

# Root River Watershed Restoration Plan: Report on Chapters III and IV (partial)

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Presentation to the Root River  
Restoration Planning Group

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# Partners and Funding Agencies



Municipalities and  
Counties of the Root  
River Watershed



## Plan Approach

1. Summarize Recommendations of the Regional Water Quality Management Plan Update (RWQMPU)
2. Evaluate Implementation of the RWQMPU
3. Inventory Recent and Ongoing Projects, Programs, and Initiatives and Integrate these Into Recommendations
4. Review and Refine Initially Identified Focus Issues
5. Characterize the Watershed Concentrating on Features Related to the Focus Issues

## Plan Approach

6. Identify Targets to be Achieved by the End of the Plan Period
7. For Each Target, Identify Actions to be Taken
8. Identify Foundation Actions
9. Present Actions in Addition to those Recommended in the RWQMPPU
10. Develop an Implementation Strategy

The plan is being documented in:

SEWRPC Community Assistance Planning Report  
No. 316, *A Watershed Restoration Plan for the  
Root River Watershed*

# Report Chapters

- I. Introduction
- II. Summary of recommendations of the RWQMPU for the Root River and evaluation of implementation to date
- III. Inventory of relevant plans, programs, and initiatives
- IV. Characterization of the watershed
- V. Description of targets to be achieved and alternative management measures
- VI. Recommended watershed restoration plan
- VII. Implementation strategies

## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives



## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives

- Inventory of related plans
  - Collated and reviewed for recommendations relevant to the focus areas
- Inventory of programs and initiatives active or available in the Root River watershed
  - Focuses on programs and initiatives that were not inventoried in the Chapter II review of efforts to implement recommendations of the regional water quality management plan update

## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives

- Inventory of related plans
  - Included regional, watershed, county, municipal, and site-specific plans
  - Land use plans and comprehensive plans
  - Stormwater drainage, stormwater management, and flood mitigation plans
  - Sanitary sewer service area plans

## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives

- Inventory of related plans
  - Environmental management plans
    - Water quality management, water resources, land and water resource management, and natural areas plans
  - Park and open space plans
  - Lake and pond management plans
  - Found 90+ plans that have some relevance to one or more focus areas

## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives

- Inventory of programs and initiatives active or available in the Root River watershed
  - Conservation Programs: Federal, State, County
  - Local Grant Programs
  - Rain Garden and Rain Barrel Programs
  - Land Trusts, Conservancies, and Other Land Preservation Programs

## Chapter III—Recent and Ongoing Watershed Management Programs and Initiatives

- Inventory of programs and initiatives active or available in the Root River watershed
  - Citizen-Based Monitoring Programs
  - Education Programs
    - Stormwater Education (*e.g. Respect our Waters*)
    - Nature Centers (*e.g. River Bend, Wehr, REC*)
    - UW-Extension
  - Boat Inspection Programs

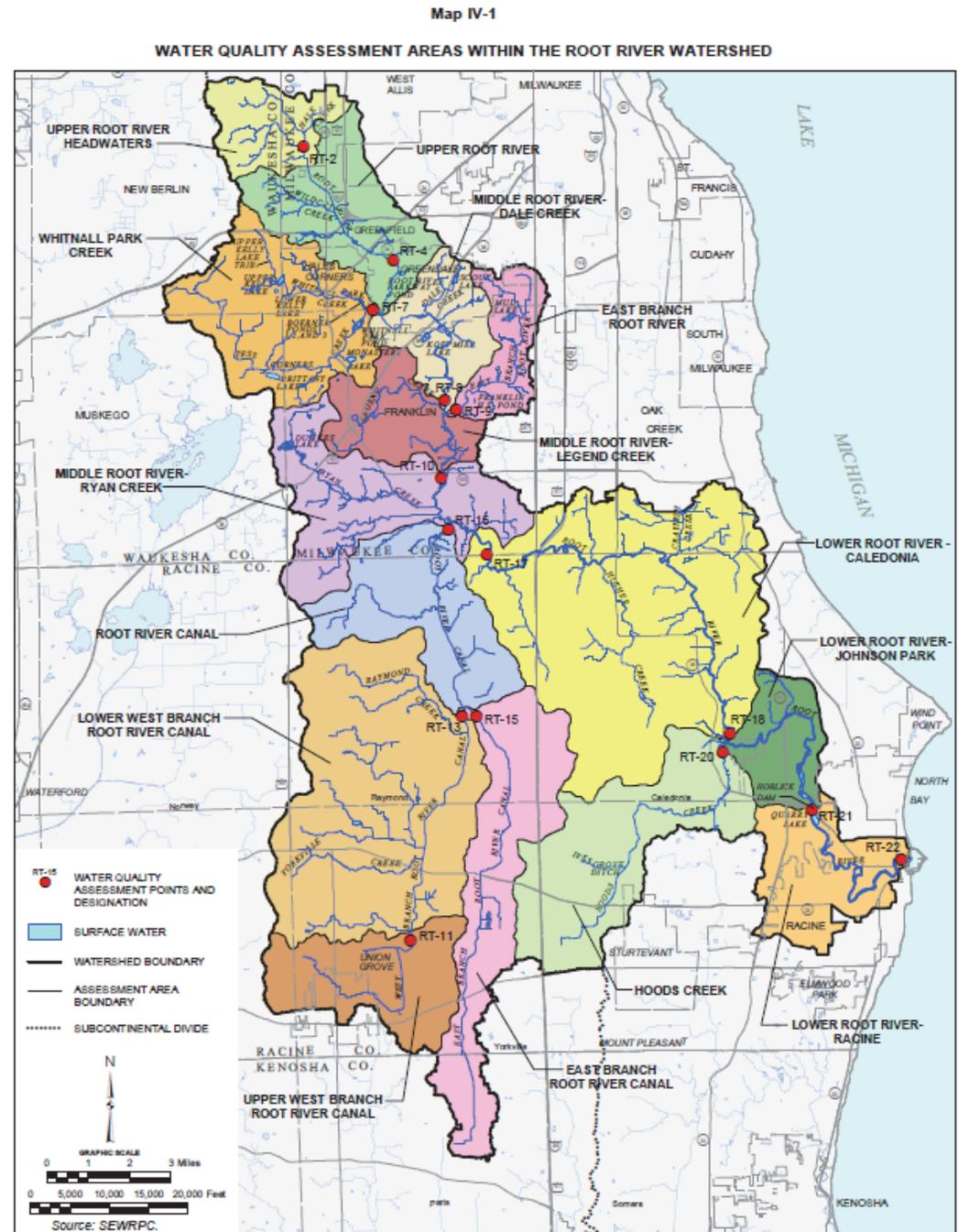
# Chapter IV—Characterization of the Root River Watershed



## Chapter IV—Characterization of the Root River Watershed

- Information on the natural and constructed features of the watershed
- Refines and updates inventories presented in the 2007 SEWRPC regional water quality management plan update
- Includes information on:
  - Physical conditions of surface water system
  - Surface water quality
  - Habitat and biological conditions
  - Natural resource base and environmentally sensitive areas

- Many of the analyses are done on the basis of the assessment areas that were previously described



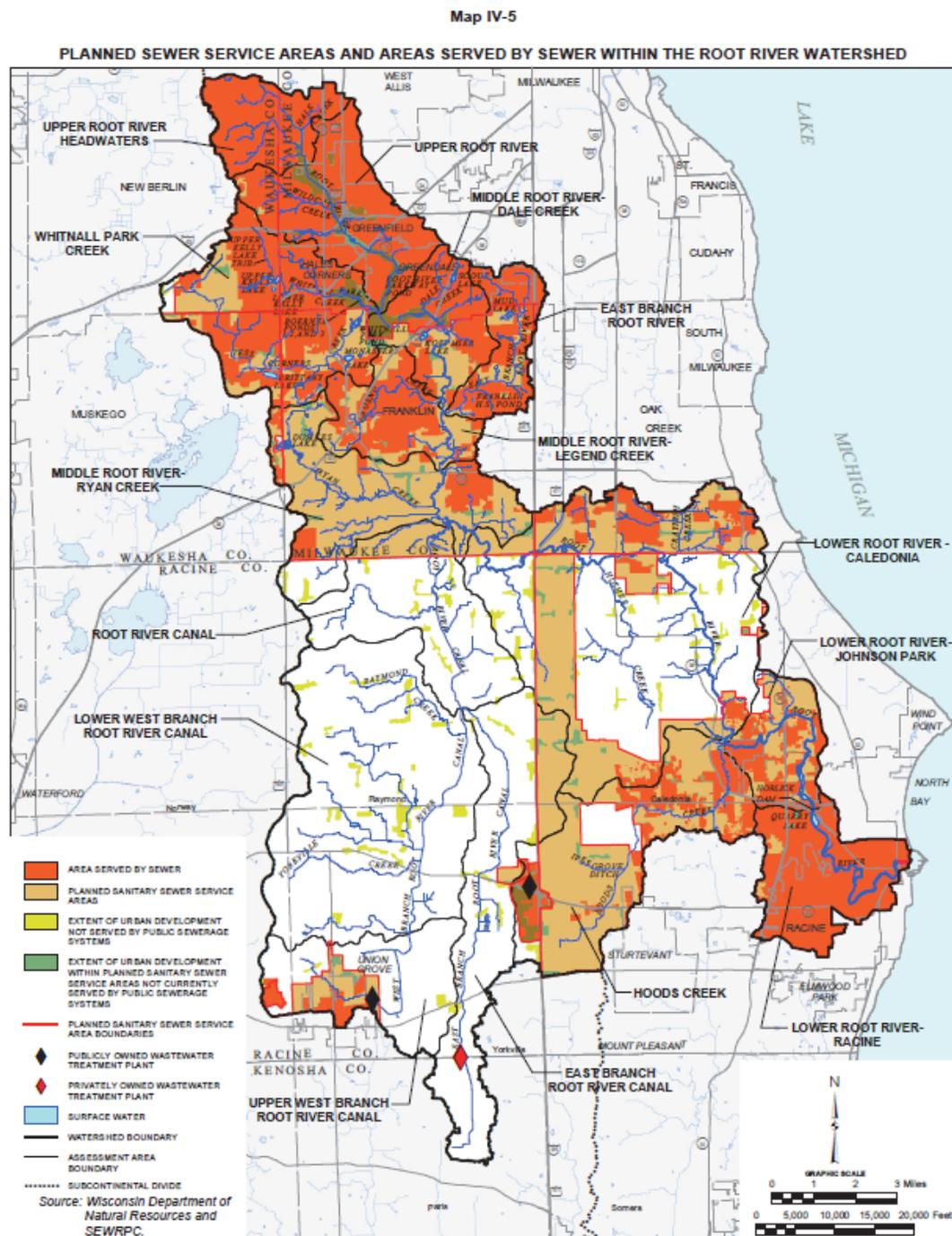
PRELIMINARY DRAFT

# Chapter IV—Characterization of the Root River Watershed

- Assessment Areas
- Land Use
  - Civil divisions, historical urban growth, existing and planned land use, urban and rural land use

- Planned sanitary sewer service areas

- Red is currently served by sewer
- Tan is planned sewer service area
- Green is unserved urban areas with in planned service areas
- Yellow is unserved urban areas outside of planned service areas



# Chapter IV—Characterization of the Root River Watershed

- Assessment Areas
- Land Use
  - Civil divisions, historical urban growth, existing and planned land use, urban and rural land use
- Climate

- Precipitation Since 1940

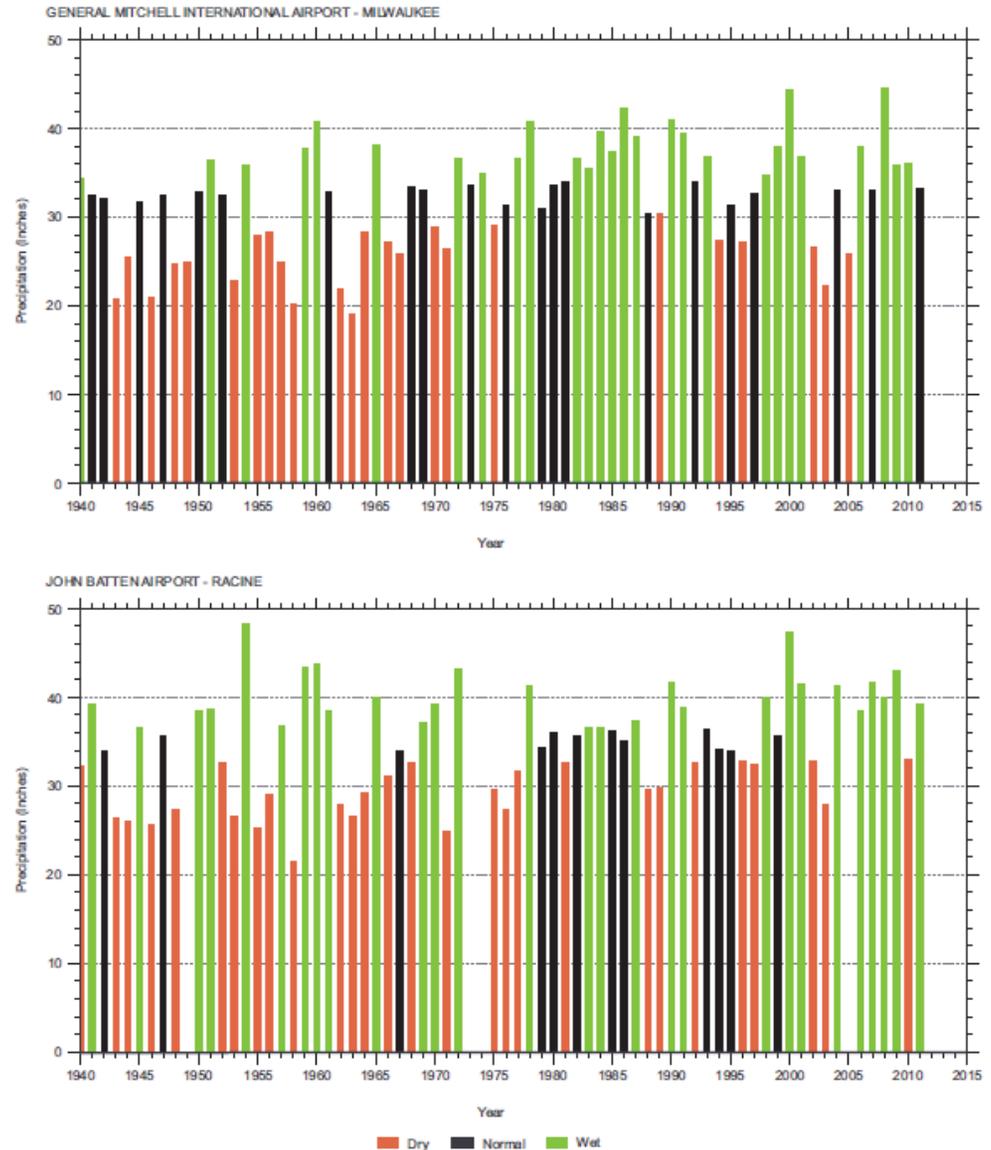
- Top is Mitchell Field
- Bottom is John Batten Airport

- Black is normal years
- Orange is dry years
- Green is wet years

- Recent years have been wetter than in the past

Figure IV-4

TOTAL ANNUAL PRECIPITATION AT THE NOAA WEATHER RECORDING STATIONS AT GENERAL MITCHELL INTERNATIONAL AIRPORT AND RACINE: 1940-2011



NOTE: Dry years and wet years were determined by the 99 percent lower and upper confidence intervals of the mean for the entire period of record 1940-2011. For General Mitchell International Airport, years with total annual precipitation that are lower than 30.39 inches were classified as dry, years with total annual precipitation that are higher than 34.0 inches were classified as wet, and all other years were classified as normal. For Racine, years with total annual precipitation lower than 33.01 inches were classified as dry, years with total annual precipitation higher than 36.64 inches were classified as wet, and all the other years were classified as normal.

Source: National Oceanic and Atmospheric Administration and SEWRPC.

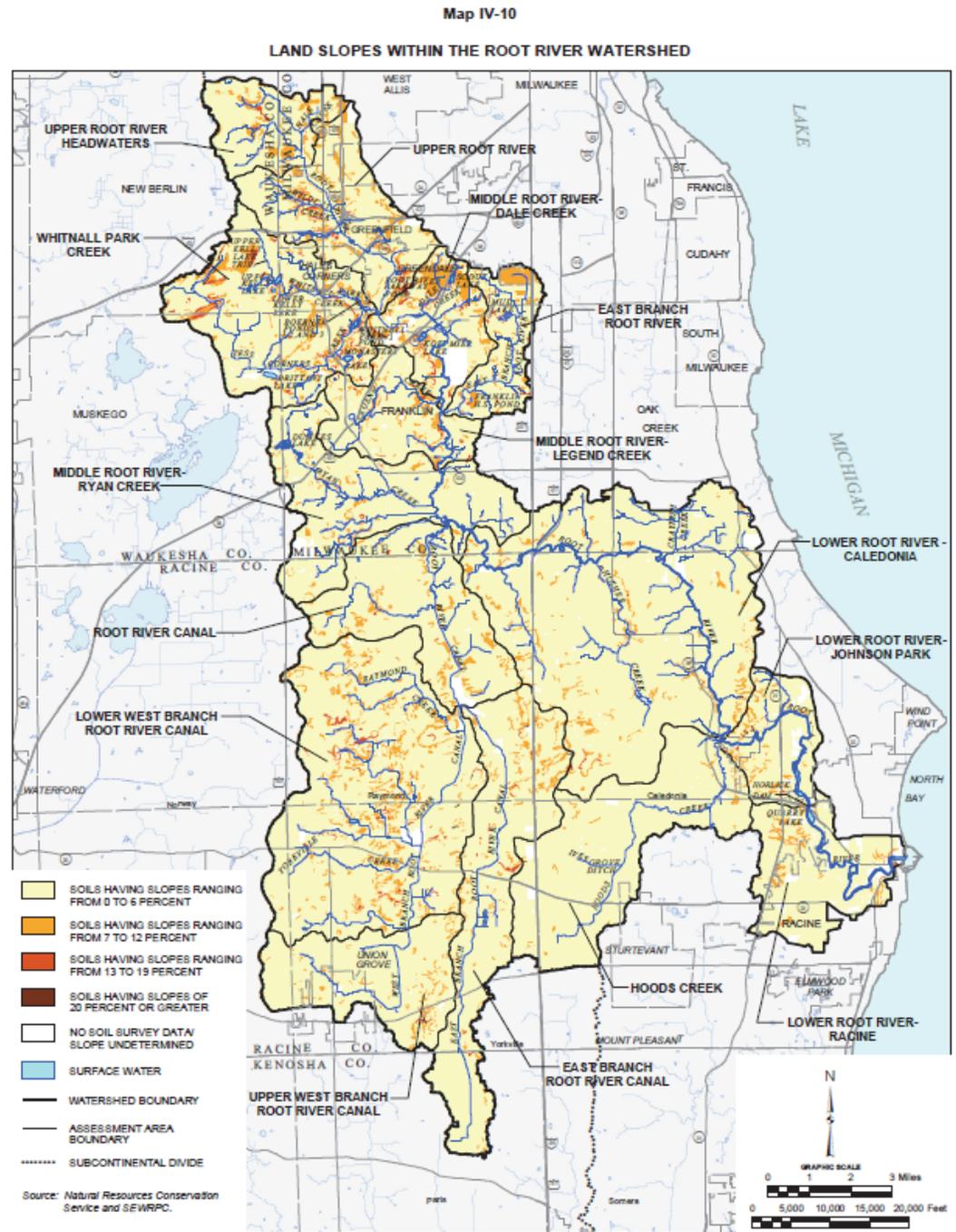
PRELIMINARY DRAFT

# Chapter IV—Characterization of the Root River Watershed

- Assessment Areas
- Land Use
  - Civil divisions, historical urban growth, existing and planned land use, urban and rural land use
- Climate
- Geology and Physiography

- Land Slopes

- Slopes greater than 6 percent have higher erosion risk (highly erodible)
- The assessment areas with the greatest percentages of highly erodible soils are heavily urbanized



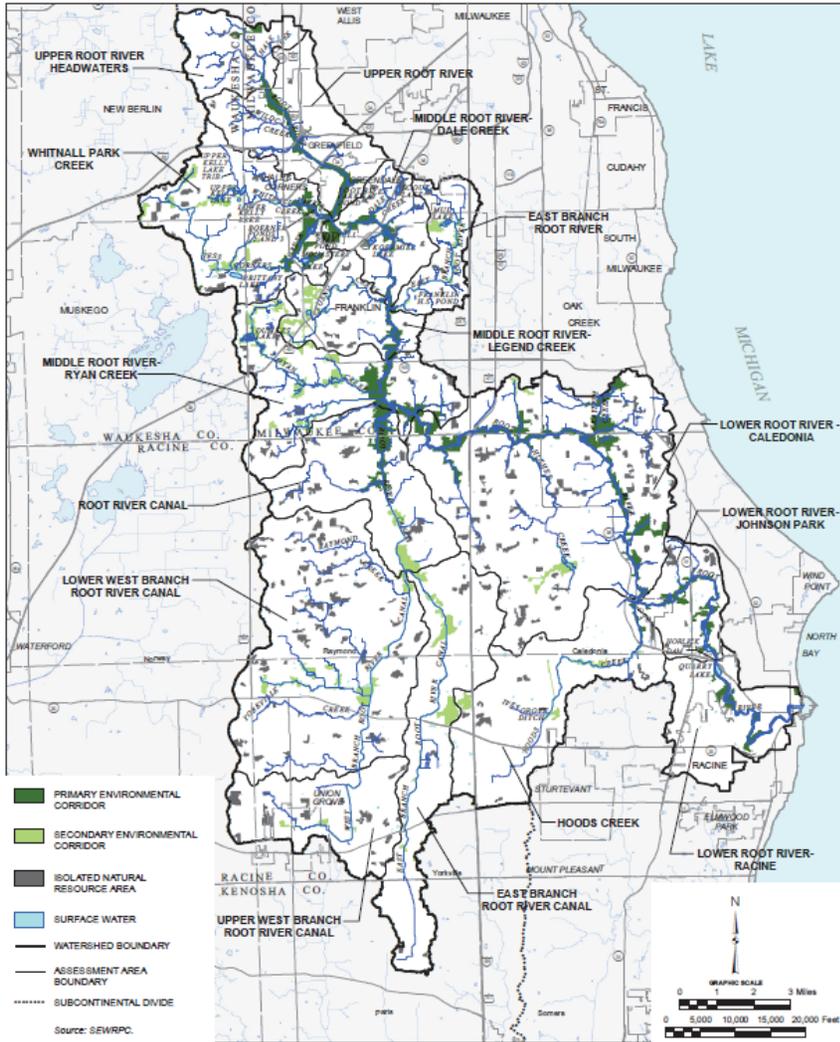
PRELIMINARY DRAFT

# Chapter IV—Characterization of the Root River Watershed

- Assessment Areas
- Land Use
  - Civil divisions, historical urban growth, existing and planned land use, urban and rural land use
- Climate
- Geology and Physiography
- Elements of the Natural Resource Base
  - Environmental corridors, natural areas, critical species habitat sites, woodlands, wetlands, wildlife habitat

Map IV-17

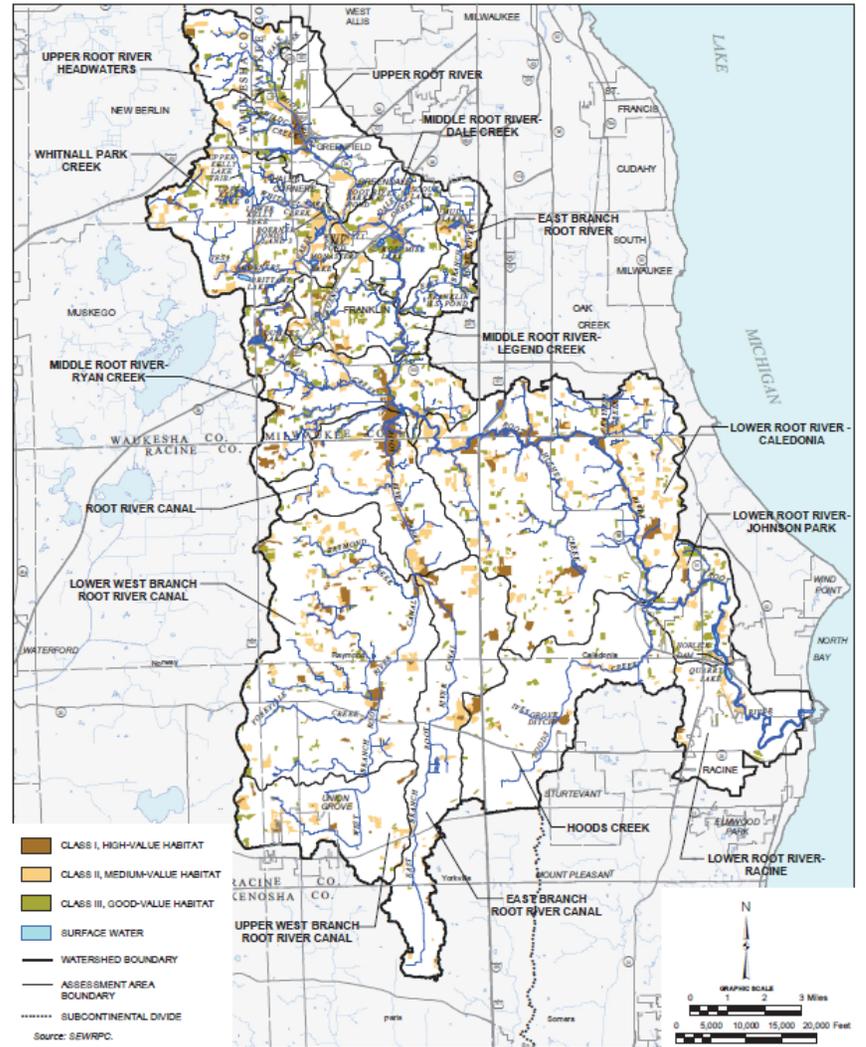
ENVIRONMENTAL CORRIDORS WITHIN THE ROOT RIVER WATERSHED: 2005



PRELIMINARY DRAFT

Map IV-19

WILDLIFE HABITAT WITHIN THE ROOT RIVER WATERSHED: 1985



PRELIMINARY DRAFT

## Next Steps

- Continue and complete characterization of the watershed
  - Water quality
  - Biological conditions
    - Fish, macroinvertebrates, mussels
  - Invasive species
  - Buffer analyses
- Identify targets to be achieved by the end of the plan implementation period

# Project Web Site

- <http://www.sewrpc.org/SEWRPC/Environment/Root-River-Watershed-Restoration-Plan.htm>
- Presentations from RRRPG meetings
- Summary notes from Advisory Group meetings
- Draft chapters as they are completed
- Comment screen

