

City of Waukesha Diversion Application

Public Information Meetings - July 26, 27, 28, 2011
Pewaukee, Wauwatosa, Sturtevant

DNR Water Use Section
Bureau of Drinking Water and Groundwater



DECISION STEPS FOR CITY OF WAUKESHA DIVERSION APPLICATION

Wisconsin determines
if application is
approvable

If yes...
Forwarded to Great
Lakes States and
Provinces

If no...
Application ends.
Opportunities for
legal remedies.

Great Lake States
Decision

If yes...
Returned to Wisconsin
for **FINAL DECISION**
and permits

If no...
Application ends.
Opportunities for legal
remedies.



WDNR Review Milestones

PUBLIC NOTICE OF APPLICATION (July 12, 2011)

PUBLIC HEARINGS I:

- Application process
- 30-day comment period

WDNR REVIEW PERIOD

Consider comments
Prepare draft EIS, draft
Technical Review and draft
decision

PUBLIC HEARINGS II:

- Draft EIS, Draft Technical Review, Draft Decision
- 45-day comment period

WDNR RESPONSE TO COMMENTS

Revisions to EIS, Technical Review and draft decision

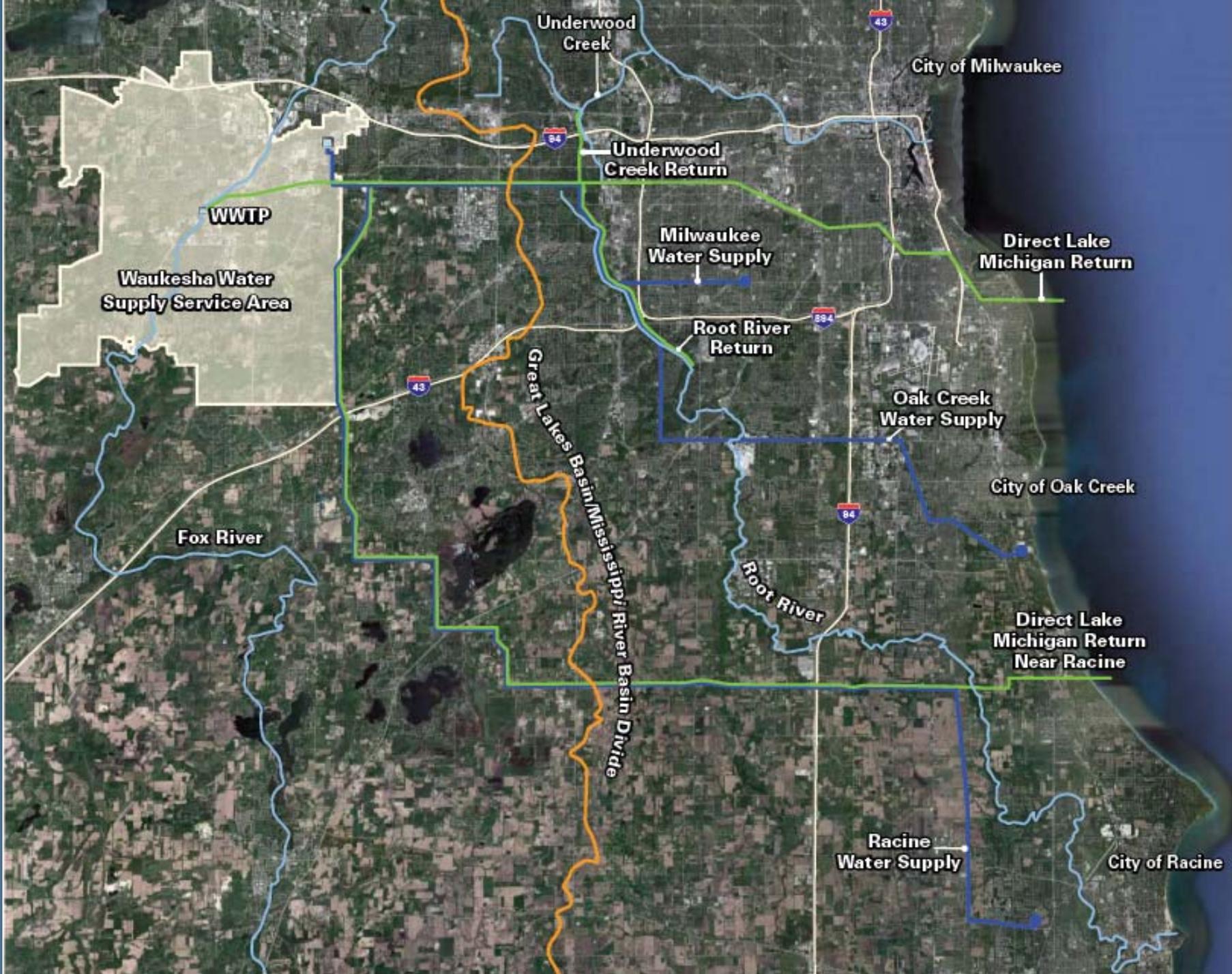
WDNR ISSUES FINAL EIS

- 30-day comment period

WDNR determines if application is approvable

City of Waukesha Diversion Application Overview

- Volume:
Annual average: 10.9 million gallons per day
Peak day: 18.5 million gallons per day
- Source: Lake Michigan
via Milwaukee, Oak Creek or Racine water utility
- Wastewater Return: Lake Michigan
via Underwood Creek @ Brookfield, direct to Lake Michigan or Root River



Underwood Creek

City of Milwaukee

WWTP

Waukesha Water Supply Service Area

Underwood Creek Return

Milwaukee Water Supply

Direct Lake Michigan Return

Root River Return

Oak Creek Water Supply

City of Oak Creek

Fox River

Great Lakes Basin/Mississippi River Basin Divide

Root River

Direct Lake Michigan Return Near Racine

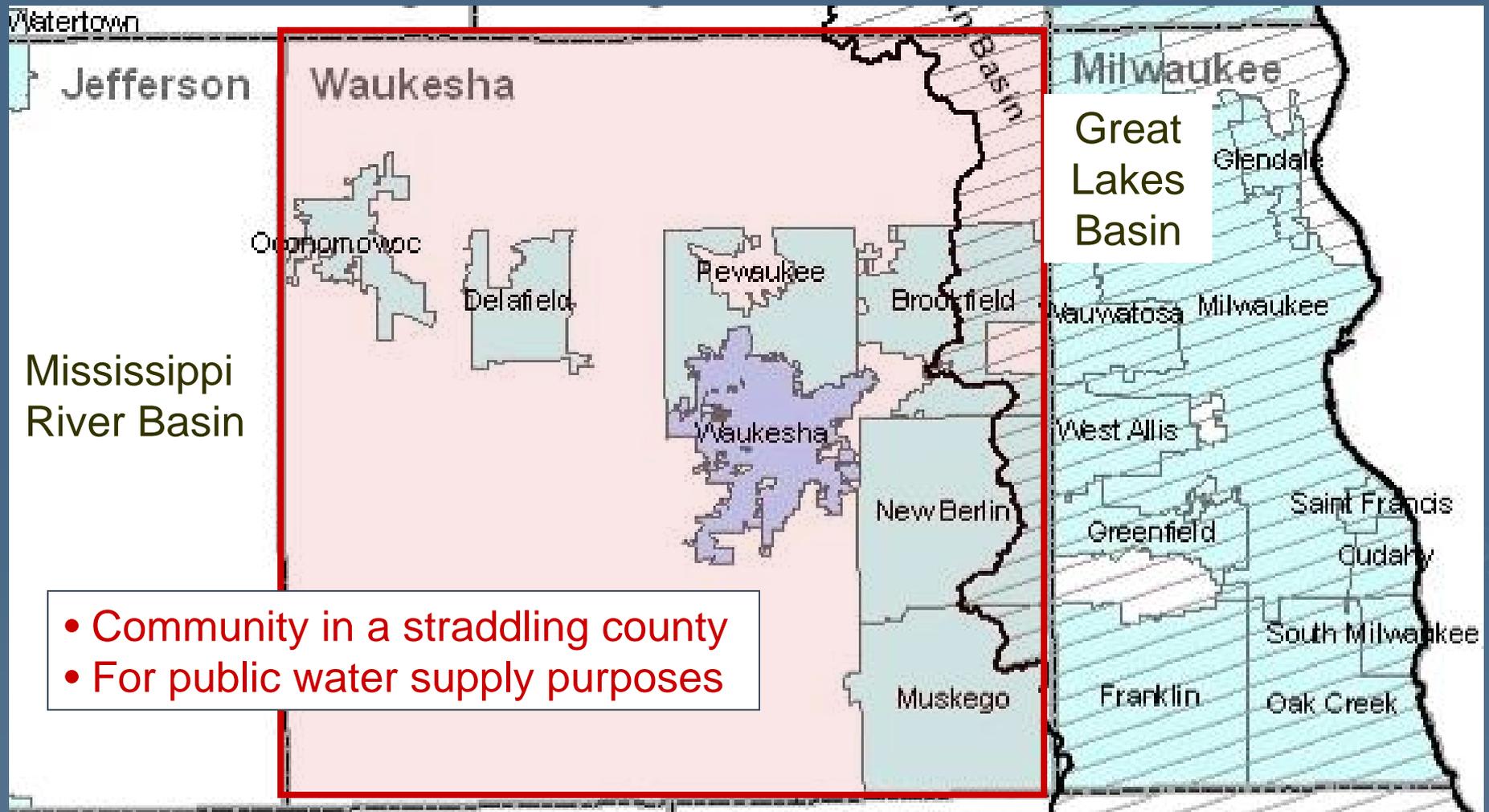
Racine Water Supply

City of Racine

What does the DNR need to decide:

- Does the application meet the Great Lakes Compact diversion criteria?

City of Waukesha is eligible to apply for a Great Lakes diversion.



Water Supply Criteria

- Used solely for public water supply purposes
- The community is without adequate supplies of potable water.
- No reasonable water supply alternative, including conservation of existing water supplies.
- Diversion limited to quantities that are reasonable

City of Waukesha Water Supply Plan

- Current supply deep and shallow aquifers
- Delineate water supply service area
- 6 alternatives evaluated
 - Lake Michigan
 - Deep and shallow aquifers
 - Shallow aquifer and Fox River alluvium (River Bank Inducement)
 - Lake Michigan and shallow aquifer
 - Unconfined deep aquifer (western Waukesha County)
 - Multiple source alternatives
- Capital costs for alternatives (\$164 million to \$319 million)
- Assessment of environmental impacts
 - Aquifer impacts
 - Surface water impacts (rivers, streams and wetlands)

Water Conservation Criteria

- The need for water cannot be avoided through water conservation
- Will implement water conservation measures that are environmentally sound and economically feasible

Wisconsin Water Conservation Law (NR 852)

- Develop water conservation plan
- Identify and analyze environmentally sound and economically feasible water conservation and efficiency measures
- Implement cost effective Water Conservation and Efficiency Measures (CEMs)
- Demonstrate efficient use of existing water supplies.

City of Waukesha Water Conservation Plan

➤ Goals

- 10% reduction over 2009 water use
- Maintain average of 45 gallons/person/day residential water use
- Implement and update plan on a 5-year cycle

➤ Implementation of measures such as:

- Lawn watering ordinance
- Information and Education
- Rebate Program
- Conservation rates

Wastewater Return Flow Criteria

- Maximizes water withdrawn from the Great Lakes basin that will be returned and minimizes water from outside the Great Lakes basin.
- Diverted water will be returned to the Great Lakes Basin
- Water is returned to Great Lakes Basin as close as practicable to the place at which the water is withdrawn, unless one of the following:
 - Not economically feasible.
 - Not environmentally sound.
 - Not in the interest of public health.

Wastewater Return Criteria (continued)

- Prevent introduction of invasive species
- Water returned to the Great Lakes via a tributary must
 - maintain the physical, chemical, and biological integrity of the receiving water
 - consider the state of the receiving water before the proposal is implemented
 - consider both low and high flow conditions
 - consider potential adverse impacts due to changes in temperature and nutrient loadings.

City of Waukesha Wastewater Return

- Current discharge to Fox River
- Potential return locations:
 - Underwood Creek
 - Direct to Lake Michigan
 - Root River
- Application preferred alternative – Underwood Creek in Brookfield
 - Return 100% volume water withdrawn to Lake Michigan Basin
 - Wastewater in excess discharge to Fox River
 - In high flow conditions all wastewater to Fox River temporarily

Additional Criteria

- No significant adverse impact to the Great Lakes basin
- Must be in compliance with all applicable local, state, and federal laws and interstate and international agreements

Environmental Impact Statement

What is an EIS?

- Environmental impact analysis of proposal and alternatives to inform the public and the DNR decision.

What is included?

- Scope – The list of topics to be addressed

Public participation

- Public comment periods on the scope, draft and final EIS

EIS - Topic Examples

- Description of project & alternatives
- Potential effects on:
 - Surface water & groundwater resources, air quality
 - Ecosystem: Plants and animals, wetlands
 - Socioeconomic: Population, economy, land use, transportation
- Types of Effects (long vs. short term, cumulative, reversibility)

Detailed topic list is available for comments.

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Public Comments

- Accepted until August 13, 2011
- Comments requested on:
 - Scope of Environmental Impact Statement
 - Interpretation of review criteria
 - Other
- Comments accepted:
 - Orally at public hearing
 - Written submitted at hearing
 - U.S postal service
 - Email: DNRWaukeshaDiversionApp@wisconsin.gov

A scenic sunset over a frozen body of water, likely a lake or river. The sun is low on the horizon, casting a warm, golden glow across the sky and reflecting on the ice. The water is partially frozen, with numerous ice floes of various sizes scattered across the surface. The background shows a dark silhouette of a forest line under the bright sky.

Questions?

DNR – Water Use Program
Drinking and Groundwater Bureau
<http://dnr.wi.gov/org/water/dwg/wateruse.html>