

## **5.11 FLOODPLAINS**

Floodplains are included in the Environmental Impact Statement (EIS) as an assessment category identified in Federal Aviation Administration (FAA) Order 1050.1E, *Environmental Impacts: Policies and Procedures*. Floodplain areas have been identified on Port Columbus International Airport (CMH or Airport) property. This section provides an overview of what is known about the existing floodplain conditions and discusses the potential impacts caused by the proposed alternatives of the EIS.

### **5.11.1 METHODOLOGY**

Floodplains are defined by Executive Order 11988, *Floodplain Management*, as “the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year” (i.e., area inundated by a 100-year flood). Department of Transportation (DOT) Order 5650.2, *Floodplain Management and Protection*, defines the values served by floodplains to include “natural moderation of floods, water quality maintenance, groundwater recharge, fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, and forestry”.

FAA Order 1050.1E, stresses that impacts to floodplains due to development are to be avoided and minimized by all means practicable. The Order also outlines the options to be considered if encroachment into a floodplain cannot be avoided. These options include: consideration of proposed action and alternatives, mitigation measures (such as elevations, special designs, and minimal fill requirements), determination of a significant encroachment, and the determination of location in a special flood hazard area.

### **5.11.2 EXISTING CONDITIONS: 2006**

Floodplains in the project area occur in narrow strips of lowland parallel to Big Walnut Creek (**Exhibit 5.11-1, 100-Year Floodplains**). According to Flood Insurance Rate Maps (FIRMs), published by the Federal Emergency Management Agency (FEMA), floodplains on CMH property and in the project area occur along the eastern edge of Airport property.<sup>1</sup> Big Walnut Creek fulfills the criteria for an area of special flood hazard with flood elevation data, and is denoted as Zone AE. Floodplains classified as Zone AE include floodways and flood hazard areas inundated by 100-year floods, for which base flood elevations have been determined. No other mapped floodplains exist on CMH property or within the project area.

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<sup>1</sup> FIRM Panels 169, 170, 188, 260, and 276, August 2, 1995.

### **5.11.3 FUTURE CONDITIONS: 2012**

This section addresses the effects of future operations and construction on existing floodplains in the vicinity of CMH. During the EIS alternatives selection process, it was determined that prudent, feasible, reasonable, or practicable alternatives were available that would both satisfy the project's purpose and need and simultaneously avoid impacts to floodplains. None of the evaluated alternatives would increase the risk of human hazards or property damage from flood waters.

#### **Alternative A: 2012 No Action**

Under Alternative A, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. No change would occur because there would be no construction to directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

#### **Alternative C2a: 2012 Relocate Runway 10R/28L 800 Feet to the South – Noise Abatement Scenario A**

Under Alternative C2a, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. The relocation of Runway 10R/28L 800 feet to the south would not directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

#### **Alternative C2b: 2012 Relocate Runway 10R/28L 800 Feet to the South – Noise Abatement Scenario B**

Under Alternative C2b, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 800 feet to the south nor the implementation of the recommendations of the 2007 Part 150 Noise Compatibility Study Update (2007 Part 150 Study) measures would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

#### **Alternative C3a: 2012 Relocate Runway 10R/28L 702 Feet to the South – Noise Abatement Scenario A**

Under Alternative C3a, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. The relocation of Runway 10R/28L 702 feet to the south would not directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

- ZONE A No base flood elevations determined.
- ZONE AE Base flood elevations determined.
- ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

**FLOODWAY AREAS IN ZONE AE**

**OTHER FLOOD AREAS**

- ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood.

**OTHER AREAS**

- ZONE X Areas determined to be outside 500-year floodplain.
- ZONE D Areas in which flood hazards are undetermined.

**UNDEVELOPED COASTAL BARRIERS\***

Identified 1983	Identified 1990	Otherwise Protected Areas

\*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
	Base Flood Elevation Line; Elevation in Feet**
	Cross Section Line
	Base Flood Elevation in Feet Where Uniform Within Zones**
	Elevation Reference Mark
	River Mile

\*\*Referenced to the National Geodetic Vertical Datum of 1929

**MAP REPOSITORY**

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
AUGUST 2, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM FLOOD INSURANCE RATE MAP**

FRANKLIN COUNTY, OHIO AND INCORPORATED AREAS

PANEL 260 OF 387

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MUNICIPALITY OF COLUMBUS	3909	020	G
MUNICIPALITY OF FRANKLIN	3910	020	G
MUNICIPALITY OF UNINCORPORATED AREAS	3907	020	G

Notice to User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

MAP NUMBER  
39049C0260 G

EFFECTIVE DATE:  
AUGUST 2, 1995



Federal Emergency Management Agency



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**Alternative C3b:  
2012 Relocate Runway 10R/28L 702 Feet to the South – Noise Abatement  
Scenario B (Sponsor’s Proposed Project)**

Under Alternative C3b, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 702 feet to the south nor the implementation of the 2007 Part 150 Study measures would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**5.11.4 FUTURE CONDITIONS: 2018**

In addition to 2012, the environmental consequences of the Sponsor's Proposed Project (Alternative C3b) and its alternatives are provided for 2018. The year 2018 represents the anticipated opening year of the first phase of the proposed terminal.

**Alternative A:  
2018 No Action**

Under Alternative A, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. No change would occur because there would be no construction to directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**Alternative C2a:  
2018 Relocate Runway 10R/28L 800 Feet to the South and Construct  
Midfield Terminal (T2) – Noise Abatement Scenario A**

Under Alternative C2a, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 800 feet to the south nor the construction and operation of the proposed terminal would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**Alternative C2b:  
2018 Relocate Runway 10R/28L 800 Feet to the South and Construct  
Midfield Terminal (T2) – Noise Abatement Scenario B**

Under Alternative C2b, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 800 feet to the south, the construction and operation of the proposed terminal, nor the implementation of the 2007 Part 150 Study measures would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**Alternative C3a:  
2018 Relocate Runway 10R/28L 702 Feet to the South and Construct  
Midfield Terminal (T2) – Noise Abatement Scenario A**

Under Alternative C3a, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 702 feet to the south nor the construction and operation of the proposed terminal would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.

**Alternative C3b:  
2018 Relocate Runway 10R/28L 702 Feet to the South and Construct  
Midfield Terminal (T2) – Noise Abatement Scenario B (Sponsor's Proposed  
Project)**

Under Alternative C3b, the floodplains within the project area would not be impacted. Floodplains would continue to exist in a narrow band along Big Walnut Creek. Neither the relocation of Runway 10R/28L 702 feet to the south, the construction and operation of the proposed terminal, nor the implementation of the 2007 Part 150 Study measures would directly alter the existing floodplain or cause secondary impacts or changes in hydrology.