



**US Army Corps  
of Engineers**  
Louisville District

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**RECORD OF DECISION**

**FOR**

**INDIANAPOLIS NORTH FLOOD DAMAGE REDUCTION PROJECT**

**MARION COUNTY, INDIANA**

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## **I. Summary of Decision**

This document records the U.S. Army Corps of Engineers' (Corps) decisions related to the findings and determinations for the *Indianapolis North Flood Damage Reduction Project* (Project) and serves as the record of decision (ROD) which concludes the Corps' implementation of the National Environmental Policy Act (NEPA).

The Corps has reviewed, analyzed and evaluated the Project's impacts to the affected environment, in light of its purpose and need– to maximize flood risk management for the affected communities within the authorized Project area. The Corps has taken into account the 1996 General Reevaluation Report (GRR) and Environmental Impact Statement (EIS), the 1997 ROD, the Draft Supplemental Environmental Impact Statement (DSEIS), the Final Supplemental Environmental Impact Statement (FSEIS), all supporting documents, data and analysis, the proposed mitigation plan, the overall public interest, the stated views of interested agencies and the public, and all other relevant factors concerning each of the alternative actions. In doing so, the Corps has considered the direct, indirect and cumulative effects and consequences of the alternative actions on the environment in accordance with NEPA, 42 U.S.C. § 4321, et seq., and the regulations published in Title 33 of the Code of Federal Regulations (C.F.R.), Part 230 and 40 C.F.R., Parts 1500-1508.

As described in the FSEIS, the proposed actions to complete the Phase 3B/South Warfleigh Section of the Project are the Westfield Boulevard Alternative and the 56<sup>th</sup> Street Alternative-Illinois Street Variation. The proposed action for the Phase 3A/Warfleigh and Phase 3C/Monon-Broad Ripple Sections of the Project, as described in the FSEIS, is the 15 Feet Vegetation Clearing Alternative. The Corps finds that the 56<sup>th</sup> Street Alternative – Illinois Street Variation and the 20 Feet Vegetation Variance Alternative are the environmentally preferred alternatives. However, based on the considerations outlined herein, the Corps selects the Westfield Boulevard Alternative and the 15 Feet Vegetation Clearing Alternative, subject to the avoidance and minimization of potential adverse impacts and mitigation for unavoidable adverse impacts during the Project design and construction phase. Award of a contract for construction of the Westfield Boulevard Alternative is specifically conditioned upon prior completion of consultation and the execution of a memorandum of agreement pursuant to Section 106 of the National Historic Preservation Act of 1966, receipt of all required environmental permits and certifications, concurrence of the non-federal sponsor, and Project funding.

## **II. Project Purpose and Need**

Flooding problems on the White River in north Indianapolis have been studied at various stages since the record flood in 1913. Other significant flood events occurred in 1937, 1943, 1957, and

1958. Numerous sections of levees were constructed by the government and private entities, and have provided varying levels of protection for the surrounding area.

The purpose of the Project is to provide the congressionally authorized level of flood risk management for the communities of Monon-Broad Ripple, Warfleigh, and South Warfleigh. Completion of the Phase 3B portion of the Project will provide flood damage reduction at a minimum level of an annual 0.35 percent chance of being exceeded; commonly referred to as the 300-year flood protection level.

Additionally, there are trees and vegetation along the previously-constructed Phases 3A/Warfleigh and 3C/Monon-Broad Ripple Sections of the Project which do not meet the levee design safety standards outlined in ETL 1110-2-571. The Corps has selected a tree and vegetation clearing action of both these Phases to meet these construction design standards and receive certification from the Louisville District Levee Safety Officer (LSO), enabling the preparation of a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA) to modify Flood Insurance Rate Maps (FIRM) through the National Flood Insurance Program (NFIP). The map revision could result in reduction and/or elimination of flood insurance cost for property owners protected by the Project.

The current proposed Project described herein would require a greater mitigation area than that already agreed upon in the 1996 GRR and EIS and the 1997 ROD. The Corps and local sponsor have selected areas in the upper White River Watershed for additional mitigation planting. This mitigation will follow Indiana Department of Natural Resources (IDNR) guidelines and meets the requirements of the Corps, U.S. Fish and Wildlife Service (USFWS) and the IDNR. The selected areas will be planted with a mix of seedlings. Larger containerized stock may be used on a site-by-site basis at less density per acre where appropriate to further the purpose of mitigation. Trees will be placed approximately 10 feet apart within each row and 10 feet apart between rows for a total of approximately of 435 stems per acre. The mitigation will be deemed successful if 75% of the trees survive after a two year period. Additional requirements will be determined in coordination and/or consultation with the USFWS and IDNR. All mitigation and/or related activities will take place within the White River Basin and/or as close to the area of impact as possible. The local sponsor will remain responsible for maintaining the mitigation areas following the two year monitoring period.

### **III. Alternatives Considered for the Phase 3B/South Warfleigh Section**

#### **a. Alternative 1 (No Action)**

Adoption of this alternative essentially continues the recommendations presented in the 1996 GRR and EIS and adopted under the 1997 ROD, which terminates this Phase 3B/South Warfleigh Section of the Project south of the Riviera Club property. The existing ground

elevation at this location is lower than the elevation needed to reach a 300-year level of protection. As a result, the downstream end of the Project, as shown in the 1996 GRR and EIS, would not provide the full flood risk management benefits to the communities of Broad Ripple, Warfleigh, and South Warfleigh.

### **b. Alternative 2 (Rocky Ripple Alternative)**

Plans were evaluated as a part of the DSEIS and the FSEIS to provide flood protection for the Town of Rocky Ripple. For this study, the Corps developed an alternative for the Town of Rocky Ripple that would minimize the footprint of real estate acquisition and the demolition of structures for the construction. As designed, the new Rocky Ripple Alternative would require approximately 9,335 total linear feet (LF) of floodwall and earthen levee; a gated-structure across Citizens Water Canal; sewer gatewell structures; roadway and pedestrian closure gates; pumping stations; the acquisition and demolition of 43 structures, including 22 residences; the clearing and grubbing of trees and other deep-rooted vegetation to a distance of 15 feet from both sides of the floodwall; the partial or complete removal of approximately 50 residential septic system lateral fields; and construction of a sanitary sewer system, including construction of a package sewer treatment plant and installation of approximately 5,600 LF of 8-inch sewer pipe.

The new Rocky Ripple Alternative would have to provide flood protection for a 300-year flood event, and could not be treated as a separable flood protection area. In order to achieve this level of protection, the proposed floodwall and levee must reach an elevational mark ranging from 720 feet (ft) National Geodetic Vertical Datum (NGVD) at the Riviera Club to approximately 717 ft. NGVD at Butler University. The height of the wall above the ground surface will vary based on the existing ground surface.

Based on the analysis presented in the FSEIS, this alternative was not selected. In addition to the social and technical challenges presented by the Rocky Ripple Alternative, it was also deemed economically unfeasible. A comparison of the total cost of this alternative to its overall benefits indicates a negative annual net benefit and a benefit to cost ratio of less than 1.0. Thus, it is ineligible for consideration as a Federal project under existing Corps policy.

### **c. Alternative 3 (56<sup>th</sup> Street Alternative)**

This alternative would consist of approximately 944 LF of floodwall between the southern end of the Riviera Club property and high ground along W. 56th Street. It would require the construction of a gated structure across the Citizens Water Canal, additional gatewell structures, roadway, parking lot and pedestrian closure gates, pumping stations, utility relocations, and vegetation clearance.

The height of the floodwall above the surface would vary across its length from 5 to 8 ft depending on the ground elevation. However, the 56th Street Alternative would not provide flood

risk management for structures to the southeast of W. Westfield Boulevard and N. Capitol Avenue as are included in the Westfield Boulevard Alternative. Because of this exclusion, the local sponsor did not support this alternative and it was eliminated from consideration.

#### Illinois Street Variation

In evaluating impacts of the alternatives for the Phase 3B Alignment, the Corps and the local sponsor identified another path for the 56th Street Alternative that would provide a similar level of protection. Designated as the Illinois Street Variation, this path would end the Phase 3B Alignment to the north of the Riviera Club property, head eastward across N. Illinois Street, the Citizens Water Canal and W. Westfield Boulevard, and terminate on high ground just east of Chase Bank. This concept would require approximately 1757 LF of floodwall, a gated-structure across Citizens Water Canal, closure gates, pump stations, utility relocations, and vegetation clearance.

The height of the floodwall above the surface would vary across its length from 10 ft near the White River and Riviera Club property to 5 ft near its termination point, depending on the ground elevation.

The Illinois Street Variation would exclude additional structures from flood reduction benefits to the southeast of W. Westfield Boulevard and N. Illinois Street that were included in the 56th Street Alternative. Specifically these include structures for the Riviera Club, a lift station, and five structures east of the Citizens Water Canal.

Because of the reduced cost and annual benefits, this variation was considered as a Proposed Action in the FSEIS. However, due to opposition from the local sponsor centered on the lack of flood damage reduction that this variation would provide relative to the other alternatives, the Illinois Street Variation Alternative was not selected.

#### **d. Alternative 4 (Westfield Boulevard Alternative)**

The Westfield Boulevard Alternative is one of the Proposed Actions for the Phase 3B/South Warfleigh Section. As presented in the 2012 DSEIS, and 2013 FSEIS, the alternative would consist of 4,220 LF of floodwall. The wall would begin at the south end of the Riviera Club property, cross the Citizens Water Canal with a gated structure near the intersection of W. Westfield Boulevard and North Capitol Avenue, extend southward running between the Canal and Westfield Boulevard, and terminate on high ground at Butler University. The alternative would cross property belonging to the City of Indianapolis, Citizens Energy Group, the Riviera Club and Butler University. As designed, the Westfield Boulevard Alternative would provide greater flood risk management benefits for residents of the Warfleigh, Monon-Broad Ripple, and South Warfleigh neighborhoods.

The height of the floodwall above the surface will vary across its length from zero to 6.5 ft depending on the ground elevation. The height of the floodwall above the surface will be

greatest for the first 300 LF immediately southwest of the canal gated-structure between the Citizens Water Canal and Westfield Boulevard.

In order to limit the aesthetic impact of the Project, the Corps would incorporate removable panels into its Project design which could be installed to increase the height of the wall prior to significant flood events along the White River. This concept would require a foundation and permanent, short I wall along a 700 LF section of the flood protection area, constructed to a minimum 100-year flood event. The addition of the removable panels to the I-wall will provide protection for a 300-year flood event.

The footprint for construction of the Westfield Boulevard Alternative would require the clearing and grubbing of trees and other deep-rooted vegetation to a distance of 15 ft from both sides of the floodwall, as necessary to attain a positive Levee System Evaluation (LSE) by a LSO per Corps' regulation. This distance would measure approximately 2.81 acres.

In reviewing the best available information with respect to each alternative, the Corps determined that Alternative 4, the Westfield Boulevard Alternative, best satisfies the purpose and need for the Project and the Corps's mission based on the following considerations:

- The selected alternative is consistent with the congressional authorization;
- The selected alternative, together with the mitigation plan, minimally impacts the environment and protects, preserves, and enhances historic, cultural and natural resources while fulfilling the purpose and need for the Project;
- The selected alternative provides the greatest net benefits of the alternatives and variations evaluated in the FSEIS, and is considered the National Economic Development (NED) plan.

#### **e. Environmentally Preferred Alternative**

The environmentally preferred alternative to complete the Phase 3B/South Warfleigh Section of the Project is the 56<sup>th</sup> Street Alternative. Compared to the other alternatives, the 56<sup>th</sup> Street Alternative would implement a shorter length of floodwall, thus resulting in lesser impacts to natural and cultural resources. Implementation of this alternative would impact approximately four less acres of forest than the selected alternative. However, the local sponsor did not support this alternative due to its relative lack of flood damage reduction when compared to the other alternatives; therefore it was dismissed from consideration.

### **IV. Alternatives Considered for the Phase 3A and 3C Vegetation Clearing**

#### **a. No Action:**

The No Action Alternative would leave conditions as they currently are for the Phase 3A/Warfleigh and Phase 3C/Monon-Broad Ripple Sections of the Project. However, this

alternative would place the entire length of Phase 3A (7,600 ft) and isolated stretches along the floodwall of Phase 3C out of compliance with the Corps' levee construction design standards provided in ETL 1110-2-571, which requires the removal of all structures, trees and other deep-rooted vegetation within 15 ft of a floodwall or toe of an earthen levee.

### **b. 20 Feet Vegetation Variance**

A vegetation variance request, as provided for in ETL 1110-2-571, was considered for the entire length of the Phase 3A/Warfleigh Section, approximately 7,600 LF. This section of the Project is an earthen levee, topped in some areas with a low lying I-wall. Currently, vegetation has been cleared for Phase 3A to a distance measuring 5 ft from the face of the I-wall. Under this alternative, vegetation would have been cleared to a distance measuring 20 feet from the I-wall face. The requested variance would have allowed existing vegetation to remain outside to a distance of 20 ft measured horizontally in the direction of the river from the riverside face of the I-wall, or measured from the riverside edge of the levee crown (for portions of the phase which consist of levee only). Approximately 2.63 acres for the Phase 3A/ Warfleigh Section would have required clearing under the 20 ft vegetation variance. Conversely, approximately 4.27 acres of trees and vegetation would have been saved if the vegetation variance for Phase 3A was adopted.

A vegetation variance request was also considered for the Phase 3C/Monon-Broad Ripple Section, specifically the areas adjacent to the Reserve at Broad Ripple condominiums. Currently, vegetation has been cleared to an average distance of 10 ft riverward of the edge of the levee crown. Under this alternative, vegetation would have been cleared to a distance of 20 ft from the edge of the levee crown. The variance would have allowed existing vegetation to remain outside a distance of 20 ft measured horizontally in the direction of the river from the riverside edge of the levee crown. Approximately 0.44 acres for the Phase 3C/Monon-Broad Ripple Section would have required clearing under the 20 ft vegetation variance. Conversely, approximately 0.17 acres of trees and vegetation would have been saved if the vegetation variance for Phase 3C was adopted.

Analysis stated in the FSEIS presented that this alternative would not meet the levee design and construction requirements of the ETL, and was therefore eliminated from consideration.

### **c. 15 Feet Vegetation Clearing**

A 15 feet vegetation clearance is the Proposed Action for the Phase 3A/Warfleigh and Phase 3C/Monon-Broad Ripple Sections of the Project. Vegetation will be removed to a distance measuring 15 ft from either the toe of the levee or face of the floodwall. The limits of the clearing for Phase 3A and 3C is provided in Appendix A of the FSEIS. In three locations along Phase 3A, for a distance measuring approximately 1,140 LF (or 15% of its total length), the vegetation clearing will go to the edge of the White River. These areas will be protected with erosion control blankets and the ends of the blankets will be anchored in trenches in the

riverbank. An undetermined number of trees will also be removed along various locations for Phase 3C, as some are located too close to the floodwall and levee.

Approximately 6.9 acres for Phase 3A and 0.62 acres for Phase 3C will require clearing for the Project. Generally these areas are described as a mature bottomland hardwood forest. Phase 3A also falls within a riparian zone along the White River and encompasses a total of 0.45 acre of delineated wetlands. The ETL also recommends the removal of all roots 0.5 inches or greater in diameter. This will be accomplished for vegetation within 15 feet of the toe of the levee or face of the floodwall.

In reviewing the best available information with respect to each alternative, the Corps determined that the 15 Foot Vegetation Clearing Alternative best satisfies the purpose and need for the Project and the Corps's mission based on the following considerations:

- The selected alternative is consistent with the congressional authorization;
- Meeting the Corps' levee construction design requirements and enabling certification by the LSO, the selected alternative will accomplish the purpose and need for the Project;
- The selected alternative, together with the mitigation plan, minimally impacts the environment and protects, preserves, and enhances historic, cultural and natural resources while fulfilling the purpose and need for the Project.

#### **d. Environmentally Preferred Alternative**

The environmentally preferred alternative for the vegetation clearing is the 20 feet vegetation variance. This alternative would preserve 4.45 acres of bottomland hardwood forest from the Proposed Action; however, it does not comply with the Corps' levee construction design requirements provided in the ETL. This noncompliance would frustrate the purpose and need for the Project by not allowing for levee certification by the Corps' LSO, therefore this alternative was dismissed from consideration.

## **V. Comments on the Final Environmental Impact Statement**

The Corps received 302 comments on the FSEIS from 225 different respondents. Respondents included state and federal governmental agencies, state and locally elected officials, affected landowners, neighborhood associations, non-profit organizations, private citizens, and local businesses. All comments were read carefully and considered for the ROD.

A majority of the comments received on the FSEIS were similar to those received and responded to as part of the DSEIS. These included, but were not limited to, the exclusion of the town of Rocky Ripple from the Project, concerns of increased vandalism, additional protection for local drinking water, calculated costs for the various alternatives studied, the Corps' economic analysis and engineering design requirements, affects to local property values and businesses,

aesthetics of the proposed floodwall, impacts to environmental resources and recreation, and effects to cultural resources, namely the Indianapolis Central Canal and Holcomb Gardens located on Butler University. These concerns were addressed in Appendix E of the FSEIS.

The bulk of the comments received during the public notice period for the FSEIS related to two new categories. The first centered on an alternative proposed by the City of Indianapolis, known as “West Bank Alignment.” Subsequent to the submission of the FSEIS, this new alignment was suggested to complete the Phase 3B/South Warfleigh Section of the Project. The proposal is similar to the alignment previously considered and subsequently rejected as economically and technically infeasible due to the prevailing soil conditions in the area. The West Bank Alignment, as proposed, does not cross the canal, but runs along its length until high ground is reached near North Michigan Road. Many respondents made reference to the proposed West Bank Alignment in their comments; however, because a similar alignment was previously eliminated as technically and economically infeasible, this alignment was not reevaluated in the FSEIS. In order for the alignment to be considered for the Project, the Corps would have to examine its feasibility, including the expense and cost allocation of addressing the poor soil conditions, and prepare a new environmental document to comply with NEPA. Thus the West Bank Alignment was not considered as part of this ROD.

The second concern centered on the impact of the Biggert-Waters Act of 2012 to homeowners and businesses located within the Project area. This law went into full affect subsequent to the completion of the FSEIS. Many respondents located outside of the flood protection area were concerned about the potential effects of rising flood insurance rates and lower property values created by the law. They urged immediate action on the Project and, for some, inclusion in the Project. The Homeowner Flood Insurance Affordability Act of 2014 was subsequently signed into law, lessening its impact. The purpose of this Project is to protect life, safety and welfare of persons and property. The effect of this Project on personal flood insurance rates is a corollary effect and outside of the Corps’ mission.

Various additional comments recommending minor design changes were also recommended for the Phase 3B/South Warfleigh Section, including the use of native plants on the levee, aesthetics of the gate closure structure, and creation of a graded earthen slope to hide the proposed floodwall. These suggestions will be considered in the pre-construction, engineering, and design phase of the Project.

Finally, a concern was raised related to the Phase 3A and 3C vegetation clearing centering on an alleged tree preservation area purportedly developed and rezoned as a condition for the construction of nearby residences. The tree preservation area would be affected by the proposed Project. The Corps and local sponsor have been unable to confirm the existence of a preservation area or the authority thereof. In accordance with Article II.D.2. of the Project Cooperation

Agreement (PCA), the local sponsor must provide (make available) the Lands, Easements, and Relocations (LER's) required to support the Project. Building the Project is a lawful exercise of the Corps' authority to ensure the safety of Marion County residents and public infrastructure. The Corps will continue to work with the local sponsor to resolve any potential zoning issues related to this preservation area prior to construction activities.

## **VI. Consideration of Applicable Laws, Regulations, Executive Orders and Policies**

### **a. National Environmental Policy Act of 1969, as Amended (NEPA)**

The Corps' proposed actions to complete the Project constitute a major Federal action and have the potential to significantly affect the quality of the human environment. In accordance with 40 CFR Parts 1500-1508, a notice of intent to prepare an EIS was published in the Federal Register in 1996, and the *Indianapolis North Flood Damage Reduction Feasibility Study* GRR and EIS were completed in the same year, and the subsequent ROD was signed in 1997. In 2011, an EA was prepared, and due to the numerous concerns raised during the public review period, a DSEIS was prepared.

Scoping for the DSEIS began on May 10, 2011 with the publication of a Notice of Intent to Prepare a SEIS in the *Federal Register* (Vol. 76, Number 90). On June 21, 2012, the DSEIS was issued by the Corps for an 88-day review period. A public hearing was held on August 23, 2012 at the Meridian Street United Methodist Church, 5500 North Meridian Street, Indianapolis, Indiana. During the DEIS public review period, 266 comments were received.

The Corps issued a FSEIS on June 7, 2013. The FSEIS evaluated subjects presented in the 2012 Draft SEIS; additional information acquired since the preparation of the DSEIS; and comments received from the public, government agencies, and the local sponsor: the City of Indianapolis. A Notice of Availability was published in the *Federal Register* on June 7, 2013 (Vol. 78, Number 110). A public notice announcing the availability of the FEIS was issued June 7, 2013 and the review period lasted for 145 days.

The Corps has reviewed and comprehensively evaluated the NEPA documents, all supporting documents, data and analysis, the proposed mitigation plan, the overall public interest, the stated views of interested agencies and the public, and all other relevant factors related to the Project. The Corps finds that the NEPA process has produced sufficient and accurate assessments of the resources, needs, concerns, and other issues that relate to this action and that, therefore, it is appropriate to select alternatives for Project completion. Signature of this ROD by the authorizing official completes the Corps' NEPA requirements and responsibilities.

**b. Section 401 of the Clean Water Act of 1972, as Amended (CWA)**

A State Water Quality Certification or waiver, pursuant to Section 401 of the CWA, is required from the Indiana Department of Environmental Management (IDEM) for any activity that may result in a discharge into waters of the State. This certification will be sought prior to, but no earlier than one year before, the initiation of the applicable selected alternative. Commencement of construction, or other implementation that would have an adverse environmental impact, is conditioned on the prior receipt of all required environmental permits and certifications.

**c. Endangered Species Act of 1973, as Amended (ESA)**

The ESA requires the determination of possible effects on or degradation of habitat critical to federally listed endangered or threatened species. Based on information available from the state and federal agencies and their comments to the 1996 GRR and EIS, the 2011 EA, and the 2012 DSEIS, there is one listed species within the Project, the Indiana bat (*Myotis sodalis*). Due to the unavoidable removal of trees within the footprint of the Project, potential habitat for the endangered Indiana bat will be lost. The Corps, in coordination with the local sponsor and state and federal agencies, has identified approximately 20 acres of land within the White River watershed to be utilized as mitigation lands that will act to preserve and restore habitat for the Indiana bat and many other species. An additional 60 acres of land, when provided by the local sponsor, will also be planted and utilized for the purpose of bottomland hardwood forest mitigation. Per USFWS recommendations, the felling of trees greater than three inches DBH (diameter at breast height) will be avoided from 1 April through 30 September. Any contracts awarded by the Corps that includes the felling of trees will enforce this recommendation. Therefore, while the selected alternatives are likely to impact the Indiana bat, they are not likely to jeopardize the continued existence of this species.

**d. Fish and Wildlife Coordination Act of 1973, as amended (FWCA)**

The Corps is required to coordinate water resource project proposals with the USFWS and the IDNR, Division of Fish and Wildlife under the FWCA (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). Coordination was initiated at the onset of the Project and continued through the writing of the FSEIS. All comments received by the USFWS and the IDNR during comment periods were addressed and implemented during the NEPA process. These comments can be found in Appendix E of the FSEIS. Coordination for the purposes of fulfilling compensatory mitigation requirements is complete.

**e. Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA)**

Section 106 of NHPA requires that federal agencies take into account the effects of its undertakings on historic properties eligible to, or listed on, the National Register of Historic Places (NRHP). This process, implemented and guided by regulations set forth in 36 CFR part 800, requires federal agencies to establish the undertaking, initiate consultation, identify

consulting parties, notify the public, define an area of potential effect (APE), identify historic properties and/or cultural resources within the APE, assess the potential for adverse effects and resolve them through either consultation or the signing a Memorandum of Agreement (MOA). Within this process, the Advisory Council on Historic Preservation (ACHP) will be given a reasonable opportunity to comment on the undertaking.

The Corps is working with consulting parties - namely the Indiana SHPO, federally recognized Native American tribes, the City of Indianapolis, local preservation groups and communities, the ACHP and affected property owners - to assess affects and resolve adverse effects to historic properties by the proposed undertaking. Currently, the selected alternative of the Phase 3B/South Warfleigh Section will adversely affect one historic property determined eligible for listing to the NRHP, the Citizens Water Canal (a.k.a. the Indianapolis Central Canal) and one historic district, the Butler University Historic District. No historic properties will be affected by the selected alternative of the Phase 3A and 3C vegetation clearing.

Continued consultation under Section 106 of the NHPA for the Project will center on avenues to avoid, minimize or off-set the adverse affects to the identified historic properties. The Corps' adoption of the ROD and selection of the Westfield Boulevard Alternative is specifically conditioned on completion of consultation under Section 106 and the signing of a MOA prior to awarding a contract for construction of the selected alternative of the Phase 3B/South Warfleigh Section, or other implementation that would have an adverse environmental impact.

#### **f. Section 176(C) of the Clean Air Act of 1963, as Amended (CAA) - General Conformity Rule Review**

The EPA defines ambient air in 40 CFR, Part 50, as “that portion of the atmosphere, external to buildings, to which the general public has access.” The CAA requires the Corps to analyze the Project alternatives for compliance with all applicable parts of this acts and applicable standards. The proposed Project area is currently in non-attainment for ozone; however, IDEM has petitioned EPA for a reconsideration of Marion County to attainment with a maintenance plan classification. The Corps' selected actions would not cause additional impacts to the status of this area and would comply with the CAA Conformity Rule.

#### **g. Executive Order 11998: Floodplain Management**

Executive Order 11988 requires federal agencies to evaluate the potential effects of actions on floodplains, and does not undertake actions that directly induce growth in the floodplain, unless no practical alternative exists. Construction of structures and facilities on floodplains must incorporate flood proofing and other accepted flood protection measures. The selected alternatives would serve to reduce the damaging effects of flooding; there are no practicable alternatives which would avoid adverse effects in the floodplain; and they would not be directly encouraging growth within the floodplain, especially as the surrounding area is already fully

developed. The City of Indianapolis participates in the FEMA program and therefore regulates development within the floodplains.

#### **h. Executive Order 11990: Protection of Wetlands**

Protection of Wetlands: Executive Order 11990 requires federal agencies to prepare wetland assessments for proposed alternatives located in or affecting wetlands. The selected alternatives include all practicable measures to minimize harm to wetlands.

In considering factors relevant to the selected alternatives' effect on wetlands, the Corps has determined there are no other practicable alternatives that address public health, safety and welfare through flood damage reduction. The selected alternatives will have no measurable impact on recharge and discharge of groundwater or surface streams, pollution, sedimentation, or erosion. Maintenance of natural systems, i.e., riparian bottomland hardwoods, will be impacted by project construction; however, all such impacts, including the change in vegetative cover of three delineated wetlands along the Phase 3A Levee, totaling 0.45 acres, from trees to herbaceous cover, will be mitigated. These areas provide a portion of riparian woodlands that are best viewed from the trail atop Section 3A. These areas do not provide any other known recreational, scientific or cultural uses.

#### **i. Executive Order 13175: Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians**

Requirements for consultation with federally recognized tribes per Executive Order 13175 have been included into the consultation process under Section 106 of the NHPA and will be incorporated into the forthcoming MOA, as necessary.

#### **j. Environmental Justice (Title VI of the Civil Rights Act and Executive Order 12898)**

The proposed action is not expected to negatively impact any community, and therefore is not expected to cause disproportionately high and adverse impacts to minority or low-income communities.

#### **k. Other**

An IDNR Construction in a Floodway Permit (FW-19540) was first issued on May 30, 2001. This permit is still valid and covers the current construction activities. The permit will be amended as necessary for future construction. In addition, the Corps will obtain National Pollutant Discharge Elimination System (NPDES) permits, as required by the CWA, for any construction disturbing more than one acre. A Section 401 Water Quality Certification or waiver will be obtained as needed when the engineering details are sufficient to complete an evaluation of impacts to the Waters of the U.S.

## **VII. Consideration of Mitigation Measures**

Although all practicable means have been employed to avoid, minimize, and mitigate for the Project's adverse effects to the environment, the selected alternatives will have the following unavoidable effects:

- Approximately 2.81 acres of vegetation to be cleared for implementation of the Westfield Boulevard Alternative;
- Approximately 6.9 acres and 0.62 acres of mature bottomland hardwood forest will be cleared for Phase 3A and Phase 3C, respectively;
- Three wetlands, totaling 0.45 acre, near the Phase 3A Levee will be impacted by vegetation clearing.

Per the USFWS requirements, these unavoidable impacts will be mitigated by planting of similar bottomland hardwood tree species within the watershed in order to minimize impacts to the endangered Indiana bat. The Corps and local sponsor have selected areas in the upper White River Watershed for mitigation planting. The mitigation will follow IDNR guidelines and meets the requirements of the Corps, USFWS, and IDNR. The selected areas will be planted with mix of seedlings and, on a site-by-site basis where appropriate to further the purpose of mitigation, larger containerized stock may be used at less density per acre. The mitigation will be deemed successful if 75% of the trees survive after a two year period. The local sponsor will remain responsible for maintaining the mitigation areas following the two year monitoring period.

Total mitigation required for the Project is approximately 81 acres. This total includes 29 acres of mitigation that have yet to be implemented from the previous construction of the Phases 3A and 3C levees. Mitigation will be completed sponsor provided lands become available.

## **VIII. Compliance with 404(b) (1) Guidelines**

A Section 404 (b) (1) Evaluation was completed for the 15 feet vegetation clearing of the Phases 3A and 3C. The evaluation can be found in Appendix C of the FSEIS.

The selected alternative fulfills the economic, engineering, and environmental requirements associated with Project development under the applied authority. No practicable alternatives to the proposed discharge site which will have less adverse impact on the aquatic ecosystem exist.

As required by Section 401 of the CWA, Water Quality Certification will be requested from the State of Indiana before the selected alternative is implemented. The fill placement operations are also in compliance with Section 307 of the CWA, as well as the ESA.

The placement of fill will result in no significant adverse impact on health and welfare, including municipal and private water supplies, recreational and commercial fishing, wildlife, and

endangered species. Life stages of aquatic and terrestrial species will not be adversely affected. No significant adverse effects on aquatic ecosystem diversity, productivity, and stability will occur.

Appropriate steps to minimize potential adverse impacts of the discharge on the aquatic ecosystem of the affected streams include sound engineering design and careful placement of fill material. In addition, the contractor(s) placing of fill material will be governed by detailed contract specifications to prevent pollution and damage to the aquatic system as a result of construction activities and fill placement. Areas in which clearing goes to the edge of the White River will be protected with erosion control blankets and the ends of the blankets will be anchored in trenches in the riverbank.

On the basis of the guidelines, the considered disposal site for the fill material is specified as complying with the requirements of 40 C.F.R., Part 230, Section 404(b) (1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.

## **IX. Findings and Statement of Decision**

The evaluation of the proposed actions and alternatives was done in accordance with all applicable laws, regulations, executive orders, and policies governing the Project. The NEPA documents and supporting documents are adequate and contain sufficient information to make a reasoned, informed Project alternative selection decision.

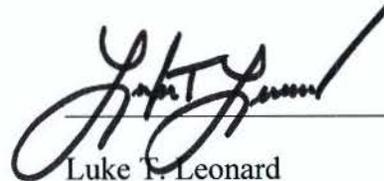
The selected alternatives are the Westfield Boulevard Alternative for the Phase 3B/South Warfleigh Section and the 15 feet vegetation clearing for the Phase 3A/Warfleigh and Phase 3C/Monon-Broad Ripple Sections.

In accordance with Section 2 of E.O. 11990, the signing of this ROD, indicates that (1) there is no practicable alternative to construction located in wetlands, and (2) that the selected alternatives include all practicable measures to minimize harm to wetlands which may result from such use. In making this finding, I have taken into account economic, environmental, and other pertinent factors.

The Corps will diligently work to avoid and minimize potential adverse impacts and implement additional mitigation for unavoidable adverse impacts during the Project design and construction phase. Award of a contract for construction of the Westfield Boulevard Alternative is specifically conditioned upon prior completion of consultation and the execution of a MOA pursuant to Section 106 of the NHPA, receipt of all required environmental permits and certifications, concurrence of the non-federal sponsor, and Project funding.

This ROD does not affect the continued construction of the “Phase 3B Levee Alignment,” as defined in the 1996 GRR and EIS and ultimately adopted under the 1997 ROD, up to the west bank of the Citizens Water Canal.

As required by NEPA (40CFR Part 1505.2), the selected alternatives, with the appropriate and practical mitigation measures identified herein, sufficiently minimize environmental harm and potential adverse impacts on the aquatic ecosystem and the human environment. Signature of this ROD by the authorizing official completes the Corps' NEPA requirements and responsibilities.

A handwritten signature in black ink, appearing to read "Luke F. Leonard", is written over a horizontal line.

Luke F. Leonard  
Colonel, Corps of Engineers  
Commanding