



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Kurt U. Schaefer
Director

September 22, 2026

Elizabeth Webster
Surface Transportation Board (Docket No. FD 36873)
395 E Street SW
Washington, DC 20423

Dear Elizabeth Webster;

The Missouri Department of Natural Resources appreciates the opportunity to review the materials for the Office of Environmental Analysis concerning Docket No. FD 36873, Union Pacific Corporation and Union Pacific Company – Control – Norfolk Southern Corporation and Norfolk Southern Railway Company; Preliminary Consultation for UP's acquisition of NS would create the country's first transcontinental railroad.

The department offers the following comments related to environmental considerations for use in evaluating your project's environmental impacts pursuant to National Environmental Policy Act as amended (42 U.S.C. §§ 4321, et seq.).

Part 1: Project Location

This is the first of two sites owned by Union Pacific which are subject to capital improvement projects. The project area is named "UP connection at West MC (Voltz)" and is located just north of Birmingham, Missouri, between St. Louis Road and North Birmingham Road. The following geographic descriptions apply to the approximate location of the study area.

Geographic Coordinates:
374809 E, 4336885 N

Public Land Survey System:
T50N R32W S01

8-Digit Hydrologic Unit Code:
Lower Missouri-Crooked (10300101)

Ecological Drainage Unit:
Central Plains/Blackwater/Lamine



Part 2: Project Location

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Geology and Geospatial Data

If a full Geologic Assessment is required for a project, the Missouri Geological Survey can be contacted directly at 800-361-4827. Other maps showing natural and cultural resources can be found at <https://dnr.mo.gov/land-geology/maps-data-research>.

Karst Topography

There are no known springs or sinkholes near the project area. The project area is in the Liberty quadrangle, which has a cave density of zero. Springs, sinkholes, and caves are features on the landscape associated with karst topography that can act as direct conduits of surface water and pollutants to groundwater. As such, extra precaution should be taken to minimize disturbance of land in or around these features, and to avoid the introduction of pollutants to sensitive groundwater resources. Karst areas may also potentially collapse.

Wells

The Water Well Drillers’ Act (Missouri Revisor of Statutes Sections 256.600 to 256.640) requires well installation and pump installation contractors to submit certification reports for all new wells drilled after July 31, 1987. As a result, the below information would not include well data prior to July 31, 1987.

According to the Well Information Management System (WIMS) database, there are nine wells near the project area. Wells can act as conduits of pollutants to groundwater resources. Any abandoned wells discovered must be plugged in accordance with section 256.615, RSMo. Best management practices should be used to protect any currently operating wells. For more information on locating and plugging wells, or on private domestic wells, please visit the link below for the department’s Well Installation Section webpage or contact the department’s Geological Survey Program directly. <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wells-drilling>.

Public Land

There are no known public lands located near the project area.

Conservation Opportunity Areas

There are no known Conservation Opportunity Areas (COA's) near the project area. Both terrestrial and aquatic COAs are identified by the Missouri Department of Conservation (MDC) and its conservation partners as priority areas that support and conserve viable populations of wildlife and the ecological systems on which they depend. Designated COAs are located statewide and may consist of a combination of public and private resources. Please contact the MDC at 573-751-4115 for more information.

Water Protection

Best Management Practices

Best management practices should be used during project activities to limit the amount of sediment and other pollutants entering waters of the state, and to protect the water's chemical, physical, and biological characteristics. These practices include, but are not limited to, conducting work during low flow conditions whenever possible, keeping heavy equipment out of the water, and taking all necessary precautions to avoid the release of fuel or other waste products to streams and other waters. In addition, the department encourages the preservation of existing riparian or buffer areas around each water resource to limit the amount of sediments or other pollutants entering the water. Any stream banks, riparian corridors, lake shores, or wetlands denuded of vegetation should be stabilized and re-vegetated as soon as is practicable.

Watershed Conditions

Public Drinking Water

There are no intakes, drinking water wells, or tanks near the project area. Proposed project personnel should be aware of nearby Public Drinking Water systems. Work associated with any project should take into consideration the protection of surface and groundwater public drinking water supplies, implementing appropriate best management practices as necessary. For additional information regarding source water protection, please contact the department's Public Drinking Water Branch at 573-526-0269.

Designated Uses

Water Bodies with Specific Designated Uses

The proposed project area is in the watershed of Shoal Creek. Water bodies are assigned specific designated uses according to State of Missouri Water Quality regulations at 10 CSR 20-7.031(2). These waters are protected by numeric water quality criteria outlined in 10 CSR 20-7.031(5) and Table A, as well as general water quality criteria outlined at 10 CSR 20-7.031(4). Designated uses of Shoal Creek include the following:

- Protection and propagation of fish, shellfish, and wildlife – warm water habitat (WWH)
- Human health protection (HHP)
- Irrigation (IRR)
- Livestock and wildlife protection (LWP)
- Secondary contact recreation (SCR)
- Whole body contact recreation – Category B (WBC-B)

Water Bodies without Specific Designated Uses

Water bodies that are not assigned specific designated uses are still protected by general water quality criteria outlined at 10 CSR 20-7.031(4) and are subject to the acute toxicity criteria of Tables A and B, as well as whole effluent toxicity conditions.

According to the National Wetlands

Inventory <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>, there is the likelihood of freshwater wetlands and ponds within the riparian corridors of Shoal Creek. This project has the potential to impact wetlands, ponds, and the aforementioned tributaries and headwater streams to be impacted, depending on their proximity to land disturbance activities. Project sponsors should avoid such impacts through alternatives analysis before compensatory mitigation is considered. If wetlands, ponds, headwaters, or tributaries are not directly impacted but are near any land disturbance, project sponsors should take care to protect water quality. While these water bodies are not assigned specific designated uses, they are protected by Missouri's general water quality criteria.

Sensitive Waters

The sensitive water within the project area is described in the following paragraph. Other sensitive waters not found in the project area include waters designated for Cold Water Habitat, Outstanding National Resource Waters, Outstanding State Resource Waters, Metropolitan No-Discharge streams, biocriteria reference locations, losing streams, and 303(d) Impaired and 305(b) Threatened Waters.

Waters with Approved Total Maximum Daily Loads

The project area is within the TMDL watershed of the Missouri River which is impaired for chlordane and PCB. Impairments should not be made worse by this project's activities. The department staff may require extra protections when developing permits or certifications to comply with total maximum daily load and wasteload allocations. Additional information can be found by contacting the department's Water Protection Program at 573-526-1446 or by visiting the link below. <http://www.dnr.mo.gov/env/wpp/tmdl/index.html>
<https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/tmdls>

Permitting Obligations

Clean Water Act Sections 401 and 404

Projects that have the potential to discharge fill or dredged material into a jurisdictional water of the United States must receive a Clean Water Act Section 404 Permit Authorization from the U.S. Army Corps of Engineers (USACE), and a Section 401 Water Quality Certification from the department. Some examples of activities that typically require a 404 permit and a 401 certification include stream bank stabilization, installation or replacement of culverts and low water crossings, fill impacts related to residential and commercial developments, and infrastructure maintenance. To learn more about the 404 permits visit the USACE's website: <https://rrs.usace.army.mil/rrs/home/permitting>. For more information about 401 water certification from the department, go to <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality>

If discharge into water has occurred, or will occur, project personnel should immediately contact the appropriate USACE District (link below) and the department's Operating Permits Section at 573-522-4502 for more information.

<http://www.mvr.usace.army.mil/Portals/48/docs/regulatory/MORegBound.pdf>

Land Disturbance

The project must apply for a land disturbance permit from the department if it involves construction disturbance activities of one or more acres, or construction activities that disturb less than one acre when part of a larger common plan of development or sale that will disturb a cumulative total of one or more acres over the life of the project. Land disturbance activities include clearing, grubbing, excavating, grading, filling, and other activities that result in the destruction of the root zone. Disturbance to valuable resource waters, including springs, sinkholes and losing streams, could require additional conditions or permits.

Information and application for online land disturbance permits are located at <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance>.

Questions regarding permit requirements may be directed to the appropriate Regional Office. <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>

Demolition and Construction Waste Management

Information on managing construction and demolition waste can be found at <https://dnr.mo.gov/print/document-search/pub2045>.

Hazardous Waste

The department's interactive map allows users to access information about hazardous substance and petroleum storage tank site investigations and cleanups. Please review site investigations and cleanups in the project area by accessing the interactive map at the following link: <https://dnr.mo.gov/waste-recycling/long-term-stewardship-lts/environmental-site-tracking-research-tool-e-start>. Should the project area intersect with one or more hazardous substance or petroleum storage tank sites, please contact erp@dnr.mo.gov for additional guidance prior to initiating excavation.

During the project, if any underground tanks or contaminated soil is discovered, workers should withdraw to a safe distance and notify the department's spill line at 573-634-2436.

It is the generator's responsibility to determine if materials generated during construction and demolition, are hazardous wastes. Demolition-related waste categories typically include paint residue (paint chips, paint scrapings, etc.), demolition debris (metal and boards that have been painted with lead-based or other heavy metal-based paint), and scrap metal (metal objects that contain lead or other heavy metals). A hazardous waste determination is not required for materials that will be reused or recycled without additional processing.

Asbestos

Prior to demolition activities, regulated structures must be thoroughly inspected by a Missouri-certified asbestos inspector to determine if any Asbestos Containing Materials are present, and a

notification made to the department at least ten working days prior to demolition. Regulated structures include any building which has been used as a commercial, institutional, or industrial building (even if it was historic use), and projects involving two or more residential structures. In addition, this includes but is not limited to the following “non-building” structures: bridges, pipelines, cooling towers, chimneys, dams, and tunnels. Any asbestos found must be properly managed to prevent release of asbestos fibers.

Solid Waste

Information about solid waste uncovered during construction activities can be found at <https://dnr.mo.gov/document-search/managing-solid-waste-encountered-during-excavation-activities-pub2192/pub2192>.

No waste may be buried on-site or at an alternate site, except for clean fill. Clean fill is defined by the Revised Statutes of Missouri as “uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the department for fill, reclamation or other beneficial use.” Clean fill must not contain protruding metals or demolition debris. Although not regulated as waste, placement of clean fill materials may be subject to requirements of the department’s Water Protection Program if it is placed in contact with surface or subsurface waters of the state or would otherwise violate water quality standards.

Air Pollution

Dust

Project sponsors should ensure fugitive particulate matter emissions, such as dust, resulting from the project do not remain on surfaces or in the air beyond the property line of origin. 10 CSR 10-6.170 restricts the emission of particulate matter to the ambient air beyond the premises of origin. Additional information on general dust emissions may be found at <https://dnr.mo.gov/print/document-search/pub2200>.

Open Burning

The open burning of refuse and trade waste is restricted according to 10 CSR 10-6.045. Construction, demolition, and trade waste cannot be open burned, except for untreated wood. Brush from land clearing activities may be burned if the burning is conducted outside the city limits and greater than 200 yards from the nearest occupied structure. Additional information on open burning can be found at <https://dnr.mo.gov/print/document-search/pub2047>.

DNR Operated Air Monitors for Particulate Matter in St. Louis

Branch Street Monitor

The Branch Street air monitoring site (EPA Site ID: 29-510-0093) is located at 100 Branch Street, St. Louis, Missouri. The monitor measures both particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2.5 microns (PM_{2.5}). The current PM₁₀ design value is above the 24-hour PM₁₀ National Ambient Air Quality Standard.

This monitor at its nearest point is located approximately 450 feet (0.085 miles) west-southwest of the Terminal Railroad Association of St. Louis railroad track lines and approximately 750 feet (0.142 miles) west-northwest of the Burlington Northern Santa Fe Railway. The Branch Street

monitor is approximately 4.5 miles east-northeast of the Chouteau Rail Yard that exceeds the boards thresholds in the Union Pacific's acquisition of Norfolk Southern project.

Blair Street Monitor

The Blair Street air monitoring site (EPA Site ID: 29-510-0085) is located at 3247 Blair Street, St. Louis, Missouri. The monitor measures several different pollutants including carbon monoxide, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. The state of Missouri is currently meeting both the 2006 24-hour PM_{2.5} and the 2012 annual PM_{2.5} standards with no areas designated as nonattainment or maintenance. The 2023-2025 preliminary PM_{2.5} 24-hour design value for this monitor is 21 micrograms per cubic meter (µg/m³) with the standard being 35 µg/m³. The 2024-2026 preliminary PM_{2.5} annual design value for this monitor is 9.0 µg/m³ with the standard newly revised annual PM_{2.5} standard promulgated in 2024 being 9.0 µg/m³.

The monitor at its nearest point is located approximately 0.70 miles west-southwest of the Terminal Railroad Association of St. Louis railroad track lines and approximately 0.70 miles west-northwest of the Burlington Northern Santa Fe Railway. The Blair Street air monitor is located approximately 4.25 miles east-northeast of the Chouteau Rail Yard that exceeds the boards thresholds.

The above comments concern potential environmental impacts related to air, land, and water. Feedback on this project related to the other topics should be directed as described below:

- Historic Preservation: Project personnel should check with the department's State Historic Preservation Office to determine if a Section 106 Review is needed. Information on the Section 106 Review can be found on the department's web site at <https://www.mostateparks.com/page/84261/section-106-review> or by contacting the State Historic Preservation Office at 573-751-7858.
- Floodplain: For information concerning flood plains impacts, contact the Missouri State Emergency Management Agency, Floodplain Management and Mitigation Branch, at 573-526-9100 or 2302 Militia Drive, Jefferson City, MO 65101.
- Endangered Species: The MDC is responsible for collecting and managing information on the location and status of endangered species in the state. Contact MDC's Endangered Species Coordinator at 573-751-4115 or P.O. Box 180, Jefferson City, MO 65102 for information about endangered species impacts.

We appreciate the opportunity to provide comments for the proposed project. If you have any questions or need clarification, please contact me at 573-522-8277.

Sincerely,



Ségolène Renazé
Policy Advisor

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