Environmental Assessment of Natural Features

Federal transportation legislation contains a requirement that the Long Range Transportation Plan include "a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan." The goal is to balance transportation needs with environmental protection.

The WMSRDC staff has conducted a preliminary assessment of transportation projects included in the 2045 Long Range Plan to identify any projects which may have negative environmental impacts. This assessment is done at this point so that communities can be notified well in advance that there may be impacts on the environment.

Factors Used in Environmental Assessment

WMSRDC staff compiled a list of each proposed transportation project in the plan and evaluated each listing using the following list of environmental factors.

- Floodplains Use of the land adjacent to a stream has a major impact on protecting water quality, avoiding flood damage, and maintaining wildlife habitat. This area adjacent to the stream channel serves as a natural reservoir for storing excess water during a flood.
- Wetlands Wetlands play a vital role in water resource protection, recreation, tourism, and the economy in West Michigan. Specifically, wetlands provide:
 - o Flood and storm control via hydrologic absorption and storage capacity;
 - Wildlife habitat for breeding, nesting, feeding grounds, and cover for many forms of wildlife.
 - o Protection of subsurface water resources, valuable watersheds, and recharge for groundwater supplies
 - o Erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
- Critical Dune Areas The purpose of Critical Dune areas is to preserve, protect enhance and the quality of Michigan's critical dunes.

Factors Not Evaluated

There are a number of other potential environmental factors which were considered for use in evaluating the projects in the Long Range Plan. However, complete and accurate data is not available for many of these factors. Listed below are a number of other potential factors which could be evaluated, should more complete information become available in the future.

- Threatened and Endangered Species The data available is insufficient to accurately map. As
 part of the consultation phase the Fish and Wildlife Service was contacted. In response, they
 noted that the following threatened and/or endangered species may be present in the WESTPLAN
 MPO: The Indiana bat, the Karner Blue Butterfly, Bald Eagles, Pitcher's Thistle, the Piping
 Plover, and the Eastern Massassauga Rattlesnake.
- Archeological sites There is no complete data that is available to the public.
- Unique habitat The data available is incomplete and insufficient to accurately map.

Environmental Assessment Findings

The map and chart on the following pages show which projects are adjacent to the environmental features that were examined. This inventory in no way substitutes a project sponsor's responsibility to complete a more in depth environmental assessment.

From the preliminary review, it does appear that some of the projects are adjacent to the environmental features which were examined. Project sponsors are encouraged to follow the best practices which are outlined in the following sections.

Environmental factors may need to be examined in more detail in order to mitigate any negative impacts. These features may also influence project costs and timing. As previously stated, this assessment does not prevent any project from moving forward, but rather is to be used to identify potential problems.

ENVIRONMENTAL ASSESSMENT CHART

Project Name	Critical Dunes	Wetlands	Floodplains
168 th Avenue			X
Henry Street			X
Sternberg Road (Quarterline to Airline)			
Witham Road			X
Sternberg Road (Martin to Lake Harbor)	X	X	
Pontaluna Road			
Grand Haven Road		X	X
Hile Road			
174 th Avenue		X	
West Spring Lake Road Bridge		X	



Planning/ Design Guidelines

Regardless of the type of project or the resources that may be impacted, the following guidelines should be considered during the planning, design, construction, and maintenance of transportation projects. They represent good planning practice and will help ensure a blending of sound construction techniques with desired environmental protection goals.

- Employ context sensitive solutions (CSS) principles from the earliest point possible in project development.
- Identify the area of potential impact related to the transportation project, including the immediate project area, anticipated borrow/fill areas, haul roads, prep sites, and other contractor areas, as well as other related project development areas.
- Conduct an inventory to determine if any environmentally sensitive resources could be impacted by the project.
- Conduct a pre-construction meeting with local community officials, contractors, and subcontractors to discuss environmental protection.
- If possible, avoid impacts to environmental resources by limiting the project scope or redesigning the project
- Where impacts cannot be avoided, mitigate them as much as possible.
- Integrate stormwater management into the design of the site. If appropriate, utilize low-impact development practices that infiltrate stormwater into the ground (e.g., swales, rain gardens, native plantings).

Construction/Maintenance guidelines

- Insert special requirements addressing sensitivity of environmental resources into plans, specifications, and estimates provided to construction contractors
- Confine construction and staging areas to the smallest necessary and clearly mark area boundaries.
- Install construction flagging or fencing around environmental resources to prevent encroachment.
- Sequence construction activities to minimize land disturbance at all times, but especially during the rainy or winter season for natural resource protection and during the high-use season for resources open to the public.
- When utilizing heavy equipment, pay close attention to the potential of uncovering archeological remains
- Before site disturbance occurs, implement erosion control best management practices to capture sediments and control runoff.
- Incorporate stormwater management into the construction phase.
- Properly handle, store, and dispose of hazardous materials (e.g., paint, solvents, epoxy) and utilize less hazardous materials when possible.
- Keep equipment in good working condition and free of leaks. Avoid equipment maintenance or fueling near sensitive areas. If mobile fueling is required, keep a spill kit on the fueling truck.
- Identify and implement salt management techniques to reduce the impacts of salt on area waterways.
- Conduct on-site monitoring during and immediately after construction to ensure environmental resources are protected as planned.