

CLEAN WATER ACT PERMIT APPLICATIONS

SECTION 404 APPLICATION FOR
DEPARTMENT OF ARMY PERMIT
AND

SECTION 401 APPLICATION FOR
OHIO EPA WATER QUALITY CERTIFICATION

**FEDEx GROUND
PERRYSBURG TOWNSHIP, WOOD COUNTY, OHIO**

JULY 2014

PREPARED FOR:
MJM ARCHITECTS
105 BROADWAY
NASHVILLE, TENNESSEE 37201



TABLE OF CONTENTS

SECTIONS:

SECTION 1	APPLICATION FOR DEPARTMENT OF THE ARMY 404 PERMIT	i
SECTION 2	APPLICATION FOR OHIO EPA SECTION 401 WATER QUALITY CERTIFICATION	1

APPENDICES

APPENDIX A	FIGURES
APPENDIX B	AGENCY COORDINATION LETTER
APPENDIX C	APPLICATION FOR SECTION 401 WATER QUALITY CERTIFICATION
APPENDIX D	MITIGATION AGREEMENT
APPENDIX E	WETLAND DELINEATION

SECTION 1

Application for Department of the Army 404 Permit
Attachment A – Additional Information 404 Permit

TABLE 2
Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property is Adjacent to FedEx Ground

Owner	Mailing Address	City	State	Zip	Parcel ID
Webb Corporation	0 J Street	Perrysburg	OH	43551	P57-300-250001013000
Tempglass Group Inc.	291 M Street	Perrysburg Township	OH	43551	P57-300-260000025500
Nopac LLC.	232 J Street	Perrysburg Township	OH	43551	P57-300-260000027000
Willis Day Warehousing Co. Inc.	0 Buck Road	Perrysburg Township	OH	43551	P57-300-260000024000
Willis Day Warehousing Co. Inc.	0 D Street	Perrysburg Township	OH	43551	P57-300-250001009000
W. W. Grainger Inc.	1300 Third Street	Perrysburg Township	OH	43551	P57-300-260000040000
Vontz Realty Company	0 J Street	Perrysburg Township	OH	43551	P57-300-260000039000
Bielski Martha J & Ronald E Trustees	29960 Glenwood Road	Perrysburg Township	OH	43551	P57-300-260000041000
Willis Day Warehousing Co. Inc.	0 Glenwood Road	Rossford Township	OH	43551	T68-300-260000023000
Willis Day Warehousing Co. Inc.	0 Glenwood Road	Rossford Township	OH	43551	T68-300-260000022000
Willis Day Warehousing Co. Inc.	0 Glenwood Road	Rossford Township	OH	43551	T68-300-260000020000
Willis Day Warehousing Co. Inc.	837 Glenwood Road	Rossford Township	OH	43551	T68-300-260000019000



Owner	Mailing Address	City	State	Zip	Parcel ID
Thammavongsa Bounmy Eddie & Praseuth	835 Glenwood Road	Rossford Township	OH	43551	T68-300-260000017500
Bischoff Thomas L	829 Glenwood Road	Rossford	OH	43460	T68-300-260000016000
Luallen Joss J	823 Glenwood Road	Rossford	OH	43460	T68-300-260000014000
Camelot East Apartments LLC	803 Glenwood Road	Rossford	OH	43460	T68-300-260000013000
Camelot East Apartments LLC	0 Glenwood Road	Rossford	OH	43460	T68-300-260000012000
Thyssenkrupp Materials Inc.	0 Glenwood Road	Northwood	OH	43619	M51-300-230404071000
Thyssenkrupp Materials Inc.	8001 Thyssenkrupp Parkway	Northwood	OH	43619	M51-300-230404072000
Norplas Industries Inc.	7825 Caple Boulevard	Northwood	OH	43619	M51-300-240001001000

SECTION 2

Application for Ohio EPA Section 401 Water Quality Certification
Attachment B – Additional Information Water Quality Certification

**APPLICATION FOR OHIO EPA
SECTION 401 WATER QUALITY CERTIFICATION****Effective October 1, 1996
Revised August, 1998**

This application must be completed whenever a proposed activity requires an individual Clean Water Act Section 401 Water Quality Certification (Section 401 certification) from Ohio EPA. A Section 401 certification from the State is required to obtain a federal Clean Water Act Section 404 permit from the U.S. Army Corps Engineers, or any other federal permits or licenses for projects that will result in a discharge of dredged or fill material to any waters of the State. To determine whether you need to submit this application to Ohio EPA, contact the U.S. Army Corps of Engineers District Office with jurisdiction over your project, or other federal agencies reviewing your application for a federal permit to discharge dredged or fill material to waters of the State, or an Ohio EPA Section 401 Coordinator at (614) 644-2001.

The Ohio EPA Section 401 Water Quality Certification Program is authorized by Section 401 of the Clean Water Act (33 U.S.C. 1251) and the Ohio Revised Code Section 6111.03(P). Ohio Administrative Code (OAC) Chapter 3745-32 outlines the application process and criteria for decision by the Director of Ohio EPA. In order for Ohio EPA to issue a Section 401 certification, the project must comply with Ohio's Water Quality Standards (OAC 3745-1) and not potentially result in an adverse long-term or short-term impact on water quality. Included in the Water Quality Standards is the Antidegradation Rule (OAC Rule 3745-1-05), effective October 1, 1996, revised October, 1997 and May, 1998. The Rule includes additional application requirements and public participation procedures. Because there is a lowering of water quality associated with every project being reviewed for Section 401 certification, every Section 401 certification applicant must provide the information required in Part 10 (pages 3 and 4) of this application. In addition, applications for projects that will result in discharges of dredged or fill material to wetlands must include a wetland delineation report approved by the Corps of Engineers, a wetland assessment with a proposed assignment of wetland category (ies), official documentation on evaluation of the wetland for threatened or endangered species, and appropriate avoidance, minimization, and mitigation as prescribed in OAC 3745-1-50 to 3745-1-54. Ohio EPA will evaluate the applicant's proposed wetland category assignment and make the final assignment.

Information provided with the application will be used to evaluate the project for certification and is a matter of public record. If the Director determines that the application lacks information necessary to determine whether the applicant has demonstrated the criteria set forth in OAC Rule 3745-32-05(A) and OAC Chapter 3745-1, Ohio EPA will inform the applicant in writing of the additional information that must be submitted. The application will not be accepted until the application is considered complete by the Section 401 Coordinator. An Ohio EPA Section 401 Coordinator will inform you in writing when your application is determined to be complete.

Please submit the following to "Section 401 Supervisor, Ohio EPA/DSW, P.O. Box 1049, Columbus, Ohio 43216-1049:

- Four (4) sets of the completed application form, including the location of the project (preferably on a USGS quadrangle) and 8-1/2 x 11 scaled plan drawings and sections.
- One (1) set of original scaled plan drawings and cross-sections (or good reproducible copies).

(See Application Primer for detailed instructions)

1. The federal permitting agency has determined this project: (check appropriate box and fill in blanks)	
a. <u>X</u> requires an individual 404 permit/401 certification- Public Notice # (if known)	
b. ___ requires a Section 401 certification to be authorized by Nationwide Permit #	
c. ___ requires a modified 404 permit/401 certification for original Public Notice #	
d. ___ requires a federal permit under _____ jurisdiction identified by #	
e. ___ requires a modified federal permit under _____ jurisdiction identified by #	
2. Application number (to be assigned by Ohio EPA):	
3. Name and address of applicant:	Telephone number during business hours:
FedEx Ground, Inc. - Facilities Project Engineer 1000 FedEx Drive Moon Twp., PA 15108 Attn: Dean Bonenberger	(412) 859-5908
3a. Signature of Applicant:	Date:
4. Name, address and title of authorized agent:	Telephone number during business hours:
Jessica Stratigakos The Mannik & Smith Group, Inc. 2235 Mercantile Road Beachwood, OH 444122	(216) 378-1490 (Office) (216) 704-1530 (Cell) (216) 378-1497 (Fax)
4a. Statement of Authorization: I hereby designate and authorize the above-named agent to act in my behalf in the processing of this permit application, and to furnish, upon request, supplemental information in support of the application.	
Signature of Applicant:	Date:
5. Location on land where activity exists or is proposed. Indicate coordinates of a fixed reference point at the impact site (if known) and the coordinate system and datum used.	
The proposed project is located in Perrysburg Township, Wood County, Ohio. Site lies within Cedar Portage watershed (HUC 04100010). The coordinates for the site are:	
Lat 41.592522 N Long -83.551206 W	
Street, Road, Route, and Coordinates, or other descriptive location	
The Site is located south of Interstate 75, 375 feet WEST of Glenwood Road, directly NORTH of Third Street. USGS map Township 3 North and Section 26.	
Watershed: Lower Maumee County: Wood Township: Perrysburg City: Perrysburg State: Ohio Zip Code: 43551	

6. Is any portion of the activity for which authorization is sought complete? Yes No
 If answer is "yes," give reasons, month and year activity was completed. Indicate the existing work on the drawings.

7. List all approvals or certifications and denials received from other federal, interstate, state or local agencies for any structures, construction, discharge or other activities described in this application.

<u>Issuing Agency</u>	<u>Type of Approval</u>	<u>Identification No.</u>	<u>Date of Application</u>	<u>Date of Approval</u>	<u>Date of Denial</u>
Ohio EPA	Isolated Wetland Permit	TBD	_____	TBD	

8. DESCRIPTION OF THE ACTIVITY (fill in information in the following four blocks - 8a, 8b, 8c & 9)**8a. Activity: Describe the Overall Activity:**

The FedEx Ground is an existing facility that is located at Buck Road near the I-75 interchange in Perrysburg Township, Wood County, Ohio (Figure 1). A NWP was issued in September 21, 2007 for the construction of the existing Site, a new package distribution hub, impacting three wetlands disturbing a total of 0.44 acre of wetlands. To mitigate for these impacts FedEx was required to purchase 0.90 credit from the North Coast Regional Council of Park Districts (NCRCPD) Edison Woods Mitigation Bank.

The proposed activity that is the subject of this permit application involves approximately 88,000 square feet (SF) of building expansion to the existing distribution center as well as new parking areas for automobiles, tractor/trailers, delivery vans, dolly storage to the north, east and south of the existing Site. In addition, an area for additional fueling capacity is planned. The building expansion will consist of a pre-engineered metal building (PEMB).

8b. Purpose: Describe the purpose, need and intended use of the activity:

This expansion will provide the space necessary to accommodate the additional package volume that is forecasted for CY15 thru CY20, and provide for the necessary additional trailer and automobile parking. The proposed Site will be able to process 60,000 packages an hour. Without this expansion operational costs would substantially increase and place economic hardship on the applicant and its customers. In addition, the long term operational viability of this site is dependent on its ability to expand and meet the current and projected demand for this area. The nearest facility of similar size is the Columbus, OH Hub, and that facility is already at capacity with no more room for expansion. If this project was not built the additional package volume and subsequent jobs would be shifted to other facilities (i.e. Detroit, MI, Pontiac, MI, Fort Wayne IN).

This expansion is projected to accommodate the package volume for approximately 5-years. However, this expansion is not "full build-out". "Full build-out" is projected to allow this facility to operate until approximately 2023.

8c. Discharge of dredged or fill material: Describe type, quantity of dredged material (in cubic yards), and quantity of fill material (in cubic yards). **(OAC 3745-1-05(B)(2)(a))**

Approximately 1742.4 cubic yards of native soils will be discharged into the wetlands on the property (Minimal Degradation Alternative) as a result of the clearing and grubbing activities that will occur to prepare the site for construction. Table 1 presents a summary of the amounts of soil that will be discharged, assuming that approximately one foot of fill material will be deposited into each wetland, over the area of impact during clearing and grubbing the Site to prepare for development. Of the 1.83 acres of wetlands potentially under USACE jurisdiction that are on site, 1.08 acres will be impacted by this project.

**Table 1: Summary of Proposed (Minimal Degradation Alternative)
Wetland Fill Areas and Volumes at FedEx Ground**

Wetland Identification	Wetland Category	Size (Acres)	Area Impacted (Acres)	Volume of Fill Required (Cubic Yards)	Potential Jurisdiction
Wetland C	Category 1 or 2	0.33	0.33	532.40	USACE
Wetland D	Category 1 or 2	0.75	0.75	1210.00	USACE
Wetland N	Category 1 or 2	0.37	0	0.00	USACE
Wetland O	Category 1 or 2	0.21	0	0.00	USACE
Wetland S	Category 1 or 2	0.17	0	0.00	USACE
Totals		1.83	1.08	1742.40	

9. Waterbody and location of waterbody or upland where activity exists or is proposed, or location in relation to a stream, lake, wetland, wellhead or water intake (if known). Indicate the distance to, and the name of any receiving stream, if appropriate.

All wetlands on the site drain to the north flowing into a small roadside drainage ditch that flows northeast along I-75 then travels north for 1.2 miles in a ditch along Tracy road, then travels east for one mile and connects to Otter Creek. Otter Creek travels northeasterly direction for eight miles which discharges into the Maumee Bay (*Figure 2*).

10. To address the requirements of the Antidegradation Rule, your application must include a report evaluating the:

- o Preferred Design (your project) and Mitigative Techniques
- o Minimal Degradation Alternative(s) (scaled-down version(s) of your project) and Mitigative Techniques
- o Non-Degradation Alternative(s) (project resulting in avoidance of all waters of the state)

At a minimum, item a) below must be completed for the Preferred Design, the Minimal Degradation Alternative(s), and the Non-Degradation Alternative(s), followed by completion of item b) for each alternative, and so on, until all items have been discussed for each alternative (see Primer for specific instructions). (Application and review requirements appear at **OAC 3745-1-05(B)(2)**, **OAC 3745-1-05(C)(6)**, **OAC 3745-1-05(C)(1)** and **OAC 3745-1-54**).

- 10a) Provide a detailed description of any construction work, fill or other structures to occur or to be placed in or near the surface water. Identify all substances to be discharged, including the cubic yardage of dredged or fill material to be discharged to the surface water. (**OAC 3745-1-05(B)(2)(b)**)
- 10b) Describe the magnitude of the proposed lowering of water quality. Include the anticipated impact of the proposed lowering of water quality on aquatic life and wildlife, including threatened and endangered species (include written comments from Ohio Department of Natural Resources and U.S. Fish and Wildlife Service), important commercial or recreational sport fish species, other individual species, and the overall aquatic community structure and function. Include a Corps of Engineers approved wetland delineation. (**OAC 3745-1-05(C)(6)(a, b)** and **OAC 3745-1-54**)
- 10c) Include a discussion of the technical feasibility, cost effectiveness, and availability. In addition, the reliability of each alternative shall be addressed (including potential recurring operational and maintenance difficulties that could lead to increased surface water degradation.) (**OAC 3745-1-05(C)(6)(h, j-k)** and **OAC 3745-1-54**)
- 10d) For regional sewage collection and treatment facilities, include a discussion of the technical feasibility, cost effectiveness and availability, and long-range plans outlined in state or local water quality management planning documents and applicable facility planning documents. (**OAC 3745-1-05(C)(6)(i)**)
- 10e) To the extent that information is available, list and describe any government and/or privately sponsored conservation projects that exist or may have been formed to specifically target improvement of water quality or enhancement of recreational opportunities on the affected water resource. (**OAC 3745-1-05(B)(2)(g)**)
- 10f) Provide an outline of the costs of water pollution controls associated with the proposed activity. This may include the cost of best management practices to be used during construction and operation of the project. (**OAC 3745-01-05(C)(6)(g)**)
- 10g) Describe any impacts on human health and the overall quality and value of the water resource. (**OAC 3745-1-05(C)(6)(c)** and **OAC 3745-1-54**)
- 10h) Describe and provide an estimate of the important social and economic benefits to be realized through this project. Include the number and types of jobs created and tax revenues generated and a brief discussion on the condition of the local economy. (**OAC 3745-1-5(B)(2)(e)**, and **OAC 3745-1-05(C)(6)(i)**)
- 10i) Describe and provide an estimate of the important social and economic benefits that may be lost as a result of this project. Include the effect on commercial and recreational use of the water resource, including effects of lower water quality on recreation, tourism, aesthetics, or other use and enjoyment by humans. (**OAC 3745-1-05(B)(2)(e,f)**, and **OAC 3745-1-05(C)(6)(e)**)

- 10j) Describe environmental benefits, including water quality, lost and gained as a result of this project. Include the effects on the aquatic life, wildlife, threatened or endangered species. (OAC 3745-1-05 (B)(2)(e,f), OAC 3745-1-05 (C)(6)(b) and OAC 3745-1-54)
- 10k) Describe mitigation techniques proposed (except for the Non-Degradation Alternative):
- o Describe proposed Wetland Mitigation (see OAC 3745-1-54 and Primer)
 - o Describe proposed Stream, Lake, Pond Mitigation (see Primer)
11. Application is hereby made for a Section 401 Water Quality Certification. I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

Signature of Applicant

Date

Signature of Agent

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in Block 3 has been filled out and signed.

Do not send a certification processing fee with this application. The appropriate fee will be assessed when a certification is issued.

10. To address the requirements of the Antidegradation Rule, your application must include a report evaluating the:
- o Preferred Design (your project) and Mitigative Techniques
 - o Minimal Degradation Alternative(s) (scaled-down version(s) of your project) and Mitigative Techniques
 - o Non-Degradation Alternative(s) (project resulting in avoidance of all waters of the state)

At a minimum, item a) below must be completed for the Preferred Design, the Minimal Degradation Alternative(s), and the Non-Degradation Alternative(s), followed by completion of item b) for each alternative, and so on, until all items have been discussed for each alternative (see Primer for specific instructions). (Application and review requirements appear at OAC 3745-1-05(B)(2), OAC 3745-1-05(C)(6), OAC 3745-1-05(C)(1) and OAC 3745-1-54).

- 10a) Provide a detailed description of any construction work, fill or other structures to occur or to be placed in or near the surface water. Identify all substances to be discharged, including the cubic yardage of dredged or fill material to be discharged to the surface water. (OAC 3745-1-05(B)(2)(b))

Preferred Alternative:

The Preferred Alternative for this project involves using the remaining space available on the property currently owned by FedEx. This includes the expansion of Load Wing B, the expansion of the distribution center and the creation of load Wing C. Furthermore, site paving is proposed to increase existing FedEx Site traffic route efficiency, new paving for vehicular parking, and a new fence around the proposed site paving.

Benefits to using the property currently owned by FedEx includes:

- The close proximity to the existing detention basins on the northern boundary of the site will allow for easy storm sewer access
- No additional land acquisition needed
- Space available at additional parcel for additional parking requirements

Construction of the site will be completed in two phases, all the impacts to wetlands will occur during the first phase. The second phase is anticipated to be completed within five years of the first phase. Prior to construction, all remaining trees, shrubs and herbaceous vegetation would have been cleared and grubbed from the Site. Topsoil would have been stripped from the Site, stockpiled on site and used as needed.

The overall footprint of this alternative would have included approximately 35 acres of impervious surface. Table 2 presents a summary of the wetland impacts that would have occurred as a result of the Preferred Alternative. Filling of the five wetlands would have occurred directly during clearing and grubbing activities at the site and preparation for construction. A 20 foot buffer was included. Assuming a depth of one foot of incidental "fill" material, the total volume of "fill" that would have been deposited into the wetlands during clearing and grubbing activities would have equated to 2678.13 cubic yards. Once the wetland areas had been cleared of vegetation, soils would have been excavated from these areas and the site prepped as described above. Under this alternative all of the wetlands that exist on the site would have been impacted totaling 1.66 acres.

Table 2
Summary of Proposed Wetland Fill Areas and Volumes at

Wetland Identification	Wetland Category	Size (Acres)	Area Impacted (Acres)	Volume of Fill Required (Cubic Yards)	Potential Jurisdiction
Wetland C	Category 1 or 2	0.33	0.33	532.40	USACE
Wetland D	Category 1 or 2	0.75	0.75	1210.00	USACE
Wetland N	Category 1 or 2	0.37	0.37	596.93	USACE
Wetland O	Category 1 or 2	0.21	0.21	338.80	USACE
Wetland S	Category 1 or 2	0.17	0	0.00	USACE
Totals		1.83	1.66	2678.13	

FedEx Ground for the Preferred Alternative

This Preferred Alternative was not pursued due to the additional impact to wetlands. Instead, the Minimal Degradation Alternative was chosen by the Applicant. The same Site expansion goals can be met by purchasing an upland parcel located southwest of the Site as proposed in the Minimal Degradation Alternative.

Minimal Degradation Alternative:

The Minimal Degradation Alternative (MDA) involves the purchase of a parcel located southeast of the current Site. This property was investigated by MSG and was found to consist of upland areas and a man-made pond. This property will be used for additional parking and the construction of a stormwater detention basin. Utilizing this property will reduce the amount of wetlands areas impacted by the proposed expansion of parking area and existing detention basin in order to accommodate for the additional impervious surface area. Wetland impacts in the MDA were reduced to 1.08 acres, as summarized in Table 3. This represents a 0.58-acre reduction in wetland impacts as compared to the Preferred Alternative. Wetland fill was reduced to 1742.4 cubic yards.

Table 3
Summary of Proposed Wetland Fill Areas and Volumes
at FedEx Ground for the Minimal Degradation Alternative

Wetland Identification	Wetland Category	Size (Acres)	Area Impacted (Acres)	Volume of Fill Required (Cubic Yards)	Potential Jurisdiction
Wetland C	Category 1 or 2	0.33	0.33	532.40	USACE
Wetland D	Category 1 or 2	0.75	0.75	1210.00	USACE
Wetland N	Category 1 or 2	0.37	0	0.00	USACE
Wetland O	Category 1 or 2	0.21	0	0.00	USACE
Wetland S	Category 1 or 2	0.17	0	0.00	USACE
Totals		1.83	1.08	1742.40	

As with the Preferred Alternative, the Minimal Degradation Alternative will allow FedEx Ground to expand its operation to process 60,000 packages per hour. Both alternatives have the same capacity for parking and for stormwater management.

Non-Degradation Alternative:

The Non-degradation Alternative is not building the proposed expansion. The expansion of Load Wing B, the distribution center and the addition of Load Wing C is critical in this expansion to accommodate the additional package volume that is forecasted for the next 15-20 years and to provide the necessary additional trailer and automobile parking. This expansion cannot be built without impacting wetlands.

FedEx operations and the local economy would be adversely effected if the proposed expansion could not occur because additional package volume and the subsequent jobs would be shifted to other facilities (i.e. Detroit, MI, Pontiac, MI, Fort Wayne IN). The nearest facility of similar size is the Columbus, OH Hub, and that facility is already at capacity with no more room for expansion.

If FedEx was not able to expand operations at the current facility it would be required to move the hub to a new location. This would be a major strain on FedEx operations and potentially the local economy if an appropriate building site could not be found in the Perrysburg area.

Development of the adjacent parcel southwest of the site would not be sufficient for operational needs. It would only provide additional parking and stormwater storage. Without expanding operations this additional parking would not be necessary.

- 10b) Describe the magnitude of the proposed lowering of water quality. Include the anticipated impact of the proposed lowering of water quality on aquatic life and wildlife, including threatened and endangered species (include written comments from Ohio Department of Natural Resources and U.S. Fish and Wildlife Service), important commercial or recreational sport fish species, other individual species, and the overall aquatic community structure and function. Include a Corps of Engineers approved wetland delineation. (OAC 3745-1-05(C)(6)(a, b) and OAC 3745-1-54)**

Preferred Alternative:

For the Preferred Alternative, the proposed site had been designed to minimize the environmental impact of FedEx Ground expansion. Wetland impacts could not be reduced due to the lack of additional space for Load Wing C and the supporting parking spaces. Stormwater management was taken into consideration to not put additional stress upon the storm sewer infrastructure. The existing stormwater detention basins will need to be expanded in order to accommodate for the additional impervious surface. The expansion of the detention basins will impact the surrounding wetlands. This alternative was not pursued, as avoidance and minimization of wetland impacts on the site could not be accomplished with the planned expansion activities.

Threatened/Endangered Species:

The Ohio Department of Natural Resources (ODNR) identified no rare or endangered species near the Site (See Appendix B). Also, no existing state nature preserves or known unique ecological sites, geologic

features, breeding or non-breeding animal concentrations, state parks, scenic rivers, state forest, or wildlife areas are known to exist within the Site. Therefore, the proposed project will have no effect on these types of resources.

According to the United States Fish and Wildlife Service (USFWS) website, Wood County, Ohio lies within the range of the Indiana bat (*Myotis sodalis*), the northern long-eared bat (*Myotis septentrionalis*) and the rayed bat (*Villosa fabalis*).

The federally endangered Indiana bat and the federally proposed endangered northern long-eared bat prefers dead or live trees and snags with peeling or exfoliating bark, split tree trunks and /or branches cavities; live trees such as shagbark hickory (*Carya ovata*) and stream corridors, riparian areas and upland woodlots which provide forage sites.

Within two miles of the proposed project, approximately 616 acres of similar woodland habitat exist that may contain suitable habitat for the Indiana bat and the northern long-eared bat (Fig.4). Removal of 26 acres of woodlot at the Site will result in a 4.2 percent loss of potential Indiana bat habitat within this area. In order to eliminate the potential for impact to the species, the woodlots will be cleared between November 1 and April 1, when the species will not be present in Northwest Ohio. Therefore, the proposed project should have no effect on the Indiana bat or the northern long-eared bat.

The federally endangered rayed bat (*Villosa fabalis*) prefers small headwater creeks with gravel or sand substrate. Typically the species will be found near and in the roots of aquatic vegetation. There are no headwater streams on the site therefore this project will have no effect on this species.

Minimal Degradation Alternative:

Similar to the Preferred Alternative, the Minimal Degradation Alternative has been designed to minimize the environmental impact of the FedEx Ground expansion. The same amount of impervious surface and stormwater detention is proposed for both alternatives. The Minimal Degradation Alternative utilizes the adjacent parcel to the southeast of the site. The development of this parcel includes a proposed stormwater detention basin. The construction of this basin will negate the need for the expansion of the existing basins and therefore reduce the overall impact to wetlands.

Controls are also proposed to manage surface water from the additional impervious surface at the site through the use of a detention basin - designed for a rainfall event with a recurrence of 100 years and with a duration of 24 hours. An NPDES permit application is included for stormwater discharge.

Approximately 1.08 acres wetlands will be impacted by the Minimal Degradation Alternative. As with the Preferred Alternative, this alternative is not expected to impact any federal or state listed species, existing or proposed state nature preserves, unique ecological sites, geologic features, state parks, state forests, scenic rivers or wildlife areas.

BMP's will be implemented during the construction of the cells to limit adverse impacts to aquatic resources.

Non-Degradation Alternative:

The Non-Degradation Alternative is a no build alternative and therefore will have no effect on water quality, aquatic life, wildlife, or threatened and endangered species.

- 10c) **Include a discussion of the technical feasibility, cost effectiveness and availability. In addition, the reliability of each alternative shall be addressed (including potential recurring operational and maintenance difficulties that could lead to increased surface water degradation.) (OAC 3745-1-05(C)(6)(h, j-k) and OAC 3745-1-54)**

Preferred Alternative:

The Preferred Alternative is technically feasible and the most cost effective alternative.

The Preferred Alternative would have cost approximately \$25,000,000 to design and construct. This option is the most cost effective because it provides the needed expansion for FedEx while using property currently owned by FedEx.

As designed, there will be an additional 35 acres of impervious surface, this includes 1,120 employee parking spaces and 930 trailer and van parking space, as well as the addition of Load-wing C.

The existing stormwater detention basin would be expanded to accommodate the additional impervious surface. The existing detention basin would be expanded by 11,850 cubic yards.

Stormwater runoff would have been routed to on-site drainage structures and through detention basins prior to discharge to surface waters.

Minimal Degradation Alternative:

The Minimal Degradation Alternative is technically feasible, available, and cost effective. This option has the advantage of providing the same amount of expansion for all FedEx Grounds operational needs at this location, while reducing impacts to wetlands on the site.

As with the Preferred Alternative, all storm water runoff will be diverted into detention ponds prior to being released via a pipe into the receiving waters. This alternative will also need a new stormwater detention basin on the acquired property located southwest of the existing Site. The total additional storm water storage needed is the same as the preferred 11,850 cubic yards.

The estimated total cost to construct the Minimal Degradation Alternative is \$25,00,000.

Non-degradation Alternative

The Non-Degradation Alternative is a no build alternative therefore would have no cost.

- 10d) **For regional sewage collection and treatment facilities, include a discussion of the technical feasibility, cost effectiveness and availability, and long-range plans outlined in state or local water quality management planning documents and applicable facility planning documents. (OAC 3745-1-05(C)(6)(i))**

The proposed project does not involve regional sewage collection or treatment facilities.

- 10e) **To the extent that information is available, list and describe any government and/or privately sponsored conservation projects that exist or may have been formed to specifically target**

improvement of water quality or enhancement of recreational opportunities on the affected water resource. (OAC 3745-1-05(B)(2)(g))

There are no known governmental or privately sponsored conservation projects that exist which specifically target the improvement of water quality or the enhancement or recreational opportunities within the impacted wetlands.

- 10f) Provide an outline of the costs of water pollution controls associated with the proposed activity. This may include the cost of best management practices to be used during construction and operation of the project. (OAC 3745-01-05(C)(6)(g))**

Preferred Alternative

Best management practices (BMP's) would have been implemented during the construction of any one of these alternatives. A Stormwater Pollution Prevention Plan (SWP3) would also have been designed and implemented under the State of Ohio's NPDES program during construction to minimized downstream impacts to water quality. The cost of implementing such a plan would have been approximately \$148,850 (see Table 4). BMP's would have also be implemented after the construction of the project and include seeding embankments, drainage channels, sedimentation basins and swales. Other BMP's such as silt fencing, straw bales and mulch blankets would have also been used as appropriate.

**TABLE 4
Cost Estimate for Water Pollution Controls at FedEx Ground**

Item	Quantity	Unit	Unit Cost	Total Cost
Topsoil, Seeding and Mulching	885,000	Square Feet	\$0.15	\$132,750
Straw Bales, Erosion Mat, Etc.	--	Lump Sum	\$3,500	\$3,500
Filter Fabric Fence	6300	Linear Foot	\$2.00	\$12,600
			Total Cost	\$148,850

Minimal Degradation Alternative

The Minimal Degradation involves the same overall project footprint just reconfigured to avoid wetland impacts. Therefore the water pollution controls would be the same cost as for the Preferred Alternative.

Non-Degradation Alternative

The Non-degradation Alternative is a no build alternative and therefore would not require any water pollution controls.

- 10g) Describe any impacts on human health and the overall quality and value of the water resource. (OAC 3745-1-05(C)(6)(c) and OAC 3745-1-54)**

Preferred, Minimal Degradation and Non-degradation Alternatives:

All alternatives would be designed, permitted and constructed in accordance with all applicable federal, state and local laws. For all the proposed alternatives the Ohio EPA will be responsible for permitting and licensing the Site. No adverse impacts to human health or the overall quality of aquatic resources are anticipated as a result of this project.

- 10h) Describe and provide an estimate of the important social and economic benefits to be realized through this project. Include the number and types of jobs created and tax revenues generated and a brief discussion on the condition of the local economy. (OAC 3745-1-5(B)(2)(e), and OAC 3745-1-05(C)(6)(i))

Preferred and Minimal Degradation Alternatives:

According to the 2010 census the population of Wood County is 125,488. A total of 48,636 households were reported in the County in 2009(2010 Census). The total civilian labor force was reported to be 66,600 in 2011. According to the Ohio Office of Policy, Research and Strategic Planning, the unemployment rate in Wood County, as of 2011 was 8.3%. This represents a trending decline from 2009 when the unemployment rate was 11.2% and when the unemployment rate was 2010 9.7%. According to the Ohio Office of Policy, Research and Strategic Planning, the median household income in 2009 was \$53,298.

The area surrounding the Alternatives is predominately rural in nature. According to the Ohio Office of Policy, Research and Strategic Planning, manufacturing, government and trade employment are the major economic industries operating within Wood County. Major employers in Wood County are listed in Table 5.

**Table 5
Major Employers in Wood County, Ohio¹**

Employer	Type
Bowling Green State University	Government
Chrysler Group LLC	Manufacturing
First Solar Inc	Manufacturing
Great Lakes Window Inc	Manufacturing
Magna Int'l/Norplas Inc	Manufacturing
Owens Community College	Government
Owens Illinois Inc	Manufacturing
Perrysburg Exempted Village Schools	Government
Walgreen Co	Trade
Wood County Government	Government
Wood County Hospital Assoc	Service
WPP PLC/TNS Custom Research	Service

¹ Information Obtained from the Office of Policy, Research and Strategic Planning

As designed, construction of the Preferred Alternative would have cost approximately \$23,000,000 and the Minimal-Degradation Alternative will cost approximately \$25,000,000. Each construction event for both alternatives will take approximately seven weeks to build. They will require approximately eight full-time construction workers on site during the construction of the project at an average wage of \$40.00 an hour.

Based on these figures the total income for the construction workers is estimated to be \$134,400 (8 workers x 60 hours a week x 7 weeks).

The economy of Wood County generates various tax revenues, including:

- 5.75 percent State sales tax
- 6.75 percent County sales tax

Table 6 presents an estimate of the total State revenues expected to be generated as a result of this project. Total State revenues, based on the individual state income tax rate and a 7.0 percent sales tax (state and local) are estimated to be \$9,629.

Table 6
Estimated State and Local Tax Revenues Generated by Preferred and Minimal-Degradation Alternatives

Category	Dollars Generated From Construction Project
Total income, before taxes	\$134,400
State income tax receipts¹	\$6,720
State and local tax income from sales²	\$2,909

¹ Figure based on 2004 1040 State Income Tax Tables

² Figure based on 6.5% State and local sales tax on 33.3% of salary

- 10i) Describe and provide an estimate of the important social and economic benefits that may be lost as a result of this project. Include the effect on commercial and recreational use of the water resource, including effects of lower water quality on recreation, tourism, aesthetics, or other use and enjoyment by humans. (OAC 3745-1-05(B)(2)(e,f), and OAC 3745-1-05(C)(6)(e))**

Currently, the FedEx Ground property provides a large economic benefit, contributing jobs, and supporting a large industry with a relatively small environmental footprint.

The Preferred, Minimal and the Non-Degradation Alternatives will be constructed adjacent to the existing FedEx Ground on the property already owned by FedEx. There will be no adverse impacts on commercial or recreational uses of water resources. Water quality, recreation, tourism, aesthetics and other uses by humans will also not be affected since the property is privately owned, not accessible to the general public and does not lie immediately adjacent to recreational resources.

- 10j) Describe environmental benefits, including water quality, lost and gained as a result of this project. Include the effects on the aquatic life, wildlife, threatened or endangered species. (OAC 3745-1-05 (B)(2)(e, f), OAC 3745-1-05 (C)(6)(b) and OAC 3745-1-54)**

The Preferred, Minimal and the Non-Degradation Alternatives will be constructed in accordance with all federal, state and local regulations that are meant to protect surface and ground water quality, human health and the environment.

Regardless of which alternative is selected, the construction of a well-designed expansion of the current FedEx Ground Site will have minimal impact on aquatic life due to the low quality of the wetlands. Water

quality will be maintained by a proper stormwater management plan. Threatened or endangered species will be protected by an appropriate timing of construction activities.

10k) Describe mitigation techniques proposed (except for the Non-Degradation Alternative):

- o Describe proposed Wetland Mitigation (see OAC 3745-1-54 and Primer)
- o Describe proposed Stream, Lake, Pond Mitigation (see Primer)

A summary of wetland mitigation requirements for the FedEx Ground Expansion is presented in Table 7 below. As stated earlier, FedEx Ground will impact 1.08 acres of wetlands because of this project. Under OAC 3745-1-54, wetland mitigation ratios are 2:1 for Category 2 non-forested wetlands, and 2.5:1 for Category 2 forested wetlands. Using the assumption that all the wetlands will be moved into category 2 mitigation ratios 2.2 acres of wetland mitigation will be required.

**Table 7
Summary of Wetland Mitigation Requirements for the Minimal Degradation Alternative**

Wetland	Wetland Type ¹	Wetland Category	Delineated Acreage within Study Area	Area Impacted (Acres)	Mitigation Ratio	Proposed Mitigation (Acres)	Potential Jurisdiction ²
Wetland C	PEM	Category 1 or 2	0.33	0.33	2:1	0.66	USACE
Wetland D	PEM/PSS	Category 1 or 2	0.75	0.75	2:1	1.5	USACE
Wetland N	PEM	Modified Category 2	0.37	0	2:1	0	USACE
Wetland O	PSS	Modified Category 2	0.21	0	2:1	0	USACE
Wetland S	PSS	Modified Category 2	0.17	0	2:1	0	OEPA
Total			1.83	1.08		2.16	

The Applicant proposes to mitigate for wetland impacts at the Site by purchasing 2.2 credits at the Pearson Park Wetland Mitigation bank.

APPENDIX A

FIGURES



APPENDIX B
AGENCY COORDINATION LETTER



APPENDIX C
MITIGATION AGREEMENT



APPENDIX D
WETLAND DELINEATION



APPENDIX E
WETLAND DELINEATION

