



**Visualize 2050
Planning and
Programming Process**

**Environmental Consultation
and Mitigation**

Part 9 of 27



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OVERVIEW OF THE ENVIRONMENTAL CONSULTATION AND MITIGATION PROCESS

Environmental mitigation is the process of addressing damage to the environment caused by transportation or other public works projects. Federal regulations require that the TPB include a discussion of possible mitigation activities that may have the greatest potential to restore and maintain environmental functions (23 CFR § 450.324 f.10.).

To promote relationships between regional transportation and environmental agencies, gather feedback on the National Capital Region Transportation Plan (NCRTP), and provide an opportunity for discussion on environmental mitigation, the TPB established its environmental consultation process between 2007 and 2009. The consultation effort engages state and local agencies responsible for land-use management, natural resources, environmental protections, conservation, and historic preservation. In the process' early development, feedback from the agency representatives revealed that agency staff would face significant challenges in providing substantial comments on the regional transportation plan due to a lack of project-level details and staff time and expertise to analyze individual projects in the plan. These agencies play integral roles in project-level planning and during National Environmental Policy Act (NEPA) reviews for specific projects, which includes assessment of the social, economic, and environmental impacts of a proposed action or project.

On the regional scale, agency staff found the development of a map highlighting environmental and historic features alongside transportation projects to be insightful. The consultation process includes a comparison of the planned transportation improvements with state conservation plans or maps and inventories of natural or historic resources. From this, an interactive map is made to provide a regional resource to inform the relationship between transportation and environmental concerns. With its defined and inventoried environmental resources and data, the interactive map serves as a tool to inform local and state agencies, as well as the public, on how the projects in the NCRTP relate to regional environmental concerns because, currently, only an assessment of the impact of transportation projects on the regional ambient air quality is required in the long-range planning process.

Transportation projects generally impact environmental resources because of construction, increased traffic, stormwater runoff from paved surfaces, and other factors. The areas where mitigation efforts to offset these negative impacts can be focused include neighborhood and community amenities like open spaces; cultural resources (i.e. historic properties or archaeological sites); wetlands and water resources; forested and other natural areas; agricultural areas; endangered and threatened species; and air quality.

TPB'S ROLE AND KEY STAFF

TPB staff lead the environmental consultation efforts for the region and are responsible for compiling environmental datasets, mapping projects and environmental resources, communicating with agencies the results of the environmental consultation activities, and identifying possible mitigation activities. Key TPB staff are listed in Table 9.1.

FIGURE 9.1: KEY STAFF

TPB Staff	Title	Role
Kanti Srikanth	Executive Director	Director for the Transportation Planning Board (TPB)
Sergio Ritacco	Senior Transportation Planner	Program Lead
Jamie Bufkin	Transportation Planner	Contributor
Jessica Storck	GIS Analyst	Map Contributor
Charlene Howard	Planning Data Resources Manager	Map Contributor

Compiling and Mapping Environmental and Historic Resources

The focal point of the TPB’s environmental consultation and mitigation process is the development of the interactive map that highlights the region’s resources and planned projects. To accomplish this, TPB staff completed extensive data collection that compares the transportation projects with the region’s natural and historic resources and regional conservation plans. The data collection involved TPB staff working with agencies to obtain updated data on floodplains, green infrastructure (as defined by Virginia and Maryland conservation plans), historic sites (as defined by national and separate state registers), protected lands (as defined by state wildlife management and conservation plans), and wetlands. Data collection occurred throughout summer 2024 with map production, analysis, and publication occurring in the early fall of 2024. The sources and dates of the data are detailed in Table 9.2.

TABLE 9.2: KEY SOURCES OF ENVIRONMENTAL AND HISTORIC RESOURCES MAPPING

Group	Data Layer	Data Source	Data Vintage	Date Accessed
Protected Lands	Federal Lands	USA Federal Lands	2024	July 2024
	DC Community Gardens	City of Washington, DC	2017	July 2024
	Maryland Agricultural Easement	Maryland Department of Agriculture	2019	July 2024
	Maryland Permanently Preserved Agricultural Lands	Maryland Department of Agriculture	2019	July 2024

	Virginia Agricultural Forestal District Layer	Virginia Department of Forestry	2021	July 2024
	Maryland Forest Conservation Act Easements	Maryland Department of Natural Resources	2019	July 2024
	Maryland Environmental Trust Easements	Maryland Department of Natural Resources	2019	July 2024
	Virginia Environmental Easements	Virginia Department of Conservation and Recreation	2023	July 2024
	City of Alexandria Resource Protection Areas	City of Alexandria	2018	July 2024
	Fairfax County Resource Protection Areas	Fairfax County Land Development Services	2024	July 2024
	Prince William County Resource Protection Areas	Prince William County Department of Public Works	2023	July 2024
	Virginia Conservation Lands	Virginia Department of Conservation and Recreation	2023	July 2024
	Maryland Rural Legacy Properties	Maryland Department of Natural Resources	2019	July 2024
	Maryland Private Conservation Lands	Maryland Department of Natural Resources	2019	July 2024
	Maryland Local Protected Lands	Maryland Department of Natural Resources	2019	July 2024
Green Infrastructure	Maryland County Parks	Maryland Department of Natural Resources	N/A	July 2024
	Maryland DNR Lands	Maryland Department of Natural Resources	2015	July 2024
	Virginia State Parks	Virginia Department of Conservation and Recreation	2019	July 2024
	Frederick County Federal State and Quasi-Public Parks	Frederick County Department of Parks and Recreation	N/A	July 2024

	Frederick County Municipal Parks	Frederick County Department of Parks and Recreation	N/A	July 2024
	Frederick Parks	Frederick County Department of Parks and Recreation	2024	July 2024
	Montgomery County Parks	Maryland National Capital Park and Planning Commission	2024	July 2024
	Prince George's County Parks	Planning Department of Prince George's County	2024	July 2024
	DC Parks	City of Washington DC Department of Parks and Recreation	2024	July 2024
	Loudoun County Open Space and Rec Centers	Loudoun County Parks, Recreation and Community Services	N/A	July 2024
	Fairfax County Non-County Parks	Fairfax County Park Authority	2024	July 2024
	Fairfax County Parks	Fairfax County Park Authority	2024	July 2024
	Arlington County Parks	Arlington County Parks and Creation	2024	July 2024
	City of Alexandria Parks	City of Alexandria Department of Recreation and Parks	2024	July 2024
	Prince William County Parks	Prince William County Department of Parks and Recreation	2022	July 2024
	Virginia Ecological Core	Virginia Department of Conservation and Recreation	2017	July 2024
	Maryland Green Infrastructure Hubs Corridors and Gaps	Maryland Department of Natural Resources	2024	July 2024
Floodplains	Inland Flooding	FEMA National Flood Hazard, within MWCOG Study Area	2024	July 2024
Wetlands	US Fish and Wildlife Service's (USFWS)	U.S. Fish and Wildlife Service	2024	July 2024

	National Wetlands Inventory (NWI)			
	Maryland Wetlands (Special State Concern)	Maryland Department of the Environment	2019	July 2024
	Hydric Soil	U.S. Natural Resources Conservation Service	N/A	July 2024
Historic Places	National Register of Historic Places (DC, MD, VA)	National Park Service	2021	July 2024
	District of Columbia - Historic Landmarks	District of Columbia Office of Planning	2021	July 2024
	Maryland - Historic Properties	Maryland Department of Planning	2020	July 2024
	Northern Virginia - Historic Sites	Northern Virginia Regional Commission	2022	July 2024

Identifying Possible Mitigation Activities

Environmental mitigation is the process of addressing damage to the environment caused by transportation or other public works projects. Commonly, actions taken to avoid or minimize environmental damage during or after construction are also considered mitigation as well. Staff reviewed environmental studies from two major transit projects, one major new roadway construction project, and two major highway widening projects in the NCRTP which showed a wide range of potential activities being considered throughout the region. Many studies discuss both planned strategies to prevent the environmental impact (minimization) and strategies to atone for it (mitigation). Examples of these activities include providing invasive plant management for impacted areas, reducing areas of impervious surface by installing planting strips, constructing noise barrier walls, and designing drainage structures to minimize effects on the ability of a floodplain to moderate floodwaters.

Consulting with Agencies

To ensure ongoing agency engagement, TPB staff used the strategies outlined in the TPB Participation Plan to engage appropriate constituencies. Agency consultation was conducted through the TPB’s advisory committees, which bring together technical experts from local and state agencies. Public announcements are shared with an actively maintained roster of agency contacts who receive updates on all public comment periods. Following the compilation of environmental GIS datasets, the TPB applied the agency-provided GIS layers of projects submitted for Visualize 2050 to display geographically on the interactive map. TPB staff then shared this interactive map with member agencies, who, through their public participation activities, provide the linkage with environmental review partners.

The TPB Technical Committee is responsible for reviewing the maps and information gathered on environmental and historic resources and how the planned projects relate. TPB staff presented the Technical Committee with this information for their review and feedback during the development of Visualize 2050.

ROLE OF KEY PLANNING AGENCIES

In the environmental consultation process, the key planning agencies are representatives from state and local agencies responsible for land-use management, natural resources, environmental protections, conservation, and historic preservation. In their own work, agency staff made routine updates to conservation plans, land-use plans, and inventories of natural or historic resources.

During and following discussions of possible environmental considerations and mitigation activities, key planning agencies are responsible for examining, documenting, and implementing any needed mitigation actions at the individual project level. The District of Columbia, Maryland, and Virginia each have their own approach to regulations on the environment and implementation of transportation projects, thus the TPB supports those approaches by providing novel resources that may be useful at understanding the challenges at a regional level and provide a forum where officials can discuss strategies used by other member jurisdictions.

PUBLIC ENGAGEMENT

The TPB uses established procedures in its Participation Plan for environmental consultation in informing active participants and community leaders by sending information through TPB member jurisdictions, agencies, and other partners who can widely disseminate data and key messages. The TPB received an update on environmental consultation in early 2025 during which the public was allowed to provide comment. The information was first shared that same month at the TPB Technical Committee meeting during which the public was able to watch the presentation and learn about these activities. Further, the results of environmental consultation were included in the plan and shared as part of Visualize 2050 public comment periods.