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- Appendix C Formal Section 7 Consultation WVNFS USFWS Biological Opinion
- Appendix D Corridor H Programmatic Agreement
- Appendix E USFS MNF Memorandum of Understanding

## **LIST OF ACRONYMS**

<b>AASHTO</b>	American Association of State Highway and Transportation Officials
<b>ACHP</b>	Advisory Council on Historic Preservation
<b>ADT</b>	Average Daily Traffic
<b>ADHS</b>	Appalachian Development Highway System
<b>AMLR</b>	West Virginia Department of Environmental Protection - Office of Abandoned Mine Lands and Reclamation
<b>APD</b>	Appalachian Development Highway System
<b>APE</b>	Area of Potential Effect
<b>ARC</b>	Appalachian Regional Commission
<b>ARDA</b>	Appalachian Regional Development Act
<b>ASDEIS</b>	Appalachian Corridor H Alignment Selection Supplemental Draft Environmental Impact Statement (November, 1994)
<b>BA</b>	Biological Assessment
<b>BE</b>	Biological Evaluation
<b>BO</b>	Biological Opinion
<b>BTU</b>	British Thermal Unit
<b>CAA</b>	Clean Air Act
<b>CAG</b>	Community Advisory Group
<b>CALTRANS</b>	California Transportation Laboratory
<b>CEQ</b>	President's Council on Environmental Quality
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>CHA</b>	Corridor H Alternatives, Inc.
<b>CMS</b>	Congestion Management System
<b>CO</b>	Carbon Monoxide
<b>COE</b>	Criteria of Effects
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>CSDEIS</b>	Appalachian Corridor H Corridor Selection Supplemental Draft Environmental Impact Statement (October, 1992)
<b>CWA</b>	Clean Water Act
<b>dB</b>	Decibel
<b>dBA</b>	Decibels on the A-weighted Scale
<b>DEIS</b>	Draft Environmental Impact Statement
<b>DDHV</b>	Directional Design Hourly Volume
<b>DOE</b>	Determination of Eligibility
<b>DOI</b>	United States Department of the Interior
<b>DTEMS</b>	Davis Thomas Elementary and Middle School
<b>EIS</b>	Environmental Impact Statement
<b>EMS</b>	Emergency Medical Services
<b>ESA</b>	Endangered Species Act
<b>FEIS</b>	Final Environmental Impact Statement

<b>FEMA</b>	Federal Emergency Management Agency
<b>FHWA</b>	Federal Highway Administration
<b>FIRM</b>	Flood Insurance Rate Maps
<b>FPPA</b>	Farmland Protection Policy Act
<b>GIS</b>	Geographic Information Systems
<b>gpm</b>	Gallons Per Minute
<b>Ha</b>	Hectare
<b>HBI</b>	Hilsenhoff Biotic Index
<b>HEP</b>	Habitat Evaluation Procedure
<b>HOV</b>	High Occupancy Vehicle
<b>HSI</b>	Habitat Suitability Index
<b>HU</b>	Habitat Unit
<b>HUD</b>	United States Department of Housing and Urban Development
<b>IL</b>	Insertion loss
<b>IRA</b>	Improved Roadway Alternative
<b>Leq(h)</b>	Representative of an average sound level over an hour's time period
<b>LOS</b>	Level of Service
<b>LUST</b>	Leaking Underground Storage Tank
<b>LWCFA</b>	Land and Water Conservation Fund Act
<b>MD</b>	Maryland
<b>MP</b>	Management Prescriptions
<b>MRLC</b>	Multi-resolution Land Characterization Consortium
<b>NAAQS</b>	National Ambient Air Quality Standards
<b>NAC</b>	Noise Abatement Criteria
<b>NEPA</b>	National Environmental Policy Act of 1970, 42 U.S.C. § 4321, et seq.
<b>NHS</b>	National Highway System
<b>NOx</b>	Nitrogen oxide
<b>NLCD</b>	National Land Cover Data
<b>NPL</b>	National Priority List
<b>NPS</b>	National Park Service
<b>NRCS</b>	Natural Resource Conservation Service (formerly Soil Conservation Service)
<b>NRHP</b>	National Register of Historic Places
<b>NRI</b>	Nationwide Rivers Inventory
<b>NWI</b>	National Wetlands Inventory
<b>NWSRS</b>	National Wild and Scenic Rivers System
<b>O<sub>3</sub></b>	Ozone
<b>OSM</b>	Office of Surface Mining
<b>Pb</b>	Lead
<b>PEM</b>	Palustrine Emergent Wetland
<b>PFO</b>	Palustrine Forested Wetland
<b>PM</b>	Particulate Matter
<b>PPM</b>	Parts Per Million

<b>PRT</b>	Potential Roost Trees; of Indiana bat
<b>PSS</b>	Palustrine Scrub-Shrub Wetland
<b>PSD</b>	Public Service District
<b>RBP</b>	Rapid Bioassessment Protocol
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RCRIS</b>	Resource Conservation and Recovery Information System
<b>ROD</b>	Record of Decision; issued pursuant to NEPA
<b>ROPA</b>	Revised Original Preferred Alternative
<b>ROW</b>	Right-of-Way
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>SDEIS</b>	Supplemental Draft Environmental Impact Statement
<b>SEIS</b>	Supplemental Environmental Impact Statement
<b>SFEIS</b>	Supplemental Final Environmental Impact Statement
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>TCHS</b>	Tucker County High School
<b>TCL</b>	Tucker County Landfill
<b>TM</b>	Thematic Mapper
<b>TMDL</b>	Total Maximum Daily Load
<b>USACE</b>	United States Army Corps of Engineers
<b>USDA</b>	U.S. Department of Agriculture
<b>USDOT</b>	United States Department of Transportation
<b>USEPA</b>	United States Environmental Protection Agency
<b>USFS MNF</b>	United States Forest Service Monongahela National Forest
<b>USFWS</b>	United States Fish and Wildlife Service
<b>USGS</b>	United States Geological Survey
<b>UST</b>	Underground Storage Tank
<b>VMT</b>	Vehicle Miles Traveled
<b>WV</b>	West Virginia
<b>WVDCH</b>	West Virginia Division of Culture and History
<b>WVDEP</b>	West Virginia Department of Environmental Protection
<b>WVDHHR</b>	West Virginia Department of Health and Human Resources
<b>WVDNR</b>	West Virginia Division of Natural Resources
<b>WVDOT</b>	West Virginia Department of Transportation, Division of Highways
<b>WVDOT</b>	West Virginia Department of Transportation
<b>WVGES</b>	West Virginia Geological and Economic Survey
<b>WVNHP</b>	West Virginia Natural Heritage Program
<b>WVNFS</b>	West Virginia Northern Flying Squirrel
<b>WVOMST</b>	West Virginia Office of Miner's Safety and Training
<b>WVSHPO</b>	West Virginia State Historic Preservation Officer (or an official authorized to act on his or her behalf for purposes of Section 106)

## GLOSSARY OF COMMONLY USED TERMS

**2000 Settlement Agreement:** Refers to February 7, 2000 agreement between Corridor H Alternatives, et. al. and USDOT, the result of Corridor H Alternatives v. Slater, Case No. 96-CV-2622 (TFH). (Appendix B)

**Acidity:** A measurement of the hydrogen ion concentration of an aqueous solution.

**Acid Drainage:** Is a low pH, sulfate-rich water with high amounts of acidity, which results from the oxidation of metal disulfide minerals upon exposure to air and water.

**Alignment:** Refers to the proposed routing of Build Alternatives.

**Alternative:** General term that refers to possible approaches to meeting the project's purpose and need. Typically refers to the No-Build and the Build Alternatives.

**Avoidance Alignments:** Alternatives developed for consideration that avoid the use of land in the Blackwater Area as defined in the Settlement Agreement and land known to be occupied by the West Virginia northern flying squirrel.

**Anticline:** A convex fold in bedrock.

**Aquifer:** A water-bearing unit of permeable rock, sand, or gravel that yields considerable quantities of water to springs and wells.

**Attainment:** Status of the various pollutants described in the NAAQS. A condition where a pollutant meets NAAQS.

**Benthic:** Located on the bottom of a body of water or in the bottom sediments, or pertaining to bottom-dwelling organisms.

**Biodiversity:** The variety and abundance of species, their genetic composition, and the communities, ecosystems, and landscapes in which they occur.

**Biological Opinion:** Documents the opinion of the USFWS as to whether or not a proposed Federal action is likely to jeopardize the continued existence of a listed species and details the effects of the action on the species and/or its critical habitat. (50 CFR 402)

**Blackwater Area:** The area within and around the Blackwater Valley, south of Thomas, as depicted on Exhibit 4 of the Settlement Agreement (Appendix B).

**Blackwater Avoidance Alignment:** Any alignment for Corridor H that is located entirely outside the Blackwater Area.

**Carbon Monoxide (CO):** A colorless, odorless gas that is formed as a product of the incomplete combustion of carbon and is emitted directly by automobiles and trucks.

**Corridor H Alternatives, Inc. (CHA):** Any corporations that are subsidiaries of CHA or are otherwise legally affiliated with CHA, any successors-in-interest to CHA, and any existing or future entities, associations, or groups formed by or with the direct involvement of any persons who, as of the Effective Date, are directors or officers of CHA partly or entirely for the purpose of opposing Corridor H or any Project or for the purpose of promoting alternatives to Corridor H or any Project.

**Community Cohesion:** The connections between and within communities that are essential for serving the needs of the residents (e.g., churches, recreational facilities).

**Corridor H:** All or a portion of the Appalachian Corridor H Highway between Elkins, West Virginia, and the West Virginia/Virginia State Line.

**Court of Appeals:** The United States Court of Appeals for the District of Columbia Circuit.

**Criteria of Effect Evaluation:** An assessment of the potential effects of a proposed project on each resource determined eligible for or listed in the National Register of Historic Places.

**Cumulative Impact:** An impact on the environment that results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions.

**Cultural Resources:** Patterned physical remains of human activity distributed over the landscape through time.

**Design Speed:** The maximum safe operating speed for which a highway is designed. The posted speed limit is generally slightly less than the design speed.

**Determination of Eligibility Evaluation:** Identification of all buildings, structures, objects and districts over 50 years of age that may be affected by a proposed project and an assessment of each resource's eligibility for the National Register of Historic Places.

**District Court:** The United States District Court for the District of Columbia.

**Environmental Justice:** Presidential Executive Order 12898 requires federal agencies to take into consideration disproportionately high and adverse human health or environmental effects of federal programs and projects on low-income and minority populations.

**Floodplain:** The portion of a river or stream valley, adjacent to the channel, which is covered with water when the river or stream overflows its banks at flood stage. It is also defined as lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

**Flood Hazard Zone:** The area flooded during a 100-year storm.

**Floodway:** An area identified on a FIRM or a Flood Boundary Floodway Map (FBFM) that represents the portion of the floodplain that carries the majority of the flood flow and is often associated with high velocity flow and debris impact. The floodway includes the channel of a stream or river and the adjacent floodplain that must be reserved in an unobstructed condition in order to discharge the base flood without increasing flood levels by more than one foot.

**Groundwater:** Naturally occurring water that moves through the ground and underlying rock, at a depth of several feet to several hundred feet.

**Habitat Evaluation Procedure:** A method created by the USFWS to evaluate the quality of habitat for selected wildlife species.

**Habitat Unit:** A non-dimensional unit of comparison in the Habitat Evaluation Procedure (see above), used to quantify gains and losses in wildlife habitat value resulting from project-related activities, and calculated by multiplying an index of habitat suitability by the area of that habitat.

**Historic Archaeological Site:** Any subsurface cultural manifestation dated post-European contact.

**Historic Property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes, for the purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.

**Insertion Loss:** The difference in sound levels before and after installation of a noise barrier.

**Karst:** The occurrence of limestone as the first bedrock unit beneath the soil in which cavities form due to the solubility of limestone under certain conditions. Surface characteristics include sinkholes and sinking streams.

**Keeper:** The Keeper of the National Register of Historic Places, or any other official within the United States Department of the Interior vested with authority to determine the eligibility of historic properties for listing in the National Register, pursuant to 16 U.S.C. § 470a.

**Level of Service (LOS):** Operating conditions within a stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort, and convenience. Six levels of service are defined, designated A through F, with A representing the best conditions and F the worst.

**Low-income Populations:** A population whose household income is below the Department of Health and Human Services poverty guidelines.

**National Register:** The National Register of Historic Places, as maintained by the United States Department of the Interior, pursuant to 16 U.S.C. § 470a.

**National Environmental Policy Act (NEPA) Document:** Any document or report prepared by or on behalf of FHWA or WVDOT pursuant to NEPA for a Project, including but not necessarily limited to any Environmental Assessment, Finding of No Significant Impact, Draft SEIS, Final SEIS, or Amended ROD, but not including any pre-decisional, deliberative, or privileged materials.

**Nitrogen Oxide:** Oxides of nitrogen (e.g., NO<sub>2</sub>, NO<sub>3</sub>)

**Non-attainment:** A condition where a pollutant exceeds the NAAQS two or more times during a year.

**Original Preferred Alternative (OPA):** The Build Alternative defined as preferred in the 1996 Corridor H FEIS and 1996 Corridor H ROD. In the Settlement Agreement it was called the “Blackwater Alignment,” although other alignments passing through the Blackwater Area may be called a Blackwater Alignment.

**Ozone:** Unstable blue gas with a pungent odor formed principally in secondary reactions involving volatile organic compounds, nitrogen oxides, and sunlight.

**Palustrine Emergent (PEM) Wetland:** Wetlands that are dominated by erect, herbaceous vegetation present for most of the growing season (i.e., marshes, wet meadows, fens, sloughs, or potholes). (Also, see “Wetland” below.)

**Palustrine Forested (PFO) Wetland:** Wetlands that are dominated by woody vegetation greater than 20 feet (6 meters) in height (i.e., swamps of bottomlands). (Also, see “Wetland” below.)

**Palustrine Scrub-Shrub (PFS) Wetland:** Wetlands that are dominated by woody vegetation less than 20 feet (6 meters) in height (i.e., pocosins, shrub swamps, or wet thickets). (Also, see “Wetland” below.)

**Physiographic Province:** A region which is generally consistent in geologic structure and climate and which has had a unified geomorphic history.

**Proclamation Boundary:** Legal boundary, established by Congress, for National Forest lands developed to aid in land management planning from project level to forest level.

**Project Impact:** Partnership between communities and FEMA that helps communities protect themselves from the devastating effects of natural disasters by taking actions that dramatically reduce disruption and loss.

**Regulatory Floodway:** The portion of the 100-year floodplain within which the majority of the floodwater is carried and where flooding hazards are the highest.

**Riparian:** Pertaining to anything connected with or immediately adjacent to the banks of a stream.

**Secondary Impact:** An impact on the environment resulting from the primary impact of the action.

**Section 106:** Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. § 470f.

**Section 4(f):** Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. § 303(c).

**Section 4(f) Document:** Any finding, evaluation, report, or other document prepared by or on behalf of FHWA or WVDOT pursuant to Section 4(f) with respect to a Project, including, but not

necessarily limited to, any finding of no constructive use and any approval of the use of a Section 4(f) Resource, but not including any predecisional, deliberative, or privileged materials.

**Section 4(f) Resource:** Any park, recreation area, wildlife or waterfowl refuge, or historic site that is protected under Section 4(f).

**Settlement Agreement:** (See “2000 Settlement Agreement” above.)

**Supplemental Environmental Impact Statement (SEIS):** Document prepared by FHWA and WVDOT in accordance with NEPA and other applicable laws and regulations; generally presented in two parts – a Draft (SDEIS) and a Final (SFEIS).

**Syncline:** A concave fold in bedrock.

**Total Maximum Daily Load (TMDL):** A calculation of the maximum amount of pollutant that a waterbody can receive and not diminish its beneficial use classification and still meet water quality standard. In addition, a TMDL contains the reductions needed to meet water quality standards and allocates those reductions among sources in the watershed.

**Upland Habitat:** Land that has sufficient dry conditions that hydrophytic vegetation, hydric soils, and/or wetland hydrology are lacking. Any area that is not a wetland, deepwater aquatic habitat, nor other special aquatic site is considered upland habitat.

**Vertical Curves:** Hills, both inclines and declines.

**Viewshed:** All land seen from one static point.

**Watershed:** A specific geographic area drained by a major stream or river.

**Wetland:** Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions.

**Zone of Saturation:** The area found below the water table where water occupies all open space.

#### COMMONLY USED METRIC CONVERSIONS

Quantity	Metric Unit	English Unit	Factor to Convert Metric Units to English Units
Length	Kilometer (km)	Mile (mi)	Kilometers x 0.62 = Miles
	Meter (m)	Foot (ft)	Meters x 3.28 = Feet
Area	Square Kilometer (km <sup>2</sup> )	Square Mile (mi <sup>2</sup> )	Sq. Kilometers x 0.39 = Sq. Miles
	Hectare (ha)	Acre (ac)	Hectares x 2.47 = Acres
Volume	Liter (l)	Gallon (gal)	Liters x 0.26 = Gallon
Mass	Kilogram (kg)	Pound (lb)	Kilograms x 2.21 = Pounds
Velocity	Kilometer per Hour (kph)	Mile per Hour (mph)	kph x 0.62 = mph