Grassland Conservation and Management Plan* benefit only the upland sandpiper and grasshopper sparrow?**

Although the mitigation/management plan targets the upland sandpiper and grasshopper sparrow, additional grassland-dependent species and foraging raptors would benefit as well. The focus of the *Grassland Conservation and Management Plan* is the creation of a modified grassland community through the reduction in the percentage of shrubs and an increase in native species of warm season grasses and forbs. The spacial configuration of the grassland conservation and management area is such that it would provide extensive, contiguous grassland and multiple habitat opportunities for the range of breeding and nonbreeding grassland birds and other species reported at ACY – opportunities that otherwise would not be available in the present shrub-dominated communities in the northwest quadrant of the

airfield. Certain portions of SJTA property were not considered as potential mitigation areas because of the abundance of frosted elfin sightings in these areas. Other areas were excluded from mitigation because of the presence of the Pine Barrens gentian (a Pinelands-listed plant species). Shrub-dominated communities would be set aside in part of the northwest quadrant of the airfield at the eastern end of the airfield and in designated fields south of Tilton Road to benefit two shrub-dependent, rare species: the notodontid moth (unlisted) and Albarufan dagger moth (unlisted).

With strict adherence to proposed environmental commitments, the *Grassland Conservation and Management Plan* would not result in a significant adverse impact upon habitat critical to the survival of local populations of the frosted elfin. In fact, the proposed *Grassland Conservation and Management Plan* would protect habitat determined to be suitable for the frosted elfin and may encourage higher utilization of the area.

- Where there any other major points of controversy pertaining to this section of the DEIS?

Yes. Comments received in response to the DEIS contend that noncompliance with the airfield mowing plan has resulted in the modification of a grass-dominated to shrub-dominated airfield community and assert that mismanagement is responsible for the decline of the upland sandpiper population at ACY. As a result of subsequent agency coordination (described above), there now is general consensus among the NJDEP, USFWS, and USDA Wildlife Services that: 1) improper management (two year cessation in mowing the shrub-dominated region of the northwest quadrant of the airfield) has not resulted in an increase in shrub-dominated habitat, 2) the decline of the upland sandpiper at ACY is not well understood and is likely to be the result of numerous factors, and 3) future adherence to an approved management plan is important for the future survival of the species. There is also general consensus among these agencies that the proposed *Grassland Conservation and Management Plan* is adequate to compensate for habitat losses due to near-term development projects; however, the USFWS stipulated later that consensus from their agency is predicated on resolving the frosted elfin issues.

- Are there major issues or impacts associated with the long-range projects?

Yes. The most significant impacts to threatened and endangered species would result from the direct access roadway and the extension of Runway 4-22. The direct access roadway would reduce and fragment wetland and upland forest area that provides habitat for the barred owl, Cooper's hawk, Northern pine snake, and Pine Barrens treefrog. There would also have to be a reduction in the NJDEP-protected habitat management zones for the barred owl and Cooper's hawk.

Depending on the alternative, the extension of Runway 4-22 has the potential to significantly impact the upland sandpiper, grasshopper sparrow, frosted elfin, and Pine Barrens gentian. In addition, there could be severe impacts to the Cooper's hawk, barred owl, Pine Barrens treefrog, and the Northern pine snake (again, depending on the alternative).

The impact assessment of long-range projects is subject to refinement and further analysis in accordance with FAA guidelines and NEPA requirements. Therefore, the impacts are not quantified at the same level of detail as the proposed projects. The *Grassland Conservation and Management Plan* developed for near-term projects provides a surplus of habitat units that could help offset impacts from the long-range projects as well.

## Wetlands

Amidst the actively maintained areas of the airport, there are several small, isolated, low-quality wetlands that are mostly associated with depressions or drainage features such as ditches and swales. In the outlying areas of the airport, however, there is an extensive forested wetland complex which is associated with the North and South Branches of the Absecon Creek. Ecologically, these wetlands are of exceptional quality. The wetlands provide nesting and breeding habitat for several threatened and endangered species and two rare species of wetland-dependent Lepidoptera. Many forest interior birds and other wildlife are dependent upon these large unbroken tracts of forested wetlands. In addition, the USFWS Wetland Evaluation Technique (WET) ranked these wetlands high in terms of wildlife diversity and abundance, groundwater recharge and discharge, and sediment toxicant retention functions. Most wetlands on the airport are regulated by the Pinelands Commission and NJDEP, regardless of their value. Therefore, the protection of wetlands was identified as a significant scoping issue to be addressed in the FEIS.

- **What major changes occurred between the draft and final EIS? Where there any major points of controversy? How does the FEIS address them?**

After publication of the DEIS, a jurisdictional determination was performed by the Pinelands Commission to establish the presence of regulated wetlands within select areas on the airport. The evaluation was limited to wetlands that have become established as a result of grading or other anthropomorphic activities in upland areas. The Pinelands Commission determined that certain airfield wetlands are not regulated by their agency but that another wetland in the vicinity of the holding apron project is regulated. The elimination of certain airfield wetlands reduces the total acreage of wetland impact, and in a few instances eliminates encroachment into the 300-foot (worst-case regulatory scenario) transition area.

Comments on the DEIS suggested that the absence of a wetlands delineation precludes accurate analysis of the true effects that the proposed action would have on wetland resources. During the EIS scoping process, it was determined that potential impacts to wetlands would be assessed using an updated version of the USFWS *National Wetlands Inventory* prepared specifically for ACY, supplemented by field verification by a qualified wetland ecologist. The Pinelands Commission had no objection to this approach because formal delineation would be required as part of the permit application process. The preliminary quantification presented in the FEIS provides a point of comparison for wetland impacts attributed to (or resulting from) implementation of each alternative and also provides sufficient information to assess the significance/severity of cumulative wetland loss at this time. Further, the analysis demonstrates that the potential wetland impacts resulting from near-term projects can be reasonably mitigated.

- **How would wetland areas be affected by the near-term projects?**

The build alternatives occur mostly in the infield areas of the airport, so the potential impacts are limited to filling in a few of the isolated (low-quality) wetlands and wetlands associated with drainage ditches. The affected wetland areas range from 1.39 to 2.67 acres, depending on the alternatives selected.<sup>7</sup> In sum, the quantity of wetland impacts and ecological loss would be relatively minor. None of the near-term project alternatives would encroach upon the high-quality forested wetlands associated with the North and South Branches of Absecon Creek.

---

<sup>7</sup>Wetland impacts have been estimated and are subject to refinement after formal delineation and final plan design.

- Is mitigation for these effects necessary, and, if so, what types of measures are being considered?

Mitigation would be necessary to compensate for the wetland impacts arising from the proposed action and would have to compensate fully for the loss of any ecological value. Several mitigation strategies are discussed in the FEIS and include upland preservation, wetland restoration, wetland creation, and/or wetland enhancement. The functions and values of restored, created, or enhanced wetlands are expected to far outweigh those lost. A wetland mitigation plan would be developed after an approach is decided upon, and it would need to be approved by the NJDEP as well as the Pinelands Commission.

- Are there major issues or impacts associated with the long-range projects?

Yes. The direct access roadway and the extension of Runway 4-22 both affect forested wetlands (or their transition areas) associated with the South Branch of Absecon Creek and are considered to be of exceptional quality. The degree of impacts would depend on the final roadway alignment and how far Runway 4-22 is extended to the south, but any impact would be considered potentially significant.

Because the SJTA's property north of the White Horse Pike is comprised of approximately two-thirds wetlands, any development in this area has the potential to affect wetlands or wetland transition areas associated with the North Branch of Absecon Creek. In addition, the NJDEP has targeted this area for habitat protection because it contains suitable breeding habitat for barred owl and Cooper's hawk. Any impact to these wetlands would be considered potentially significant as well.

#### *Floodplains*

According to the Federal Emergency Management Agency (FEMA), flood-prone areas are associated with the North and South Branches of Absecon Creek. However, the Environmental Assessment indicated that impacts were not likely to occur as a result of the proposed action. Therefore, impacts to floodplains were not considered to be a significant issue or concern.

- Would the near-term projects cause development to occur within 100-year or 500-year floodplains?

No.

- Are there major issues or impacts associated with the long-range projects?

Yes. Due to the linear nature of these floodplains, it is unlikely that flood-prone areas could be avoided if the direct access roadway were to be developed. Based upon the current conceptual alignment for the roadway, approximately two acres of 100-year floodplains (Zone A) along the South Branch of Absecon Creek would be impacted.

These same floodplains would also be affected by the extension of Runway 4-22. The nature and extent of development that would have to occur in the floodplains varies for each alternative – the further south the extension, the greater the degree of the impacts. Based on the conceptual plans prepared so far, between six and 30 acres of floodplains could be impacted if the runway were to be extended.

### *Traffic and Transportation*

The Environmental Assessment included a detailed traffic analysis, which indicated that significant traffic impacts were not likely to occur as a result of the proposed action. Local conditions have not changed substantially since that report was prepared. Therefore, traffic congestion or other transportation-related problems were not identified as a significant issue or concern to be addressed.

- In general, how would the near-term projects affect traffic volumes or patterns in the project study area?

If the proposed projects are implemented, the number of passengers, visitors, guests, and employees would increase, thereby adding airport and hotel-related traffic volume to the study area roadways. However, the projected increase is not expected to require any new public roadways or facilities because there will be sufficient roadway capacity available to accommodate the worst-case traffic demands. For instance,

- On the airport, Terminal Road and Amelia Earhart Boulevard function very well and have adequate capacity to accommodate forecast demand even with the proposed action. Signal timing changes at the intersection of these two roadways would resolve the traffic delays that are projected to occur during late afternoon rush hours.
- Outside the airport, the local roadway network performs adequately and will continue to do so for the foreseeable future because Atlantic County is improving two nearby intersections.<sup>8</sup> Those projects will increase safety and efficiency along Tilton Road, Delilah Road, through the Airport Circle, and along Wrangleboro-Pomona Road as well.

- Are there major traffic impacts or other issues associated with the long-range projects?

Long-range activity forecasts were used to predict future levels of service for the study area roadways, and no new roadways or facilities were identified as being needed at this time. However, the SJTA does have a long-range plan for a direct access roadway that would connect the airport with the Atlantic City Expressway, if the need for such a roadway arises. The direct access roadway would separate FAA employee traffic from airport traffic, thereby allowing the two traffic streams to operate more efficiently. The project is depicted on the Airport Layout Plan to indicate how the project could be implemented if and when needed.

### *Energy Supply and Utilities*

The potential for substantial changes in the demand for energy or public utility services was not a significant issue or concern. A utilities assessment was performed; it concludes that there is sufficient system capacity in all services to adequately accommodate the projected demands associated with the proposed action.

### *Light Emissions*

The potential for increased annoyance due to changes in airport light emissions was not a significant issue or concern. The proposed action includes additional ground-mounted and pole-mounted lighting that is required for various airport facilities and also for aircraft operations during nighttime and periods of **low** visibility. However, any changes in ambient or directional lighting would

---

<sup>8</sup>The County's projects are being implemented whether the airport's proposed projects are implemented or not – so these were not considered to be "connected" actions.

not be noticeable because the proposed projects are centrally located on airport property and adequately buffered from off-airport land uses, including any homes or businesses.

#### **Solid Waste**

The disposal of additional solid waste resulting from the proposed action was not identified as a significant scoping issue. As is the current practice, the additional solid waste would be collected by a private hauler and shipped to an out-of-state landfill. Even if this method were not used and solid waste had to be disposed of locally, the Atlantic County landfill has adequate capacity until 2020.

- **Were any solid waste issues or concerns raised during scoping?**

Yes. There was a scoping comment that expressed concern over the proximity of the airport to a nearby landfill and whether increased air operations resulting from the proposed action could increase the risks associated with wildlife hazards to aircraft (e.g., bird strikes).

ACY lies within two miles of Haneman Landfill. The landfill activities are strictly controlled (dumping occurs only at night when bird activity is minimal). The operators also use both passive and aggressive techniques to minimize bird activity, and there is a daily bird monitoring/counting program. According to the most recent quarterly reports, bird activity at the landfill has been decreasing, and there have been no closures of the landfill due to unacceptable levels of bird activity. Because mitigation techniques are already in place effectively dealing with potential wildlife hazards, no further action or mitigation is proposed as part of this FEIS.

#### **Hazardous Materials and Waste**

The FAA Technical Center, which includes ACY, is listed on the EPA's National Priorities List (NPL) as a Superfund cleanup site. Within the project study area, there are 32 Areas of Concern (AOCs) that are in various stages of investigation and/or remediation. Several of these AOCs are hazardous waste sites that could be impacted by the alternatives being considered. Federal actions involving Superfund cleanup sites are considered "significant" by definition; therefore, hazardous materials and waste was identified as a significant scoping issue to be addressed in the FEIS.

- **Would the near-term projects increase risks to human health and the environment?**

The potential risks to human health and the environment would be low or nonexistent because the alternatives avoid any AOCs where remedial activities are ongoing. The only AOCs that would be disturbed are those where investigations have already occurred, remedial activities have been completed, and the site has been approved for use.

- **Which mitigation measures are included in the proposed action?**

There is little or no expectation of encountering contaminated media, so no remedial activities are proposed. BMPs could be implemented to ensure the health and safety of workers during construction. If construction-related activities such as excavation result in the discovery of previously unknown hazardous waste, then work on the project would stop, and the site would be turned over to the responsible federal or state agency until the waste material is removed and disposed of in accordance with applicable regulations.

- Are there major issues or impacts associated with the long-range projects?

The direct access roadway, the extension of Runway 4-22, and the non-aviation development along the White Horse Pike all have the potential to affect ongoing investigative and remedial activities. Given the nature and extent of contamination in the affected areas, the potential risk to human health and the environment could range from moderate to high.

The long-range projects addressed in this FEIS require project-specific analysis, evaluation of design level alternatives, and mitigation measures prepared in accordance with NEPA. Therefore, no action is being taken on the long-range projects at this time.

*Other (Section 4(f), Farmland/Soils, Coastal Zone Management, Coastal Barriers, and Wild/Scenic Rivers)*

- Were there adverse effects associated with any other environmental impact categories?

No. The proposed action would not adversely affect public parks, recreation areas, designated wildlife/waterfowl refuge areas, or historic sites; it would not affect coastal zone management areas or coastal barrier systems; nor would it affect designated wild or scenic rivers – because these resources do not exist in the project study area.

The proposed action would also not adversely affect farmlands as designated by the Atlantic County Soil Conservation Service. Although some of the soils are listed as prime, unique, or otherwise important, the airport property is committed to urban/transportation uses, so the soils no longer retain their agricultural designation.

*Construction Impacts*

Construction-related effects are considered temporary and normally not significant unless there are unusual circumstances (e.g., especially large projects causing substantial urban effects). Because ACY is an ecologically-sensitive area, it is possible that the adverse effects of development could be made worse by construction activities if proposed mitigation measures are not incorporated into the development plans. However, construction impacts were not identified as a significant issue during the scoping process.

- What construction-related impacts would be expected to occur?

Construction activities resulting from the airport development alternatives may include, but are not limited to, temporary adverse effects (e.g., noise disturbance, increased air emissions, soil erosion and sedimentation, and increased traffic). These impacts are short term in nature and can be minimized through the establishment and utilization of BMPs.

- Are mitigation measures included in the proposed action?

To minimize construction impacts, environmental controls (such as timing restrictions to avoid breeding and nesting periods) and BMPs (such as restoring grassland areas affected by grading) would be included throughout the preparation of the plans and specifications for the proposed construction projects. These controls would be used to minimize temporary noise, air, erosion, and traffic impacts associated with construction activities. In addition, the proposed *Grassland Conservation and Management Plan* includes measures to avoid, reduce, and/or minimize adverse effects to grassland species and habitat.

## Cumulative Effects

The environmental changes caused by the SJTA's management and operation of ACY are not the only effects that need to be considered in this FEIS. The FAA Technical Center, the NJANG, and the USCG also make improvements to support their respective missions. Atlantic County is responsible for the surrounding area's roadway improvements as well. All of this development – past, present, and future – affects the study area, so it would be reasonable to consider that the impacts associated with the SJTA's actions could cause (or contribute to) significant cumulative effects when added to the impacts of the other agencies' actions. On this basis, cumulative effects were identified as a significant scoping issue to be addressed in the FEIS.

- Which impact categories were identified as potential areas of concern?
  - Noise and compatible land use
  - Secondary impacts
  - Air quality
  - Water quality
  - Biotic communities
  - Threatened and endangered species
  - Hazardous materials and waste

### Noise and Compatible Land Use

The noise analysis prepared for the FEIS includes all aircraft operations – civilian and military, existing and forecast – as well as vehicular traffic noise. With airport and roadway noise combined, the analysis indicates that noise levels are expected to diminish over time because the older, noisier (Stage 2) airplanes are being replaced with newer, quieter (Stage 3) airplanes. No additional adverse impacts to residential land uses have been identified.

### Secondary (Induced) Impacts

The assessment of secondary impacts prepared for the FEIS considers the airport's total employment (including the FAA Technical Center and the NJANG). The number of new hires over a ten-year period is approximately 1,000 – many of whom probably live in the area already. Further, Atlantic County is a regional growth center that can easily accommodate the additional demand for housing and infrastructure.

### Air Quality

The air quality analysis prepared for the FEIS considers all mobile sources on the airport – civilian and military, existing and forecast – as well as future stationary sources. The results indicate that air emissions would remain below established thresholds and that the EPA's conformity requirements would not apply.

### Water Resources

The surface water effects discussed in the FEIS would increase with the other agencies' development projects, but no potentially significant impacts were identified. All stormwater discharges are regulated through the NJDEP's permit program to ensure compliance with applicable water quality standards. The groundwater assessment indicates there would be no appreciable degradation or deprivation of the water table or the aquifer below.

### Biotic Communities

Impacts to biotic communities resulting from past and present projects have been adequately compensated for by using mitigation and management techniques to improve the suitability of other areas of ACY that had little or no habitat value. So far, the mitigated effects of past and present projects have been determined to be individually minor. Future actions would continue to reduce the amount of grassland and forest interior resources available for resident and transient species. More specifically,

- In addition to the approximately 93 acres of grassland that would be removed due to the SJTA's near-term projects, it is estimated there could be another 36.5 acres needed for the SJTA's long-range projects and other agency development actions. The SJTA's proposed mitigation/management plan could be used to mitigate for (a portion of) their future projects. The FAA Technical Center and the NJANG would be responsible for their own mitigation.
- Approximately 92 acres of upland forest would be removed due to the SJTA's near-term and long-range projects combined<sup>9</sup> – that is, five percent of the total forest area on the airport. This would permanently affect wildlife habitat through direct loss, fragmentation, and edge effect. No mitigation is proposed.

### Threatened and Endangered Species

Several state-listed threatened and endangered species are susceptible to the cumulative effects of projects and actions undertaken within the study area, particularly those projects/actions that adversely affect the grassland and forest areas which support such species. Breeding populations of the upland sandpiper, grasshopper sparrow, and frosted elfin are of primary concern. Other species of concern include the barred owl, Cooper's hawk, Pine Barrens treefrog, Northern pine snake, narrow-leaved vervain, and Pine Barrens gentian. Even though no single project or action in the past five years has significantly impacted grassland-dependent species, resident populations of the upland sandpiper are declining.

The future projects/actions identified in the FEIS have the potential to significantly impact these threatened and endangered species. Further planning and analysis, including mitigation, will be needed before these projects can be considered for development approval.

### Hazardous Materials and Waste

In the past five years, no development action has caused or contributed to the long-standing hazardous waste problems in the study area. The FAA's ongoing Superfund cleanup activities are expected to continue in accordance with CERCLA requirements. The City of Atlantic City has satisfactorily cleaned up their (two) sites, and the NJDEP is expected to approve them for use. The FEIS indicates that the potential risks to human health and the environment as a result of the proposed action would be low and can be adequately managed/minimized by using BMPs during construction. Finally, there are no other foreseeable projects or actions that would adversely affect hazardous waste sites. No significant cumulative effects are anticipated.

---

<sup>9</sup>There was insufficient information to quantify the effects of the other agency actions.

## Summary of Key Issues and Measures to Minimize Harm

- List the adverse environmental effects that cannot be avoided should the proposed action be approved and the preferred alternatives implemented.

Unavoidable adverse effects would occur as a result of increased airport utilization, additional impervious cover, loss of existing vegetation, and redevelopment of a Superfund cleanup site. The adverse effects include: increased noise, air, and water pollution; loss of wetlands; loss or diminished value to grassland and forested habitat that may be suitable for state-listed (endangered or threatened) and rare species; increased energy consumption, solid waste disposal, vehicular traffic, and light emissions; and potential risks to human health and safety. In addition, the adverse effects caused by *this* proposal would contribute to the cumulative effects resulting from other independent regional growth activities. The significant issues and concerns (identified during scoping and evaluated in the FEIS) are summarized in Table ES-6.

- What are the irreversible/irretrievable commitments of resources which would be involved in the proposal should it be implemented?

The proposed action would reduce natural ground cover and vegetation. The preferred alternatives result in the irreversible/irretrievable loss of 93 acres of grassland habitat, which includes habitat for three state-listed species – upland sandpiper, grasshopper sparrow and frosted elfin. Implementation of the *Grassland Conservation and Management Plan* contained in the FEIS demonstrates, however, that the permanent impact to these species would be negligible. The preferred alternatives also eliminate 27.72 acres of upland forest and 1.39 acres of freshwater wetlands, which would be mitigated and permitted in accordance with regulatory requirements. See also Table ES-6.

- What are the proposed methods for mitigating adverse environmental impacts?

Any action that reduces, minimizes, avoids, or compensates environmental impacts is a mitigation measure. Mitigation is a particularly important concept in this FEIS – so much so that the following mitigation measures are included in the proposed action and, more specifically, the preferred alternatives.

- The preferred alternatives minimize impacts to threatened and endangered species habitat to the maximum extent practicable and the proposal includes a 290-acre *Grassland Conservation and Management Plan* to compensate for impacts that cannot be avoided. The plan also minimizes impacts to other grassland species, including nonbreeding threatened and endangered species, rare species, and Species of Special Concern.
- The preferred alternatives avoid wetlands with high ecological value, minimize impacts to wetlands to the maximum extent practicable, and a wetlands mitigation plan would be prepared to compensate for impacts that cannot be avoided.
- The preferred alternatives reduce stormwater discharge (by minimizing the loss of natural ground cover) and minimize impacts by incorporating a Stormwater Management Plan with best management practices for retaining, pretreating, and infiltrating increased runoff that cannot be avoided. The plan includes environmental commitments and best management practices to be incorporated into conditions and/or specifications for construction and operation of the airport. Further reductions in water pollution would be achieved by constructing an aircraft deicing facility with a drainage

system to collect glycol contaminated stormwater runoff for off-site treatment or disposal.

- The preferred alternatives avoid hazardous waste sites where investigative or remedial activities are ongoing and include provisions for appropriate health and safety plans for projects involving (remediated) waste sites.

The proposed mitigation measures are summarized in **Table ES-6**.

In response to agency comments on the DEIS, the SJTA **has** consented to an additional list of 29 Environmental Commitments to ensure that the effects of the proposed action on endangered and threatened species would be minimized.<sup>10</sup> These mitigating measures include: requirements for management of the airport for threatened and endangered species and continued coordination with involved agencies; standards for the conservation and management of grassland habitat on the airport; seasonal restrictions on construction and maintenance activities; and monitoring and reporting requirements to ensure adherence to these conditions. If approved, the commitments would be included as conditions to the FAA's Record of Decision to be adhered to by the SJTA during project implementation (e.g., design, construction, operations).

- **Are there permits, licenses, or other entitlements which must be obtained in implementing the proposal?**

Yes. Applicable permits and other regulatory requirements were identified through agency consultation and are identified in the appropriate sections of the FEIS. They are also summarized in Table ES-6.

---

<sup>10</sup>Technically an EIS does not make any commitments so their listing here does not require the SJTA to implement them. Commitments to implement mitigation measures are made in enforceable documents such as a Record of Decision, Memorandum of Agreement, or as conditions of permits.

Table ES-6  
Summary of Key Issues and Measures to Minimize Harm

Impact Category / Significant Issue and/or Concern	Unavoidable Adverse Impacts / Irreversible/Irretrievable Commitments of Natural Resources	Mitigation Measures / Permits and Regulatory Program Requirements
Noise and Land Use	<p>Increased noise exposure</p> <p>The proposal would increase aircraft takeoffs, landings, and overflights of residences near the airport</p> <p>Up to 5 (existing) residents would still be adversely affected by incompatible noise levels</p>	<ul style="list-style-type: none"> <li>• No mitigation is proposed because the predicted noise levels are below established thresholds for noise mitigation</li> <li>• No regulatory permits or requirements apply; however, the SJTA is voluntarily preparing an FAR Part 150 Noise Study to consider alternatives for reducing residential noise exposure</li> </ul>
Induced Development	<p>Increased demand for housing, unanticipated growth</p> <p>There are no foreseeable or discernable adverse effects beyond the study area</p>	<ul style="list-style-type: none"> <li>• No mitigation is proposed.</li> <li>• All development plans must comply with Pinelands CMP standards and be approved by the NJ Pinelands Commission</li> </ul>
Air Quality	<p>Increased air pollution</p> <p>The proposal would increase airport operations and automobile traffic that contribute emissions of air pollutants</p>	<ul style="list-style-type: none"> <li>• No mitigation is proposed because the predicted emissions are below EPA and NJDEP standards</li> <li>• No regulatory permits or requirements apply</li> </ul>
Water Resources	<p>Increased storm runoff, pollutant loading, net change of stream flow, decreased aquifer recharge</p> <p>The preferred alternatives would eliminate 86 acres of natural ground cover (buildings, aprons, roads, etc.)</p>	<ul style="list-style-type: none"> <li>• The preferred alternatives <u>minimize</u> development to the extent practicable. In addition, the SJTA would be required to prepare a <i>Stormwater Management Plan</i> with BMPs for onsite retention pretreatment, and infiltration of runoff</li> <li>• Stormwater management plans must comply with Pinelands CMP standards and NJDEP regulatory requirements</li> </ul>
	<p>Non-point source pollution</p> <p>The proposal would increase urban/industrial area runoff contamination (e.g., petroleum, sediment, nutrients, pesticides, etc.)</p>	<ul style="list-style-type: none"> <li>• The SJTA would be required to prepare a <i>Stormwater Pollution Prevention Plan</i> (with a <i>Spill Prevention, Control, and Countermeasures Plan</i>) for managing non-point source pollution through the application of water quality BMPs</li> <li>• The current NJPDES permit would be updated and testing would continue to ensure that pollutant levels are compatible with NJDEP water quality goals (e.g., effluent limits)</li> </ul>
	<p>Biodegradation</p> <p>The proposal would increase airport operations and the use of deicing/anti-icing agents (glycol) that contaminate stormwater and can harm fish and other aquatic life</p>	<ul style="list-style-type: none"> <li>• The proposal includes a deicing apron and drainage system designed to <u>reduce</u> existing biodegradation by capturing and storing glycol contaminated runoff for off-site treatment/ disposal</li> <li>• Discharges to the sanitary sewer system must conform to pre-approved release rates established by the ACMUA.</li> </ul>
	<p>Construction-related sediment loads</p> <p>The proposal would increase construction activities that cause soils to erode, which can increase suspended solids and sedimentation in area streams and receiving waters</p>	<ul style="list-style-type: none"> <li>• The SJTA would be required to prepare a <i>Soil Erosion and Sediment Control Plan</i> to <u>minimize</u> erosion and its effects during construction</li> <li>• For applicable projects, E&amp;S plans are subject to review and approval of the Pinelands Commission and the USDA Natural Resource Conservation Service</li> </ul>

Table ES-6  
Summary of Key Issues and Measures to Minimize Harm

Impact Category / Significant Issue and/or Concern	Unavoidable Adverse Impacts / Irreversible/Irretrievable Commitments of Natural Resources	Mitigation Measures / Permits and Regulatory Program Requirements	
Biotic Communities	Loss or diminished value of grassland habitat	The preferred alternatives would eliminate 93 acres of existing grassland habitat. Additional edge effect and fragmentation would reduce habitat value	<ul style="list-style-type: none"> <li>The preferred alternatives <u>minimize</u> development in grassland areas to the extent practicable; environmental commitments further <u>minimize</u> potential impacts by imposing timing restrictions on development and grassland BMPs, and the <i>Grassland Conservation and Management Plan</i> <u>compensates</u> for impacts that cannot be avoided</li> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>
	Loss or diminished value of forested habitat	The preferred alternatives would eliminate 27.72 acres of existing forest habitat  Additional edge effect and fragmentation would reduce habitat value	<ul style="list-style-type: none"> <li>The preferred alternatives <u>minimize</u> development in forested areas to the extent practicable, and environmental commitments further <u>minimize</u> potential impacts by imposing timing restrictions on forest clearing</li> <li>Development plans must comply with Pinelands CMP standards</li> </ul>
Threatened- Endangered Species  <i>(state-listed and Pinelands-listed)</i>	Upland sandpiper (loss or diminished value of critical habitat)	The preferred alternatives would eliminate 78.66 acres of critical habitat	<ul style="list-style-type: none"> <li>The preferred alternatives <u>minimize</u> development in critical grassland habitat to the extent practicable; environmental commitments further <u>minimize</u> potential impacts through timing restrictions on development and grassland BMPs, and the <i>Grassland Conservation and Management Plan</i> <u>compensates</u> for impacts that cannot be avoided</li> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>
	Grasshopper sparrow (loss or diminished value of critical habitat)	The preferred alternatives would eliminate 60.43 acres of critical habitat	<ul style="list-style-type: none"> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>
	Frosted elfin (loss or diminished value of suitable habitat)	The preferred alternatives would eliminate 4.107 acres of suitable habitat	<ul style="list-style-type: none"> <li>The preferred alternatives <u>avoid</u> development in critical habitat and <u>minimize</u> development in suitable habitat to the extent practicable; environmental commitments further <u>minimize</u> potential impacts and the <i>Grassland Conservation and Management Plan</i> <u>compensates</u> for impacts that cannot be avoided</li> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>
	Cooper's hawk and barred owl (loss or diminished value of habitat)	The preferred alternatives would eliminate 14.65 acres of NJDEP-designated protected habitat (no nesting birds would be displaced)  Additional edge effect and fragmentation would reduce habitat value	<ul style="list-style-type: none"> <li>The preferred alternatives <u>avoid</u> known nesting areas for both species and <u>minimize</u> forest clearing to the extent practicable; environmental commitments further <u>minimize</u> potential impacts by imposing timing restrictions on forest clearing</li> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>
	Non-breeding species and Species of Special Concern (loss or diminished value of habitat)	The preferred alternatives would reduce grassland and forest habitat for resident and transient species	<ul style="list-style-type: none"> <li>The preferred alternatives <u>minimize</u> development in grassland and forest areas to the extent practicable; environmental commitments further <u>minimize</u> potential impacts, and the <i>Grassland Conservation and Management Plan</i> <u>compensates</u> for impacts that cannot be avoided</li> <li>Development plans (including mitigation) must comply with Pinelands CMP standards</li> </ul>

Table ES-6  
Summary of Key Issues and Measures to Minimize Harm

Impact Category / Significant Issue and/or Concern	Unavoidable Adverse Impacts / Irreversible/Irretrievable Commitments of Natural Resources	Mitigation Measures / Permits and Regulatory Program Requirements
Wetlands	Loss or diminished value of freshwater wetlands	<p>The preferred alternatives would eliminate an estimated 1.39 acres of wetlands and encroach upon wetland transition areas</p> <ul style="list-style-type: none"> <li>• The preferred alternatives <u>avoid</u> high quality wetlands and <u>minimize</u> impacts to low-quality wetlands to the extent practicable; In addition, the SJTA would be required to prepare a mitigation plan to <u>compensate</u> for wetland disturbances that cannot be avoided</li> <li>• Wetland mitigation plans must be approved by NJDEP and the Pinelands Commission; a General Permit or an Individual Permit would be required in accordance with the <i>NJ Freshwater Wetlands Protection Act Rules</i></li> </ul>
Hazardous Waste	Disturbance of CERCLA-listed waste sites	<p>The proposal involves development activities at a federally-listed Superfund site</p> <p>Areas of concern affected by the preferred alternatives have been or would be remediated prior to construction activities</p> <ul style="list-style-type: none"> <li>• The preferred alternatives <u>avoid</u> AOCs where investigative or remedial activities are ongoing (except for AOC 6, which must be avoided until the site is approved for use); a health and safety plan, with BMPs for construction activities at hazardous waste sites, would <u>minimize</u> potential environmental risks</li> <li>• No permit requirements were identified; however, development-related activities involving any CERCLA waste site regardless of its status must be coordinated with and approved by the FAA's Superfund Technical Committee at ACY</li> </ul>
	Disturbance of NJDEP-listed waste sites	<p>The preferred alternatives would impact two state-listed waste sites; both sites have been remediated and approved for use</p> <ul style="list-style-type: none"> <li>• A health and safety plan, with BMPs for construction activities at hazardous waste sites, would <u>minimize</u> potential risks to human health and safety</li> <li>• No permit requirements were identified; development activities involving the listed sites should be coordinated with NJDEP</li> </ul>
Cumulative Impacts	Incremental effects of past, present, and future actions taken by stakeholders in the study area	<p>The FAATC, SJTA, NJANG, and USCG share this site; collectively, they cause or contribute adverse environmental effects (e.g., noise, air, and water pollution, etc.)</p> <p>Their functions are not likely to stop and could increase, so cumulative adverse effects at this site are unavoidable; however, no foreseeable or discernable significant adverse effects were identified in the FEIS</p> <p>The FAA Technical Center (which includes ACY) is a Federal installation; no stakeholder is permitted to undertake development (or remedial) action that is not compliant with NEPA (or CERCLA)</p>

## Agency and Public Involvement

One of the purposes of preparing the EIS was to include agencies and the public in the FAA's decision-making process. Therefore, agency and public coordination has been an important and ongoing activity. Section 5 of the FEIS describes the steps taken to encourage agencies and the public to participate, and it summarizes those events.

The scoping process invited agencies and the public to tell the FAA what issues should be addressed in the DEIS. Two scoping meetings were held so that the FAA could listen to these issues and concerns. Comments submitted during scoping and the FAA's responses to them are presented in the *Post Scoping Document, Appendix H* of the FEIS.

After scoping, the FAA established an Interdisciplinary (ID) Team to serve as a forum for agency coordination while the DEIS was being prepared. The ID Team, consisting of 19 agencies, met once a month for 14 months to discuss technical and administrative issues and/or to provide assistance on regulatory matters.

When the DEIS was published, nearly 100 copies were sent to 1) local libraries and township offices, 2) agencies with jurisdiction by law and/or special expertise, and 3) anyone who requested it. The FAA conducted a second public meeting (a formal public hearing this time) to discuss the proposed action, alternatives, and the environmental impacts addressed in the DEIS. Also, in response to agency comments, three additional interagency meetings were held to discuss issues and changes to be incorporated into the FEIS. All the comments received after circulating the DEIS were reviewed. Those comments and the FAA's responses to them are presented in *Appendix J* of the FEIS.

Now, the FEIS is being provided to agency officials and to the FAA's decisionmaker. Copies are also being sent to the same libraries and townships offices and to interested parties who request it. No decision regarding the proposed action may be made or recorded until 30 days after the FEIS is filed with the EPA.

The Federal Aviation Administration is the lead agency for the Federal government in the preparation of this statement.

For additional information, contact:

Daisy Mather  
Federal Aviation Administration  
Eastern Region Airports Division (AEA-610)  
1 Aviation Plaza  
Jamaica, New York 11434  
Telephone: (718) 553-2511  
E-Mail: [daisy.mather@faa.gov](mailto:daisy.mather@faa.gov)



## Attachment 3

### ENVIRONMENTAL COMMITMENTS

#### GENERAL REQUIREMENTS

1. All land clearing and grading activities for near-term development projects are subject to prior approval by the Commission or the New Jersey Department of Environmental Protection ("NJDEP") in accordance with the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A. Wetlands will be delineated and boundaries will be verified by the Commission.
2. All land clearing and grading activities will be confined within approved near-term development areas and grassland conservation areas.
3. All clearing and grading activities within forest, grassland, wetlands and wetland buffers will be minimized to the maximum extent practicable. All wetlands in the vicinity of the near-term projects or within the Grassland Conservation and Management Area that are not scheduled to be disturbed will be protected with fencing.
4. All grassland temporarily disturbed during construction activities will be restored using native species of local genotypes upon completion of final grading to the maximum extent practicable.
5. The limit of any land disturbance within near-term projects and the Grassland Conservation and Management Area will be fenced prior to commencement of any land disturbance activities.
6. Construction equipment, material and soil stockpile areas, and all woody debris will not be stored or disposed of within forest, grassland, wetlands or wetland buffer areas.
7. Vehicular access within grassland will be restricted to existing roads or as directed by United States Department of Agriculture ("USDA") Wildlife Services.

#### GRASSLAND CONSERVATION AND MANAGEMENT REQUIREMENTS

8. All grassland management activities will be performed with the advice of an Advisory Committee. The Advisory Committee shall consist of representatives from the Commission, NJ Department of Environmental Protection Endangered and Non-game Species Program, US Fish and Wildlife Service, US Department of Agriculture Wildlife Services, FAA Technical Center, and the Authority, and shall meet at a location and frequency that is mutually agreeable.
9. All grassland management activities shall adhere to a mowing plan as currently approved, or as may be periodically revised based on the recommendation of the Advisory Committee. Appropriate airport maintenance and operation staff responsible for mowing the

airfield will be required to attend an annual training program to be held prior to commencement of the winter mowing season.

10. Prior to commencement of land clearing or grading activities for construction of any near-term development project, adequate grassland creation and/or enhancement will be achieved to compensate for losses to grassland habitat from proposed development.

11. A 290-acre Grassland Conservation and Management Area will be established and managed in a manner that is conducive to the long-term conservation of the Upland Sandpiper. No development, grading or clearing activities, other than those activities associated with the establishment or maintenance of the Grassland Conservation and Management Area, shall be permitted within the Grassland Conservation and Management Area without prior authorization of the Pinelands Commission.

12. The 290-acre Grassland Conservation and Management Area will be made up of 165 acres of grassland creation and 125 acres of grassland enhancement within the area designated as Grassland Conservation and Management Area as follows:

- a. Creation of grassland habitat within pavement removal areas (15 acres), Existing barren land (7 acres), existing shrub areas (143 acres)
- b. Enhancement of existing grassland habitat (125 acres)
- c. Removal of additional 15 acres of pavement associated with reduction in Width of Runway 13-31 to 150 feet and creation of grassland habitat.

13. Within three (3) years of commencement of grassland creation and enhancement activities the following vegetation characteristics, or as amended by the Advisory Committee, shall be achieved:

a.	Grass Cover	Min 60%	Max 80%
b.	Forb Cover	Min 10%	Max 30%
c.	Total Herbaceous Cover	Min 70%	Max 80%
d.	Shrub Cover	Min 0%	Max 10%
e.	Nuisance Species *	Min 0%	Max 10%
f.	Bare Ground	Min 20%	Max 30%
g.	Vegetation Height		
	Mid May through Mid June	Min 10"	Max 16"
	June through August	Min 10"	Max 16"

*\*"Nuisance" species to be mutually agreed upon by the Advisory Committee and the Authority*

14. Within the Grassland Conservation and Management Area, the Authority will create a minimum of 25 frosted elfin ovipositing plots of 0.25 acres each. The plots would include variable density coverage of wild indigo as follows: 15 plots at 10% (250 plants each); 5 plots at 20% (500 plants each); and 5 plots at 40% (1,000 plants each). The plots would include 2% low bush blueberry container-grown plants to provide additional opportunities for frosted elfin nectaring. Each plot should be located between 50 and 88 meters of the forest edge. Wild indigo seed for the "plugs" would be obtained from on-site sources so that the local genotype would be replanted. Seed will be collected from the tallest phenotype wild indigo plants.

15. Grassland habitat will be created within the 0.8 acre forest clearing resulting from 31-end ILS project to provide a minimum aerial coverage of 10% wild indigo (*Baptisia tinctoria*) and 2% low bush blueberry (*Vaccinium vacillans*). A total of 50 Staggerbush (*Lyonia mariana*) will also be planted at intervals along the forest edge.

16. All seeding and planting within the Grassland Conservation and Management Area shall consist of a seed mix and/or species composition that has been approved by the USDA Wildlife Services, NJDEP Endangered and Non-Game Species Program and the Commission. Seed mix may include depending on availability:

- a. Grasses: little bluestem (*Andropogon scoparius*), side oats grama (*Bouteloua curtipendula*), broomsedge (*Andropogon virginicus*), poverty grass (*Danthonia spicata*), purple top (*Tridens flavus*), switchgrass (*Panicum virgatum*) and deertongue (*Dicanthelium clandestinum*). Oats (*Avena sativa*) are recommended as a nurse crop.
- b. Forbs: grass-leaved blazing star (*Liatris graminifolia*), wild indigo (*Baptisia tinctoria*), butterfly weed (*Asclepias tuberosa*), wild bergamot (*Monarda fistulosa*), black-eyed susan (*Rudbeckia hirta*), partridge pea (*Cassia fasciculata*), common milkweed (*Asclepias syriaca*), Indian hemp (*Apocynum cannabinum*), narrow-leaved mountain mint (*Pycnanthemum tenuifolium*), calico aster (*Aster lateriflorus*), heath aster (*Aster pilosus*). Blazing star (*Liatris spicata*) will be selectively seeded into areas of the Grassland Conservation and Management Area that include the wetter soils.

17. All grassland creation, enhancement and restoration activities will be performed by and/or under the supervision of a firm with demonstrated experience in habitat restoration.

18. Frosted elfin (*Callophrys irus*) habitat within 50 meters of the forest edge will be preserved and maintained according to a mowing and management plan approved by NJDEP Endangered and Non-game Species Program and the Commission.

19. Prior to the commencement of land clearing or grading activities within the Grassland Conservation and Management Area, a pre-construction field survey for the frosted elfin (*Callophrys irus*) will be conducted by a qualified entomologist between May 1 and July 15 to identify areas of wild indigo (*Baptisia tinctoria*) that are used for ovipositing. All areas within

20-meters of indigo found to support ovipositing frosted elfin will be fenced prior to commencement of land disturbance. No mechanized shrub removal will be permitted within the fenced area. Shrub removal within the fenced area will be performed manually so as not to disturb indigo plants and ericaceous shrubs (specifically, lowbush blueberry, *Vaccinium vacillans* and staggerbush, *Lyonia mariana*) and dewberry (*Rubus* spp.) to the extent practicable. Ericaceous shrubs and Dewberry patches within 20 meters of protected indigo patches identified during the pre-construction field survey for frosted elfin will be retained up to a maximum of 10% coverage. Manual removal will allow for the use of small equipment such as a small backhoe for the removal of individual shrubs.

20. All grassland creation and enhancement activities will minimize disturbance to soils and retain desirable vegetation to the maximum extent possible.

21. All woody debris, including stumps, roots and shoots will be removed from grassland creation and enhancement areas.

#### SEASONAL RESTRICTIONS

22. All Grassland creation and enhancement activities will be performed between the period of October 1 through April 15. Shrub removal within the Grassland Conservation and Management Area will only be performed between November 1 and March 31.

23. No construction activities within grassland disturbed by near-term development projects shall commence between April 15 and August 15. All construction areas shall be fenced prior to any land disturbance or grading activities. All grass within fenced construction sites shall be maintained at no more than five (5) inches in height for the duration of construction.

24. Clearing activities within the forest is prohibited from March 1 through September 1.

#### MONITORING REQUIREMENTS

25. A qualified ecologist/wildlife biologist will be retained to oversee and monitor all construction and grassland creation, enhancement, restoration, management and monitoring activities to ensure adherence to these environmental commitments. The ecologist/wildlife biologist will oversee manual shrub removal to minimize disturbance to soils and vegetation. Within manual shrub removal areas, indigo plants disturbed during shrub removal will be replanted in place to the maximum extent practicable. Disturbance to Dewberry (*Rubus* spp.) within manual shrub removal areas will also be minimized to the maximum extent practicable.

26. Vegetation within grassland creation, enhancement and restoration areas will be monitored for a period of no less than five (5) years. Regular reports on the status of grassland management activities, including recommendation for corrective action if needed, shall be provided to the Advisory Committee and the FAA.

27. All development activities will be monitored for the period of construction. Regular reports on the status of construction activities, adherence with terms and conditions of approvals, including recommendations for corrective action as necessary, will be provided to the Advisory Committee and the FAA.

28. An annual grassland breeding bird species survey will be performed, including the upland sandpiper (*Bartamia longicauda*), and frosted elfin (*Callophrys irus*) surveys within the Grassland Conservation and Management Area extending for a minimum of three (3) years beyond achieving appropriate vegetation characteristics in accordance with item 13 above. Survey methodology/protocol will be developed in consultation with the Advisory Committee. The results of the surveys, including recommendations for corrective action as necessary, shall be provided in an annual report to the Advisory Committee and the FAA.

29. In consultation with USDA Wildlife Services, a program will be implemented within the Grassland Conservation and Management Area and land development areas to deter use by hazardous bird species.

#### **FOREST PRESERVATION AREA**

30. A 283-acre and 124-acre Forest Preservation Areas will be established and managed in a manner that is conducive to the long-term conservation of wetlands associated with the North Branch of Absecon Creek. No development, grading or clearing activities shall be permitted within the Forest Preservation Area without prior authorization of the Pinelands Commission. All forest management activities conducted within the Forest Preservation Area will be performed with the advice of an Advisory Committee. The Advisory Committee shall consist of representatives from the Commission, NJ Department of Environmental Protection Endangered and Non-game Species Program, US Fish and Wildlife Service, US Department of Agriculture Wildlife Services, FAA Technical Center, and the Authority, and shall meet at a location and frequency that is mutually agreeable.





**RESOLUTION OF THE NEW JERSEY PINELANDS COMMISSION**

**NO. PC4-18-**\_\_\_\_\_

**TITLE:** Issuing an Order to Certify Ordinances 12-2018 and 19-2018, Amending Chapter 225 (Zoning) of the Code of Egg Harbor Township

**Commissioner** \_\_\_\_\_ **moves and Commissioner** \_\_\_\_\_ **seconds the motion that:**

**WHEREAS**, on October 1, 1993, the Pinelands Commission fully certified the Master Plan and Land Use Ordinances of Egg Harbor Township; and

**WHEREAS**, Resolution #PC4-93-139 of the Pinelands Commission specified that amendment to the Township’s certified Master Plan and Land Use Ordinances be submitted to the Executive Director in accordance with N.J.A.C. 7:50-3.45 (Submission and Review of Amendments to Certified Master Plans and Land Use Ordinances) of the Comprehensive Management Plan to determine if said amendment raises a substantial issue with respect to conformance with the Pinelands Comprehensive Management Plan; and

**WHEREAS**, Resolution #PC4-93-139 further specified that any such amendment shall only become effective as provided in N.J.A.C. 7:50-3.45 of the Comprehensive Management Plan; and

**WHEREAS**, on April 18, 2018, Egg Harbor Township adopted Ordinance 12-2018, amending Chapter 225 (Zoning) of the Township’s Code by adopting requirements for the provision of affordable housing in the RG-4 and RG-5 (Residential) Districts, within the Pinelands Regional Growth Area; and

**WHEREAS**, the Pinelands Commission received a certified copy of Ordinance 12-2018 on April 23, 2018; and

**WHEREAS**, on May 2, 2018, Egg Harbor Township adopted Ordinance 1970-2017, amending Chapter 225 by adopting a revised Schedule of Area, Yard and Building Requirements for the RG-4 and RG-5 Districts; and

**WHEREAS**, the Pinelands Commission received a certified copy of Ordinance 19-2018 on May 7, 2018; and

**WHEREAS**, by letter dated May 15, 2018, the Executive Director notified the Township that Ordinances 12-2018 and 19-2018 would require formal review and approval by the Pinelands Commission; and

**WHEREAS**, a public hearing to receive testimony on Ordinances 12-2018 and 19-2018 was duly advertised, noticed and held on June 20, 2018 at the Richard J. Sullivan Center, 15C Springfield Road, New Lisbon, New Jersey at 9:30 a.m.; and

**WHEREAS**, the Executive Director has found that Ordinances 12-2018 and 19-2018 are consistent with the standards and provisions of the Pinelands Comprehensive Management Plan; and

**WHEREAS**, the Executive Director has submitted a report to the Commission recommending issuance of an order to certify that Ordinances 12-2018 and 19-2018 are in conformance with the Pinelands Comprehensive Management Plan; and

**WHEREAS**, the Commission’s CMP Policy and Implementation Committee has reviewed the Executive Director’s report and has recommended that Ordinances 12-2018 and 19-2018 be certified; and

**WHEREAS**, the Pinelands Commission has duly considered all public testimony submitted to the Commission concerning Ordinances 12-2018 and 19-2018 and has reviewed the Executive Director’s report; and

**WHEREAS**, the Pinelands Commission accepts the recommendation of the Executive Director; and

**WHEREAS**, pursuant to N.J.S.A. 13:18A-5H, no action authorized by the Commission shall have force or effect until ten (10) days, Saturdays, Sundays and public holidays excepted, after a copy of the minutes of the meeting of the Commission has been delivered to the Governor for review, unless prior to expiration of the review period the Governor shall approve same, in which case the action shall become effective upon such approval.

**NOW, THEREFORE BE IT RESOLVED** that

1. An Order is hereby issued to certify that Ordinances 12-2018 and 19-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, are in conformance with the Pinelands Comprehensive Management Plan.
2. Any additional amendments to Egg Harbor Township’s certified Master Plan and Land Use Ordinances shall be submitted to the Executive Director in accordance with N.J.A.C. 7:50-3.45 to determine if said amendments raise a substantial issue with respect to the Comprehensive Management Plan. Any such amendment shall become effective only as provided in N.J.A.C. 7:50-3.45.

**Record of Commission Votes**

AYE NAY NP A/R*				AYE NAY NP A/R*				AYE NAY NP A/R*			
Ashmun				Howell				Prickett			
Avery				Jannarone				Quinn			
Barr				Lloyd				Rohan Green			
Chila				Lohbauer				Earlen			
Galletta				Pikolycky							

\*A = Abstained / R = Recused

Adopted at a meeting of the Pinelands Commission

Date: \_\_\_\_\_

\_\_\_\_\_  
Nancy Wittenberg  
Executive Director

\_\_\_\_\_  
Sean W. Earlen  
Chairman



State of New Jersey  
 THE PINELANDS COMMISSION  
 PO Box 359  
 NEW LISBON, NJ 08064  
 (609) 894-7300  
 www.nj.gov/pinelands



PHILIP D. MURPHY  
 Governor  
 SHEILA Y. OLIVER  
 Lt. Governor

General Information: Info@pinelands.nj.gov  
 Application Specific Information: AppInfo@pinelands.nj.gov

SEAN W. EARLEN  
 Chairman  
 NANCY WITTENBERG  
 Executive Director

**REPORT ON ORDINANCES 12-2018 AND 19-2018, AMENDING CHAPTER 225  
 (ZONING) OF THE CODE OF EGG HARBOR TOWNSHIP**

July 27, 2018

Egg Harbor Township  
 3515 Bargaintown Road  
 Egg Harbor Township, NJ 08234

**FINDINGS OF FACT**

I. Background

The Township of Egg Harbor is located in the southeastern portion of the Pinelands Area, in Atlantic County. Pinelands municipalities adjacent to Egg Harbor Township include Galloway Township, Hamilton Township and Estell Manor City in Atlantic County, as well as Upper Township in Cape May County.

On October 1, 1993, the Pinelands Commission fully certified the Master Plan and Land Use Ordinances of Egg Harbor Township.

On April 18, 2018, Egg Harbor Township adopted Ordinance 12-2018, amending Chapter 225 (Zoning) of the Township’s Code by adopting requirements for the provision of affordable housing in the RG-4 and RG-5 (Residential) Districts, within the Pinelands Regional Growth Area. The Pinelands Commission received a certified copy of Ordinance 12-2018 on April 23, 2018.

On May 2, 2018, Egg Harbor Township adopted Ordinance 19-2018, amending Chapter 225 by adopting a revised Schedule of Area, Yard and Building Requirements to reflect the amendments made by Ordinance 12-2018 relative to permitted density and Pinelands Development Credit use in the RG-4 and RG-5 Districts. The Pinelands Commission received a certified copy of Ordinance 19-2018 on May 7, 2018.

By letter dated May 15, 2018, the Executive Director notified the Township that Ordinances 12-2018 and 19-2018 would require formal review and approval by the Pinelands Commission.

## II. Master Plans and Land Use Ordinances

The following ordinances have been submitted to the Pinelands Commission for certification:

- \* Ordinance 12-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, introduced on March 21, 2018 and adopted on April 18, 2018; and
- \* Ordinance 19-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, introduced on April 18, 2018 and adopted on May 2, 2018.

These ordinances have been reviewed to determine whether they conform with the standards for certification of municipal master plans and land use ordinances as set out in N.J.A.C. 7:50 3.39 of the Pinelands Comprehensive Management Plan. The findings from this review are presented below. The numbers used to designate the respective items correspond to the numbers used to identify the standards in N.J.A.C. 7:50 3.39.

### 1. **Natural Resource Inventory**

Not applicable.

### 2. **Required Provisions of Land Use Ordinance Relating to Development Standards**

Ordinance 12-2018 amends Chapter 225 (Zoning) of the Code of Egg Harbor Township by requiring that all residential development in the RG-4 and RG-5 Districts provide for affordable housing. The ordinances were adopted to implement the Township's Settlement Agreement with the Fair Share Housing Center, executed on August 16, 2017. The agreement stipulates that Egg Harbor Township has a rehabilitation obligation of 92 units, a prior round obligation of 763 units, and a third round prospective need of 1,000 units.

Ordinance 12-2018 requires that all residential development in the RG-4 or RG-5 Districts resulting in construction of new residential housing units must set aside 20% of the new units for low and moderate income households. Projects that contain less than 20 affordable housing units must have said units dispersed throughout the development and located within buildings designed to be architecturally indistinguishable from the market-rate units within the development. Projects that contain 20 or more affordable housing units have the option of accommodating said units in 100% affordable housing buildings that meet the garden apartment requirements provided in the Township's Code. Residential developments that received preliminary or final approval before the effective date of Ordinance 12-2018 are exempted from the affordable housing set-aside requirements, unless those approvals expire or are amended to reflect substantial changes to the general terms and conditions on which preliminary approval was granted. Information provided to the Commission by the Township indicates that, as of June 30, 2018, there are no projects in either zone that qualify for this exemption.

Egg Harbor Township's RG-4 and RG-5 Districts are the two highest-density zones within the Township's Pinelands Regional Growth Area. In the RG-4 District, single-family detached dwellings, two-family dwellings and single-family attached dwellings (townhouses) are

permitted at a maximum density of 6.0 units per acre. The same housing types, as well as garden apartments, are permitted in the RG-5 District at a maximum density of 7.5 units per acre.

Ordinances 12-2018 and 19-2018 revise various area and bulk standards applicable to different types of permitted residential uses in the two zones but do not change permitted housing types. With respect to single-family attached units (townhouses) in both zones, the minimum required tract size is reduced from five to three acres and the minimum required perimeter buffer is reduced from 20 to 10 feet. For garden apartments in the RG-5 District, the minimum required tract size is reduced from 10 to seven acres. Maximum permitted densities in the two zones remain unchanged; therefore, there is no change in the Township's Regional Growth Area residential zoning capacity. Based on the permitted densities and amount of vacant land in the two zones, the Township estimates that Ordinances 12-2018 and 19-2018 will provide a realistic opportunity for development of up to 726 affordable housing units through 2025.

Ordinances 12-2018 and 19-2018 are consistent with the land use standards of the Comprehensive Management Plan. This standard for certification is met.

**3. Requirement for Certificate of Filing and Content of Development Applications**

Not applicable.

**4. Requirement for Municipal Review and Action on All Development**

Not applicable.

**5. Review and Action on Forestry Applications**

Not applicable.

**6. Review of Local Permits**

Not applicable.

**7. Requirement for Capital Improvement Program**

Not applicable.

**8. Accommodation of Pinelands Development Credits**

Ordinance 12-2018 amends Chapter 225 (Zoning) of the Township's Code by requiring that Pinelands Development Credits (PDC) be acquired and redeemed for 25% of the market rate residential units developed in the RG-4 and RG-5 Districts. This 25% obligation applies regardless of the density at which any particular project is proposed or constructed. The use of

PDCs is not required for those units in the RG-4 or RG-5 Districts that are required to be developed as affordable units.

Ordinance 12-2018 does not increase or decrease the amount of residentially zoned property in Egg Harbor Township's Regional Growth Area. Neither does the ordinance affect the maximum permitted densities or residential zoning capacity in the Regional Growth Area. Rather, Ordinance 12-2018 accommodates PDC use in a different manner than has traditionally been the case, in order to allow the Township to meet both its PDC and affordable housing obligations. Instead of providing a base density and affording developers an opportunity to use PDCs to increase that density if they so choose, the Township has elected to make PDC use a mandatory component of all residential projects in its two highest-density zones, with an exemption for affordable housing units.

N.J.A.C. 7:50-3.39(a)8 specifies that in order to be certified by the Commission, municipal land use ordinances must provide for sufficiently residentially zoned property in the Regional Growth Area to be eligible for an increase in density to accommodate PDCs as provided for in N.J.A.C. 7:50-5.28(a)3. N.J.A.C. 7:50-5.28(a)7i then authorizes Pinelands municipalities to employ additional density bonus or incentive programs, provided such programs do not interfere with or otherwise impair in any way the required municipal program for use of PDCs. Additional flexibility is provided in more general terms in the introduction to subchapter 5 of the CMP which states that CMP standards may be refined by local agencies, provided that the objectives and goals the minimum standards represent will be achieved. In this context, the PDC requirements implemented by Ordinance 12-2018 are consistent with the Comprehensive Management Plan. While the 25% requirement applied to the RG-4 and RG-5 Districts is not as high a number as would be provided through the more traditional zoning approach (where PDCs would account for 33% of the total number of permitted units), it is important to remember that the traditional base density/bonus density approach utilized throughout the Pinelands Area only provides an *opportunity* for the use of PDCs. There is no requirement under the traditional approach that any PDCs be used in any particular development project. Ordinance 12-2018 *guarantees* a certain level of PDC use in association with any residential development in the Township's two highest-density Regional Growth Area residential zones, regardless of project density or the number of units that are ultimately built. Given the greater certainty provided by this approach, the Executive Director believes that the PDC requirements adopted by Ordinance 12-2018 should be viewed as being consistent with Comprehensive Management Plan standards.

This standard for certification is met.

## **9. Referral of Development Applications to Environmental Commission**

Not applicable.

## **10. General Conformance Requirements**

Ordinances 12-2018 and 19-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, are consistent with the standards and provisions of the Pinelands Comprehensive Management Plan. This standard for certification is met.

**11. Conformance with Energy Conservation**

Not applicable.

**12. Conformance with the Federal Act**

Ordinances 12-2018 and 19-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, comply with the standards and provisions of the Pinelands Comprehensive Management Plan. No special issues exist relative to the Federal Act. Therefore, this standard for certification is met.

**13. Procedure to Resolve Intermunicipal Conflicts**

Not applicable.

**PUBLIC HEARING**

A public hearing to receive testimony concerning Egg Harbor Township's application for certification of Ordinances 12-2018 and 19-2018 was duly advertised, noticed and held on June 20, 2018 at the Richard J. Sullivan Center, 15C Springfield Road, New Lisbon, New Jersey at 9:30 a.m. Ms. Grogan conducted the hearing, at which the following testimony was received:

Peter Miller, Egg Harbor Township Administrator, stated that Ordinances 12-2018 and 19-2018 arise from the Township's settlement agreement with the Fair Share Housing Center on the municipality's affordable housing obligation. He asked that the Commission look favorably upon the two ordinances.

There being no further testimony, the hearing was concluded at 9:40 a.m.

Written comments on Ordinances 12-2018 and 19-2018 were accepted through June 27, 2018; however, none were received.

**CONCLUSION**

Based on the Findings of Fact cited above, the Executive Director has concluded that Ordinances 12-2018 and 19-2018, amending Chapter 225 (Zoning) of the Code of Egg Harbor Township, comply with Comprehensive Management Plan standards for the certification of municipal master plans and land use ordinances. Accordingly, the Executive Director recommends that the Commission issue an order to certify Ordinances 12-2018 and 19-2018 of Egg Harbor Township.

SRG/CEH



State of New Jersey  
THE PINELANDS COMMISSION  
PO Box 359  
NEW LISBON, NJ 08064  
(609) 894-7300  
www.nj.gov/pinelands



PHILIP D. MURPHY  
Governor  
SHEILA Y. OLIVER  
Lt. Governor

General Information: [Info@pinelands.nj.gov](mailto:Info@pinelands.nj.gov)  
Application Specific Information: [AppInfo@pinelands.nj.gov](mailto:AppInfo@pinelands.nj.gov)

SEAN W. EARLEN  
Chairman  
NANCY WITTENBERG  
Executive Director

## MEMORANDUM

To: CMP Policy & Implementation Committee

From: Larry L. Liggett   
Director, Land Use & Technology Programs

Date: July 18, 2018

Subject: Pinelands Infrastructure Trust Fund

---

### Overview

The Comprehensive Management Plan (CMP) relies upon several strategies for redirecting development from environmentally sensitive and agriculturally important areas to the Pinelands-designated growth areas, including traditional zoning and the Pinelands Development Credit (PDC) program. The CMP also recognizes that while there are private financial benefits to be derived from residential development, there are also public costs associated with the provision of capital facilities such as sewage disposal systems, water supply and roads that are needed to serve the new residential areas.

In order to facilitate the development anticipated in Regional Growth Areas (RGAs) and to ease financial burdens local taxpayers face in order to provide necessary infrastructure improvements, the Pinelands Infrastructure Bond Act was enacted on August 23, 1985. The Act authorized the issuance of bonds in the amount of \$30 million, the proceeds of which were to be used to provide grants and loans to any local unit<sup>1</sup> in the Pinelands Area for infrastructure capital projects that support development in Pinelands RGAs.

The Act defined “*infrastructure capital projects*” to include the acquisition, construction, improvement, expansion, repair or rehabilitation of all or part of any structure, facility or equipment necessary for, or ancillary to, any eligible system. Although a fairly broad range of infrastructure project types are eligible for funding under the Pinelands Infrastructure Trust Fund (PITF) program, the Commission has solely focused on sewer construction, primarily for two reasons:

---

<sup>1</sup> Local unit means any county, municipality, authority or agency that has administrative jurisdiction over an area that would be served by an infrastructure capital project.

1. This was the area of greatest need on the part of Pinelands RGAs when the program was first initiated; and
2. Existing wastewater assistance programs offered by the New Jersey Department of Environmental Protection (NJDEP) provided a readily accessible source for the engineering expertise and management capacity that are necessary to effectively undertake such construction projects and which the Commission did not and presently does not possess.

The Infrastructure Bond Act required that the Pinelands Commission adopt an Infrastructure Master Plan to evaluate proposed projects. The Commissioner of the NJDEP is authorized to approve projects undertaken in conjunction with this program, subject to a finding that the applicant municipality's zoning ordinance has been certified by the Pinelands Commission and that the Commission finds that the projects are consistent with the Infrastructure Master Plan.<sup>2</sup> In 1987, by Resolution PC4-87-3, the Commission adopted an Infrastructure Master Plan that includes a list of the projects that municipalities, utility authorities or county and regional planning agencies in all 23 Pinelands RGAs identified as necessary to accommodate growth.

The Act did not specify what proportion of loans versus grants should be awarded under the program. An Infrastructure Financing Plan was prepared to help the Commission answer this question. Based on the analysis provided in the financing plan, which was also adopted in 1987, the Commission ultimately decided that the State's Municipal Wastewater Assistance program, administered by the NJDEP's Municipal Finance & Construction Element, would be the most effective framework for arranging financing for eligible projects.<sup>3</sup> The Commission also concluded that all projects receiving a Notice of Project Eligibility would be offered a grant of up to 40% of the eligible project costs and a loan of up to 20% of the eligible project costs. The remaining project costs would either be financed at the local level or through a market-rate loan from the New Jersey Infrastructure Financing Trust.

### ***Summary of PITF Projects and Status***

The table on the following page lists the PITF projects funded by the Commission and outlines the appropriations adjustments that were made with each successive PITF program round. After the original appropriation in 1987, the Commission solicited proposals from Pinelands communities on four occasions, the last in 1993. At that point in time, virtually all of the capital funds available through the program were allocated.

A brief description of all PITF projects is attached at the end of this memorandum.

---

<sup>2</sup> Consequently, each time a new project is approved under the PITF program or the program is revised in any way, the Commission must adopt a resolution modifying the Infrastructure Master Plan to formally incorporate such changes.

<sup>3</sup> At the time the Financing Plan was being prepared, the State Construction Grants Program, which was then the vehicle for funding wastewater projects, was being replaced due to the expiration of federal funds. The State developed the Municipal Waste Water Assistance Program and the administrative rules governing this program, N.J.A.C. 7:22-6 and N.J.A.C. 7:22-7, became effective May 4, 1987. It was administered through NJDEP's Environmental Trust, now known as the NJ Infrastructure Bank.

**Summary Table**  
**PITF Appropriations and Projects 1987-1993**

Projects	1987	1990	1991	May 1993	September 1993
State Administration	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Local Planning & Design	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Monroe Interceptor and Collection	\$3,124,500	\$3,124,500	\$3,124,500	\$3,124,500	\$3,124,500
ACUA Coastal Interceptor	\$13,800,000	\$13,800,000	\$13,800,000	\$10,407,153	\$10,407,153
Waterford Sewage Treatment Plant	\$2,520,000	0	0	0	0
OCUA Ridgeway-Cabin Branch Interceptor					
OCUA	\$3,648,000	0	0	0	0
OCUA Manchester	n/a	n/a	\$4,337,848	\$4,337,848	0
Chesilhurst Interceptor	\$307,906	0	0	0	0
Chesilhurst Collection System	\$317,894	\$2,897,122	\$2,897,122	\$1,761,008	\$1,761,008
Hamilton-Harding Highway Interceptor	\$855,000	\$855,000	\$855,000	\$855,000	\$855,000
Galloway-Pinehurst Interceptors	\$395,716	\$395,716	\$395,716	\$395,716	\$395,716
Stafford-Ocean Acres Skeleton System	\$2,880,003	\$2,438,833	\$2,438,833	\$2,438,833	\$2,438,833
Winslow Route 73 Interceptor & Collection	n/a	n/a	n/a	\$4,687,754	\$5,985,273
Barnegat Phase 1 Interceptor	n/a	n/a	n/a	n/a	\$1,737,600
Hamilton-ACUA Collection	n/a	n/a	n/a	n/a	\$744,467
Egg Harbor Township Collection	n/a	n/a	n/a	n/a	\$605,612
Contingency Grants & Loans	\$1,550,961	\$1,550,961	\$1,550,961	\$1,392,168	\$1,344,818
Reserved for Future Use	0	\$4,337,848	0	0	0
<b>Total</b>	<b>\$30,000,000</b>	<b>\$30,000,000</b>	<b>\$30,000,000</b>	<b>\$30,000,000</b>	<b>\$30,000,000</b>

***Changes to the Program since 1987***

Since 1987, the Commission has approved several revisions to the system used to evaluate projects in order to emphasize changing priorities. For example, in 1990, the ranking system was modified to explicitly consider the number of PDC opportunities a proposed project would support. In 1991, the ranking system was revised again to eliminate project cost as a factor because it was not a reliable indicator of project cost-effectiveness. In 2006, the Commission adopted another series of ranking criteria changes, awarding bonus points for mixed-use projects, higher density development, and innovative design and treatment.

***2006 Funding Round***

By 2005, sufficient loan funds and accrued interest (\$15.3 million) had been repaid to the PITF to enable to Commission to launch another funding round. In April of that year, the Commission conducted a survey of Pinelands growth area communities to determine whether the PITF Program should continue to focus on sewer construction or whether it should be expanded to address other infrastructure needs. Although the survey results cannot necessarily be considered conclusive, due primarily to the low response rate, they did suggest an interest in a broader application of the program funds. Many of the respondents indicated that the PITF was still needed to fund sewer construction projects, but a clear interest was expressed in funding for transportation and water infrastructure projects as well.

In May 2006, the Commission once again advised potential grantees of the availability of PITF monies and encouraged communities to submit project proposals. In response to this invitation, the Commission received six proposals, five of which were either ineligible because they did not propose expanding sewer service systems or only marginally met the program ranking criteria because the new residential component was so small. As a result, these five applications were given extremely low eligibility scores. Only one proposal, submitted by the Jackson Township Municipal Utilities Authority, seemed to meet the objectives of the PITF Program. However, the time needed to fulfill all of the regulatory steps that had to be followed before an award could be conveyed was far longer than the Jackson MUA could wait to advance its project. Consequently, the community elected to not to accept PITF funds.

Given the low quality of project proposals received during the 2006 solicitation (in terms of addressing the program ranking criteria), together with the general observation that most of the sewer systems needed to serve growth areas had already been constructed and presently have adequate reserve capacity to accommodate a considerable proportion of likely future development demands, the Commission decided not to pursue further PITF rounds or projects.

### ***2018 Needs Survey***

In July 2018, Commission staff began a survey of RGAs to determine whether conditions had changed and what types of infrastructure funding needs might exist today. Letters were mailed to counties, municipalities, and municipal utility authorities to advise them of the availability of approximately \$15.6 million in funding. A series of meetings will be scheduled with entities that express an interest in using the PITF to help fund projects that are currently in the planning stage. These meetings will provide information about pressing infrastructure needs in the RGAs and will help staff formulate a Pinelands Infrastructure Master Plan Amendment.

We will be discussing these efforts with the Committee on July 27<sup>th</sup>, along with the next steps of developing project ranking criteria and preparing an Infrastructure Master Plan Amendment. The Infrastructure Master Plan will identify the projects that would be eligible for funding through PITF. The Master Plan will be brought to the full Commission for approval before submitting it to the NJDEP and gaining legislative approval. Legislative approval would be the final step before projects could be authorized to apply for funding.

### ***PITF Projects 1987-1993***

Monroe Interceptor and Collection System: This project, sponsored by the Monroe Township Municipal Utilities Authority, involved the extension of the Township's interceptor system to service its entire RGA, as well as a collection system for the Victory Lakes/Friendly Village area in the RGA. The collection system was intended to serve new development as well as some 975 existing units, some with reported septic system failures, in the Victory Lakes/Friendly Village area.

Atlantic County Utilities Authority Coastal Interceptor: This was a regional interceptor project that was constructed to serve the RGAs of both Hamilton and Egg Harbor townships and to correct a stream discharge problem from the Hamilton Sewage Treatment Plant. The interceptor has the capacity to serve over 33,000 homes, including some existing homes with septic system problems.

Waterford Sewage Treatment Plant: abandoned

Ocean County Utilities Authority Ridgeway-Cabin Branch Interceptor: This project was originally for construction of a regional interceptor to serve both Manchester and Jackson townships. The project was revised to involve construction of an interceptor and collection system to serve Manchester Township only. The interceptor was sponsored by the Ocean County Utilities Authority while the collection system was sponsored by the Manchester Township Municipal Utilities Authority. Under the revised project, sufficient capacity was to be retained for service into Jackson Township's RGA.

Chesilhurst Interceptor: abandoned

Chesilhurst Collection System: This project was sponsored by the Borough of Chesilhurst to alleviate a problem with residential septic systems in areas of unsuitable soils. The collection system connects to the Atlantic Basin Interceptor, which conveys wastewater to the Camden County treatment facility in Camden. The entire Borough is located in a Pinelands RGA.

Hamilton-Harding Highway Interceptor: This interceptor was completed by the early 1990s and serves a portion of Hamilton Township's RGA. The project ultimately qualified for additional PITF funding when the Hamilton Township Sewage Treatment Plant was converted to a pumping station and the wastewater was directed to the Atlantic County Utilities Authority Coastal Interceptor.

Galloway-Pinehurst Interceptors: This project, sponsored by Galloway Township, consisted of the construction of two interceptors to serve the Pinehurst portion of the Township's RGA. The Pinehurst area is located north of the White Horse Pike (Route 30) and west of the Garden State Parkway.

Stafford-Ocean Acres Skeleton System: This project was sponsored by the Stafford Township Municipal Utilities Authority and involved a collection system to serve a portion of the Ocean Acres subdivision, a community that comprises a major portion of the Township's RGA. The area is bounded on the east by the Garden State Parkway and to the south by Route 72.

Winslow Route 73 Interceptor and Collection System: This project comprised all three phases of a regional interceptor network to serve the entirety of Winslow Township's RGA. The interceptor ties into the Camden County Municipal Utilities Authority's Cedarbrook pumping station, which conveys the wastewater to the county treatment facility in Camden.

Barnegat Phase I Interceptor: This was a two-phase project to serve areas both east and west of the Garden State Parkway. Phase I was intended to serve both existing and new development in a significant portion of Barnegat's RGA, both in the Pinelands Area and in the Pinelands National Reserve. Phase II was intended to provide sewer service in the remainder of the RGA in the Pinelands Area and the Pinelands National Reserve.

Hamilton ACUA Collection System: This project was proposed by the Hamilton Township Municipal Utilities Authority and involved the construction of a collection system to serve the eastern portion of the Township's RGA. The system is in close proximity to the Coastal Interceptor. It serves an area of approximately 1,400 acres in the vicinity of the Hamilton Mall and the Atlantic City Expressway.

Egg Harbor Collection System: This project was submitted by the Egg Harbor Township Municipal Utilities Authority and was designed to extend sewer service to the western portion of the Township's RGA. The collection area serves some 400 acres and ties into the existing Atlantic County Utilities Authority pumping station at English Creek Avenue.