



APPENDIX F: ENVIRONMENTAL ANALYSIS

ENVIRONMENTAL ANALYSIS

The Des Moines Area MPO has established a regional goal to preserve, to protect, and to enhance the natural and the human environments. This appendix provides an overview of the environmental review conducted for projects in the plan. The assessment takes into consideration the social, the natural, and the human environments, assists in streamlining the federal project review process, and identifies potential environmental mitigation strategies. This environmental review is to conduct an early, cursory analysis of the Mobilizing Tomorrow's planned transportation capital improvements to the natural, human, and social environments to make early project decisions and to increase awareness of subsequent project-level environmental analyses that may be required.

Federal Requirements

The environmental streamlining of transportation planning review is intended to provide a mechanism which allows information, analyses, and products from long-range transportation planning efforts to be incorporated into and formally adopted in SAFETEA-LU and National Environmental Policy Act (NEPA) documents.

It is FHWA's policy that (23 CFR § 771.105):

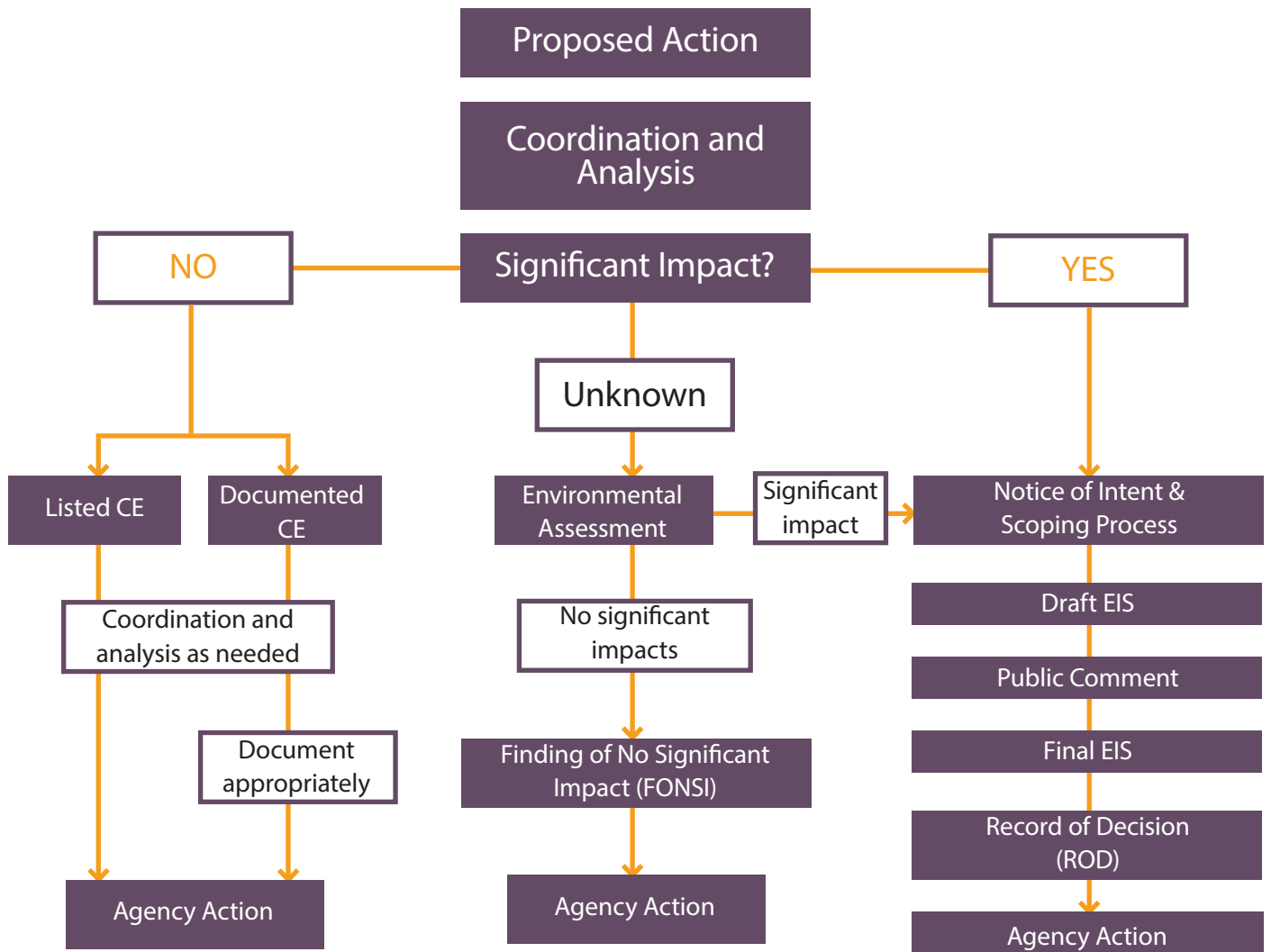
To the fullest extent possible, all environmental investigations, reviews, and consultations be coordinated as a single process, and compliance with all applicable environmental requirements be reflected in the environmental document required by this regulation.

- Alternative courses of action be evaluated and decisions be made in the best overall public interest based upon a balanced consideration of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, state, and local environmental protection goals.
- Public involvement and a systematic interdisciplinary approach be essential parts of the development process for proposed actions.
- Measures necessary to mitigate adverse impacts be incorporated into the action.

In addition, federal guidance notes an MPO's MTP should include a discussion of potential environmental mitigation activities. 23 CFR 450 defines environmental mitigation activities as:

"... strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize, or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment, which includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air."

NEPA PROCESS FROM CENTER FOR ENVIRONMENTAL EXCELLENCE



Environmental Review

The Mobilizing Tomorrow environmental review consisted of assessing the impacts of each of the MTP’s planned transportation projects on the natural and on the human environment. The Des Moines Area MPO established an on-line natural areas map to analyze the potential effects. The purpose of the Des Moines Area MPO’s review is to assist in streamlining the NEPA process by identifying planned transportation capital improvements’ potential effects on the environment within the early phases of the transportation planning process. This analysis is not intended to substitute for the development of a CE, an EA, or an EIS, but rather to supplement the NEPA process.

The Des Moines Area MPO utilized the natural areas map, discussed in Chapter 2, to analyze the impact of planned transportation capital improvements and was used in the scoring of proposed projects. This inventory included:

- Threatened and endangered species
- Parks, conservation land and trails
- Streams
- Hydric soils
- Wetlands
- Large, medium and small habitat blocks
- Remnant prairies
- Contaminated site facilities
- Floodplains
- Floodways

Transportation Impacts

The Des Moines Area MPO analyzed the planned improvements’ proximity to elements of the natural areas maps and docked points to those that were likely to affect one or more of these elements. Only five projects in the final approved list of projects have any areas of concerns for impacting natural resources. Staff of the MPO will monitor these projects and continue to seek solutions to avoid impacting the natural resources. The five projects include:

PROJECT ID	SPONSOR	DESCRIPTION
117	City of Bondurant	Garfield Street Extension
241	City of Des Moines	Add two lanes (SE Connector)
393	City of Pleasant Hill	Connection between NE 70th and SE 68th
503	City of West Des Moines	Grand Avenue Extension
341	Iowa DOT	15th Street Extension (US 69)



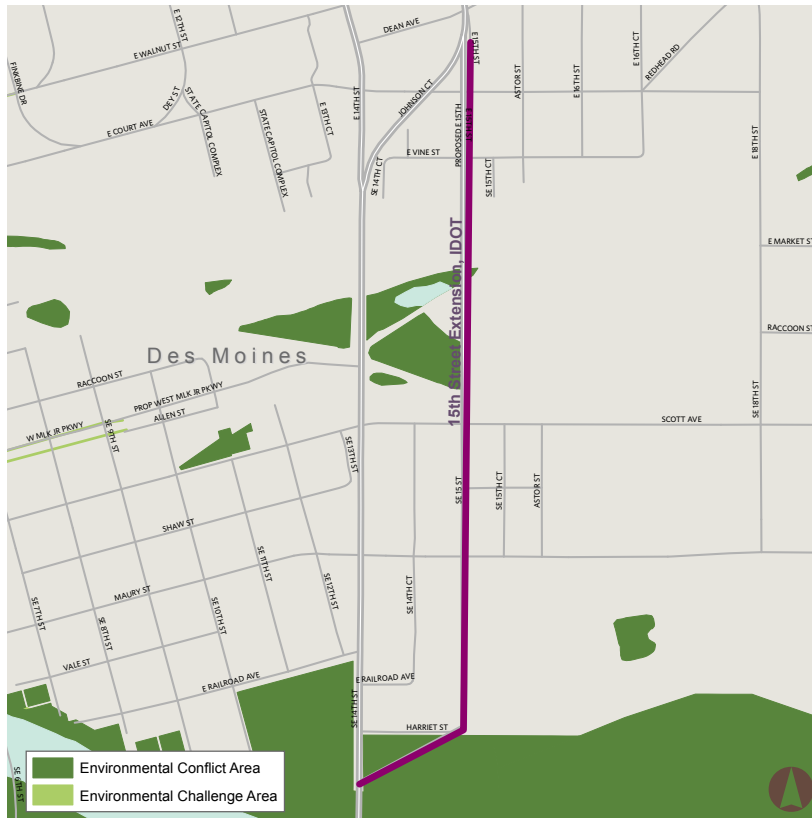
PROJECT ID: 117
CITY OF BONDURANT

NATURAL AREA IMPEDIMENTS	
	Hydric Soils
	Floodplain



PROJECT ID: 241
CITY OF DES MOINES

NATURAL AREA IMPEDIMENTS	
	Wetlands
	Hydric Soils
	Floodplain



PROJECT ID: 503
IOWA DOT

NATURAL AREA IMPEDIMENTS

Parks and Conservation Land

Wetlands

Mitigation Strategies

Environmental mitigation refers to the strategies developed to actively avoid, minimize, or mitigate the potential impacts a transportation improvement may have on the natural and human environment.

Potential mitigation strategies will/shall include at least one of the following strategies:

- Avoiding impacts
- Minimizing a proposed activity/improvement size or its involvement
- Rectifying impacts (restoring temporary impacts)
- Taking precautionary and/or abatement measures to reduce construction impacts
- Employing special features or operational management measures to reduce impacts
- Compensating for environmental impacts by providing suitable, replacement or substitute environmental resources of equivalent or greater value, on or off-site

Interagency Consultation

The Des Moines Area MPO established the Environment Roundtable to support the review of environmental impacts of transportation projects. Members consist of representatives from the following agencies:

- Capital Crossroads – Environmental Capital
- Center on Sustainable Communities
- Central Iowa Sierra Club and Des Moines Area Audubon
- Department of Natural Resources
- Des Moines Area Community College
- Des Moines Izaak Walton League of America
- Des Moines Park and Recreation
- Des Moines Water Works
- Drake University
- Environmental Law and Policy Center
- Growing Green Communities
- Iowa Audubon
- Iowa Clean Cities Coalition
- Iowa Department of Public Health
- Iowa Economic Development Authority
- Iowa Energy Office
- Iowa Interfaith Power and Light
- Iowa Floodplain and Stormwater Management Association
- Iowa Natural Heritage Foundation
- Iowa Rivers Revival
- Madison County Conservation
- Metro Waste Authority
- Pleasant Hill Park and Recreation
- Polk County Conservation
- Polk Soil and Water Conservation District
- Trees Forever

Environmental Justice (EJ) Review

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations (1994) was enacted to reinforce Title VI of the Civil Rights Act of 1964. Executive Order 12898 states that:

“Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

As part of its environmental justice analysis, the Des Moines Area MPO identified seven degrees of disadvantage, or types of traditionally disadvantaged populations, as the analytic basis for ensuring compliance with Title VI. This analysis was utilized to evaluate the impacts of planned transportation projects in areas with socially disadvantaged populations. The seven degrees of disadvantage include:

- Linguistically Isolated
- Non-white Population
- Persons in Poverty
- Carless Households
- Single heads of households
- Persons over 65
- Persons with a disability

Using U.S. Census data at the census tract level, regional averages were determined for each of the seven degrees. A census tract was marked as disadvantaged for each degree if it exceeded the regional average. For example, the regional average for Persons in Poverty sits at 10.7 percent. Any census tract that had an average above 10.7 percent would be considered disadvantaged for that degree. To determine environmental justice areas, all seven degrees were combined to total the number of degrees of disadvantaged in each census tract. Any census tract with six or more disadvantaged degrees was identified as an Environmental Justice (EJ) Area. In the MPO planning area, 4 percent of the land is considered to be an EJ Area, with 15 percent of the population residing in these areas.

Transportation Impacts

The Des Moines Area MPO analyzed the planned transportation projects' proximity to the environmental justice areas. A complete look at each approved project and its proximity to an EJ area can be found on the MPO's website "Measures on the Map" on-line tool.

