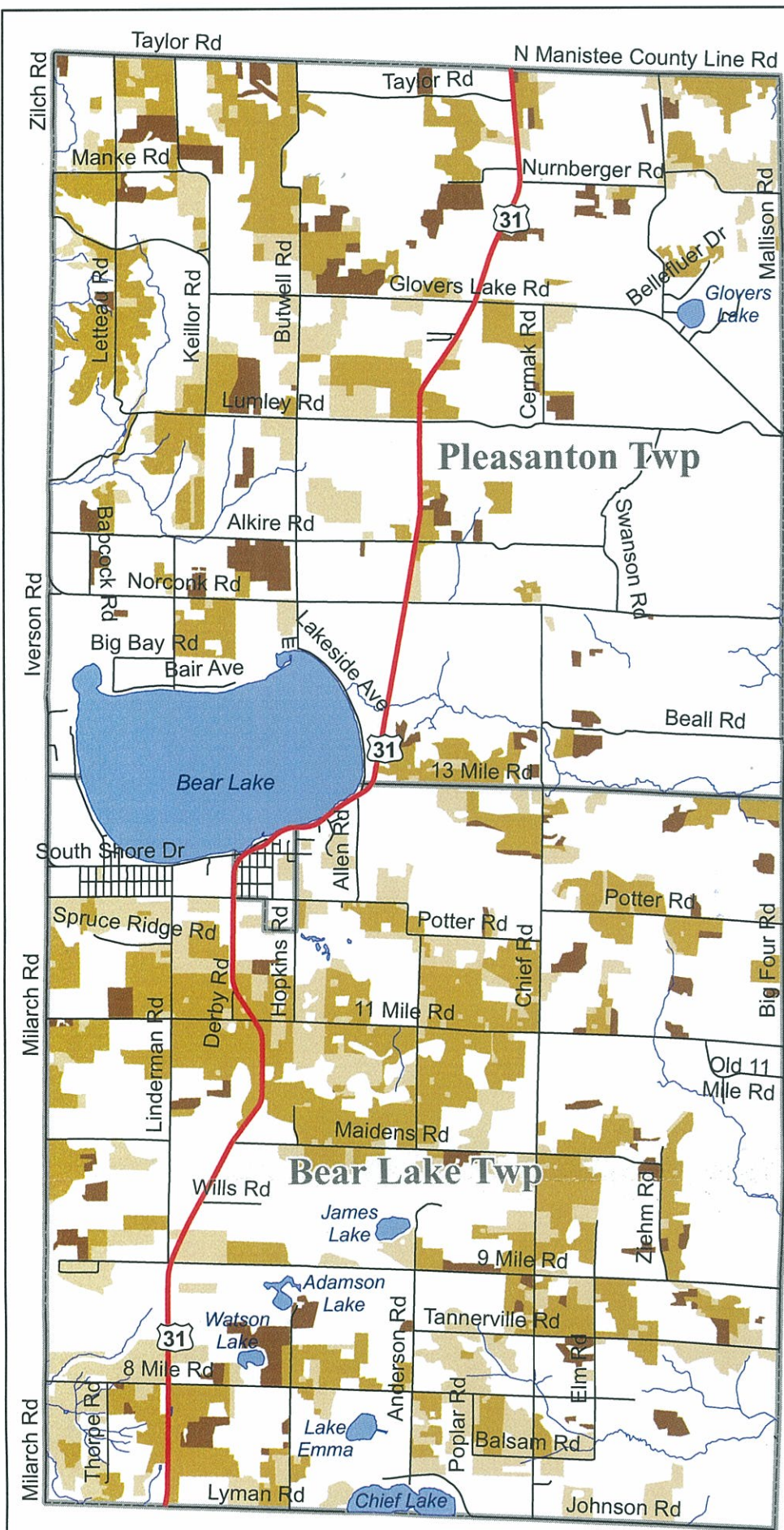




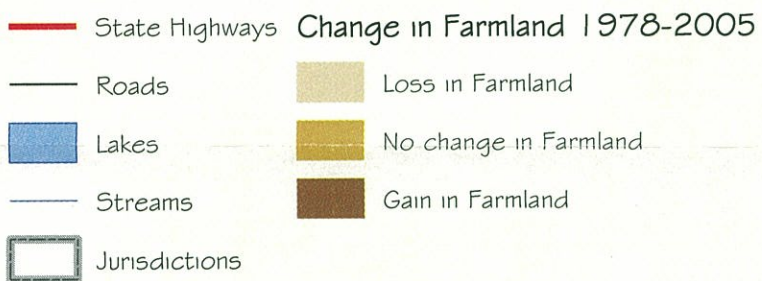
Maps



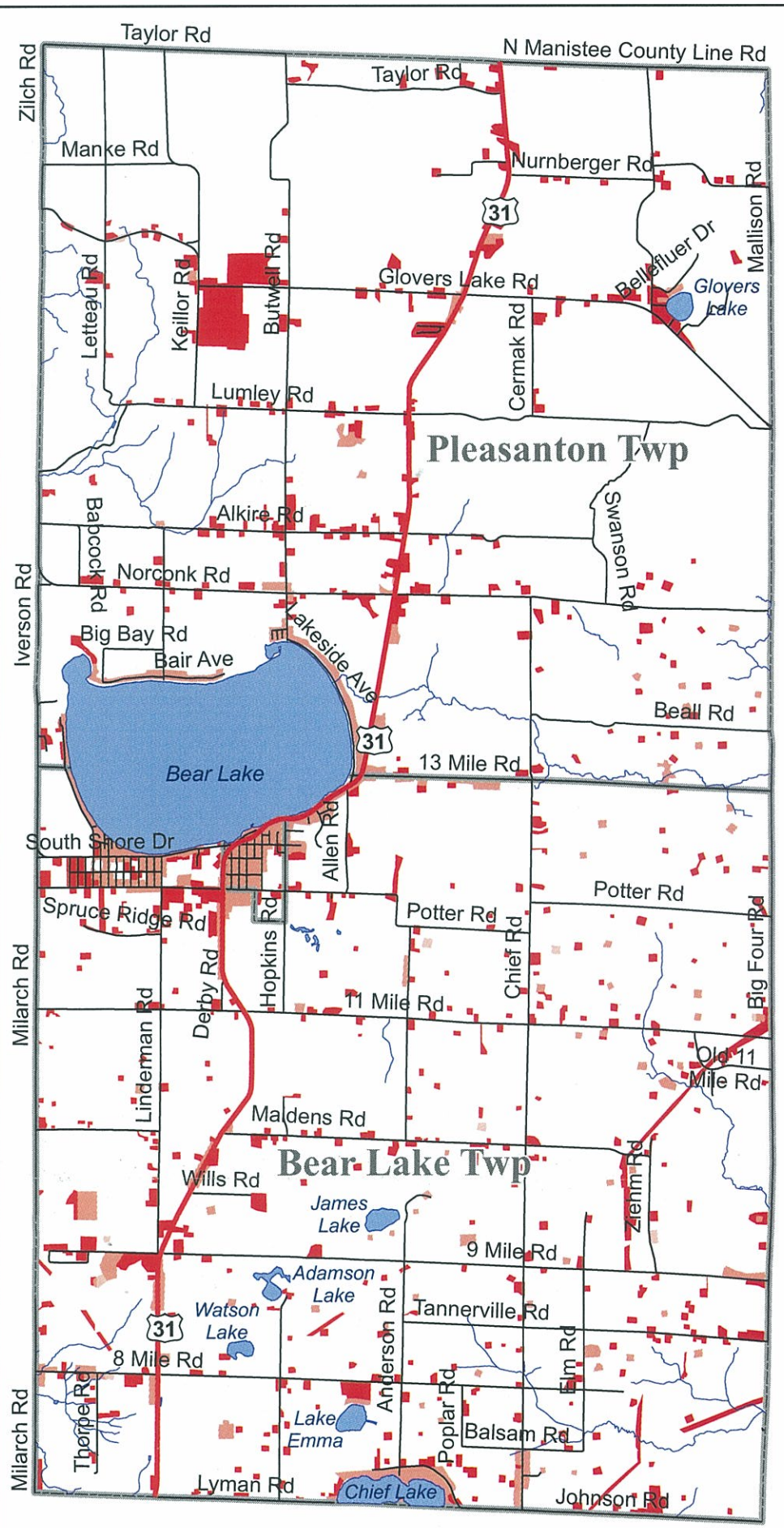
Bear Lake Community

Map 15

Pattern of Land Use Changes:
1978-2005; Farmland



Source: Manistee County Planning & LIAA
Michigan Center for Geographic Information,
Department of Information Technology



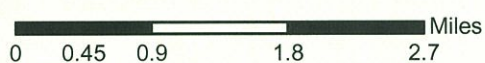
Bear Lake Community

Map 15a

Pattern of Land Use Changes:
1978-2005; Urban Lands



Source: Manistee County Planning & LIAA
Michigan Center for Geographic Information,
Department of Information Technology

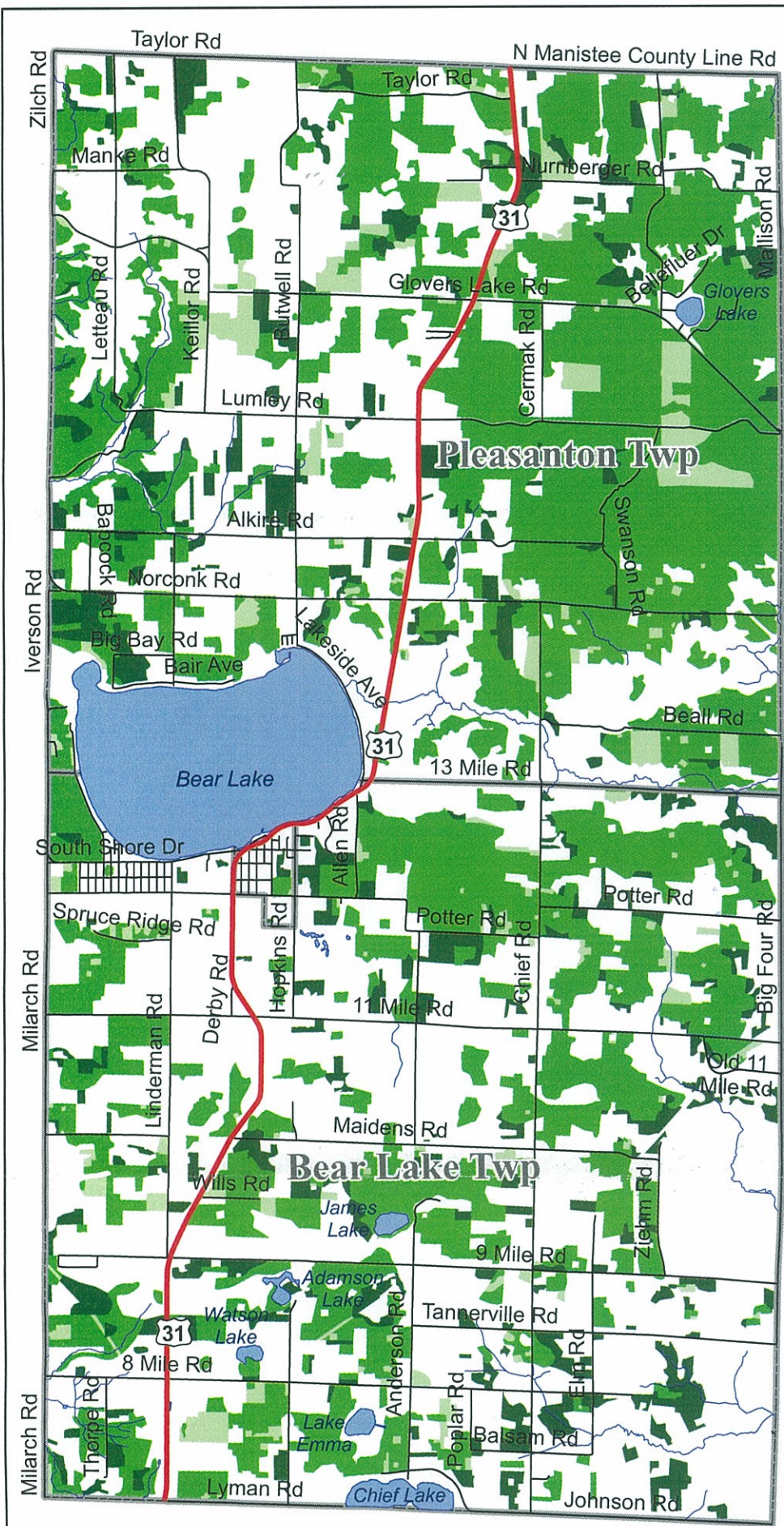


Map Prepared June 2007 by:



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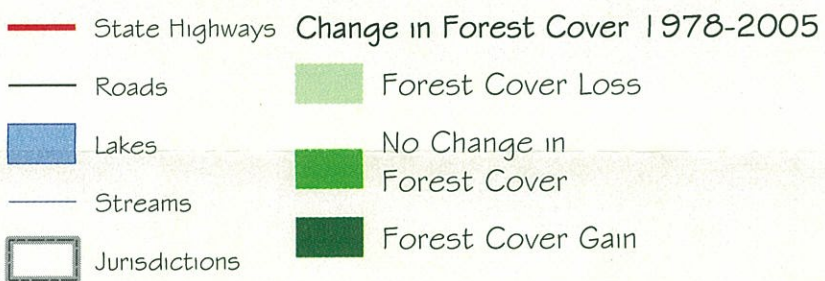
**PARTNERSHIPS
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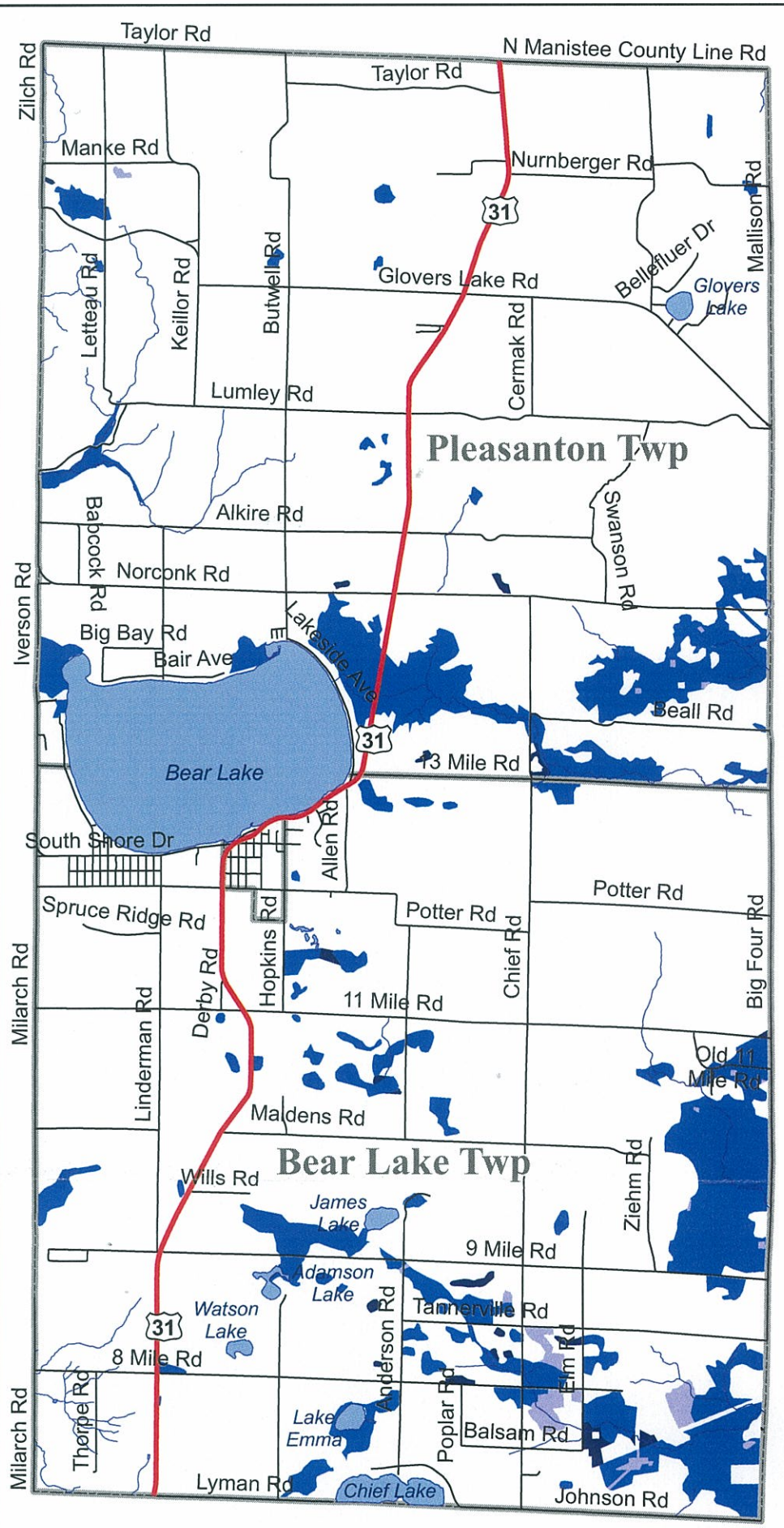
Bear Lake Community

Map 16

Pattern of Land Use Changes:
1978-2005; Forest Lands



Source: Manistee County Planning & LIAA
Michigan Center for Geographic Information,
Department of Information Technology



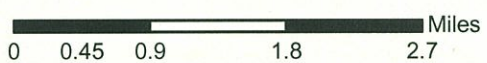
Bear Lake Community

Map 16a

Pattern of Land Use Changes:
1978-2005; Wetlands



Source: Manistee County Planning & LIAA
Michigan Center for Geographic Information,
Department of Information Technology

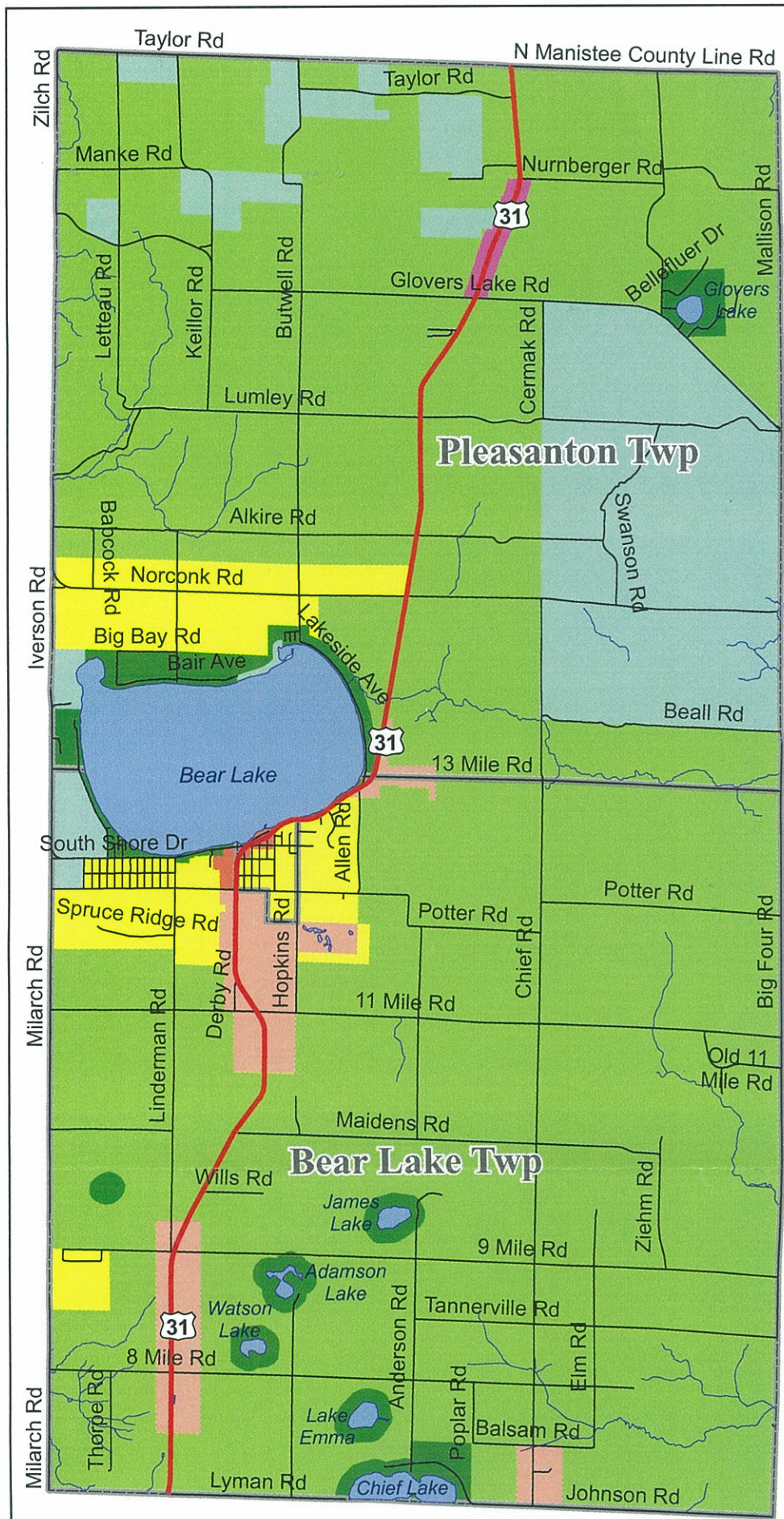


Map Prepared June 2007 by:



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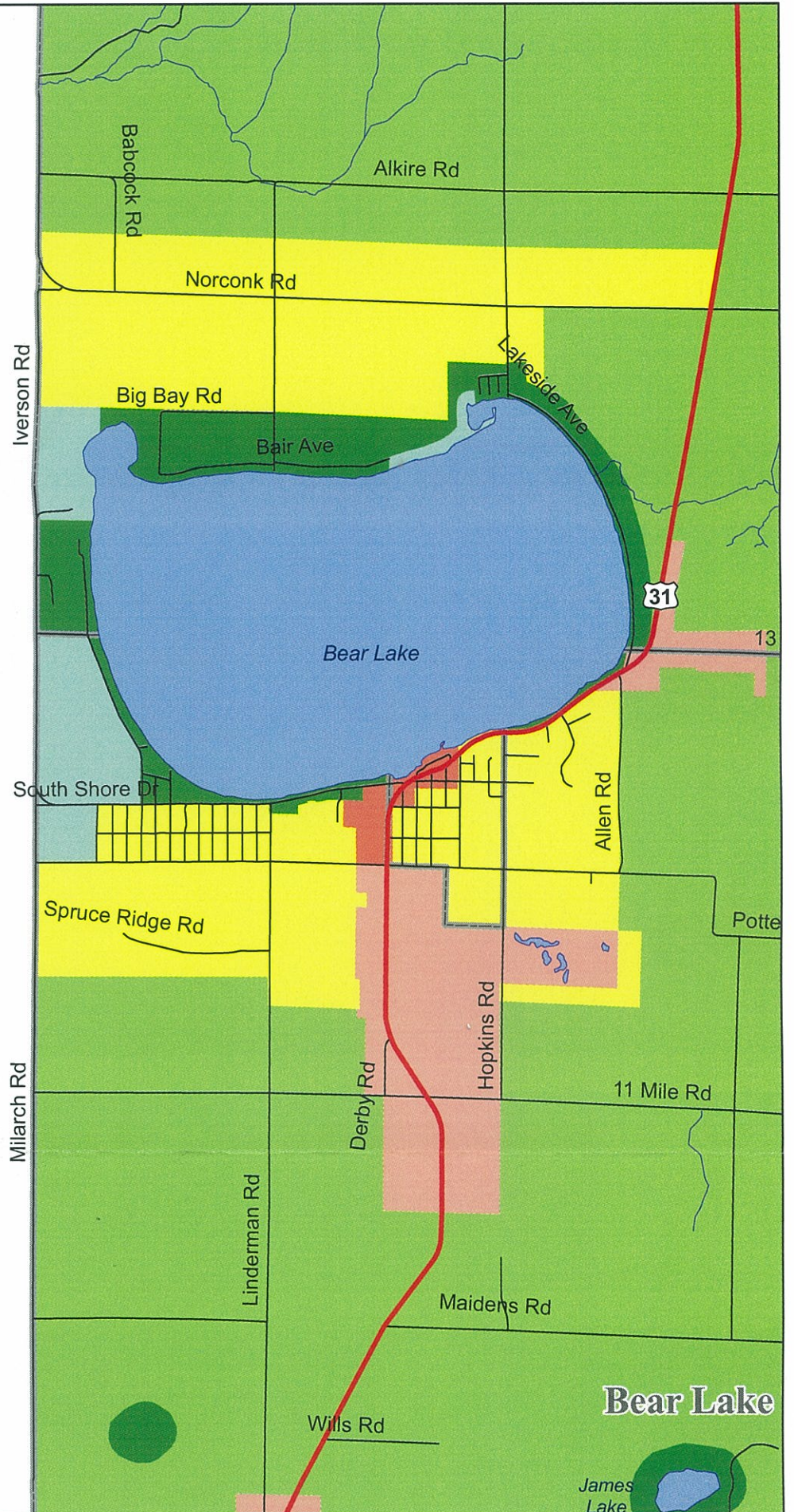


Bear Lake Community
Future Land Use

Map 17

- | | |
|------------------|---|
| — State Highways | Mixed Use - Commercial |
| — Roads | Industrial |
| — Lakes | Rural Residential - Agriculture/Open Space |
| — Streams | Resort Residential |
| — Jurisdictions | Medium to High Density Residential |
| | Mixed Use Commercial / Residential - Downtown |
| | Natural Resources and Open Space |

Source: Bear Lake Community Planning Commission
Michigan Center for Geographic Information,
Department of Information Technology



Bear Lake Community
Future Land Use

Map 17a

- | | |
|------------------|---|
| — State Highways | Mixed Use - Commercial |
| — Roads | Industrial |
| — Lakes | Rural Residential - Agriculture/Open Space |
| — Streams | Resort Residential |
| — Jurisdictions | Medium to High Density Residential |
| | Mixed Use Commercial / Residential - Downtown |
| | Natural Resources and Open Space |

Source: Bear Lake Community Planning Commission
Michigan Center for Geographic Information,
Department of Information Technology



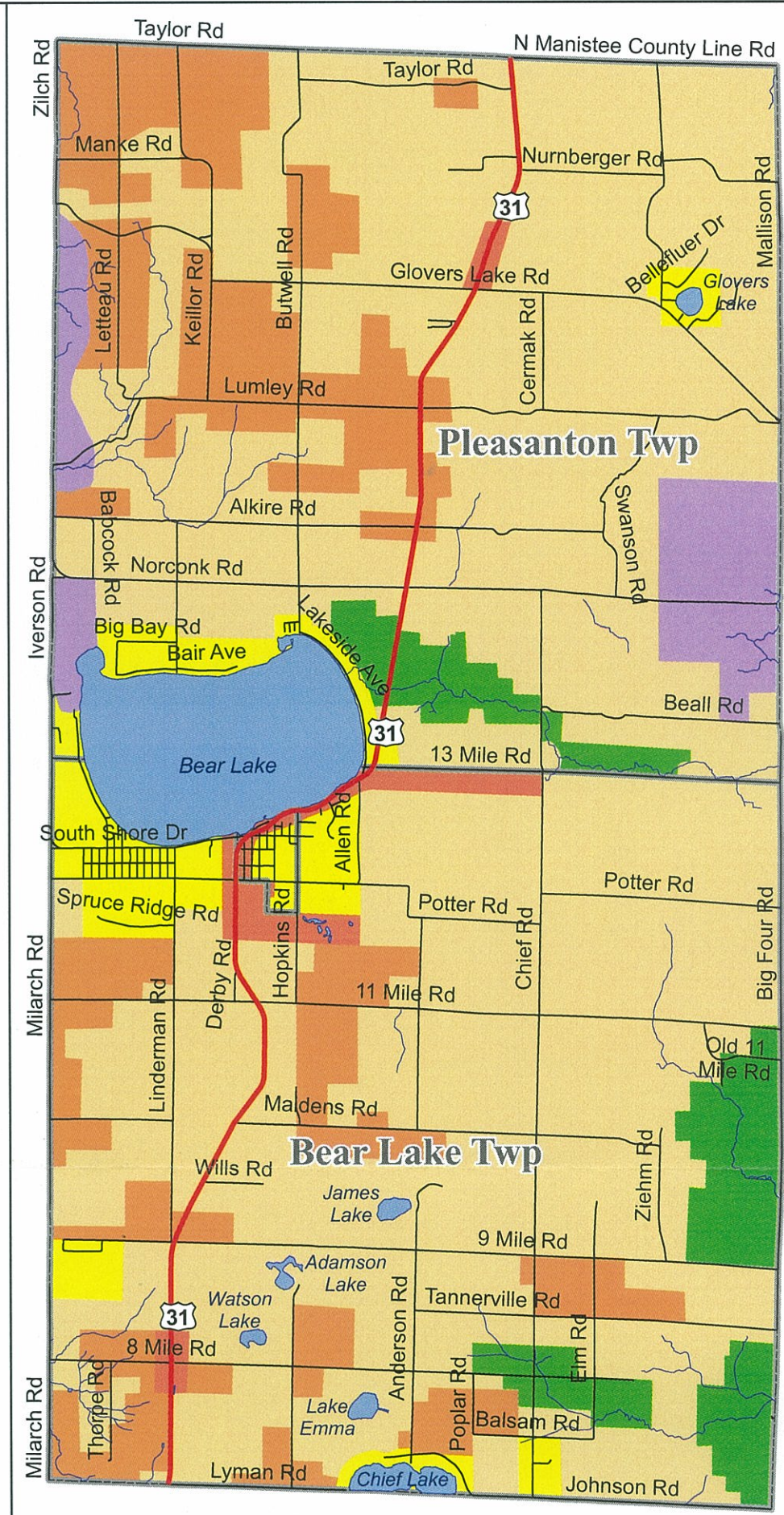
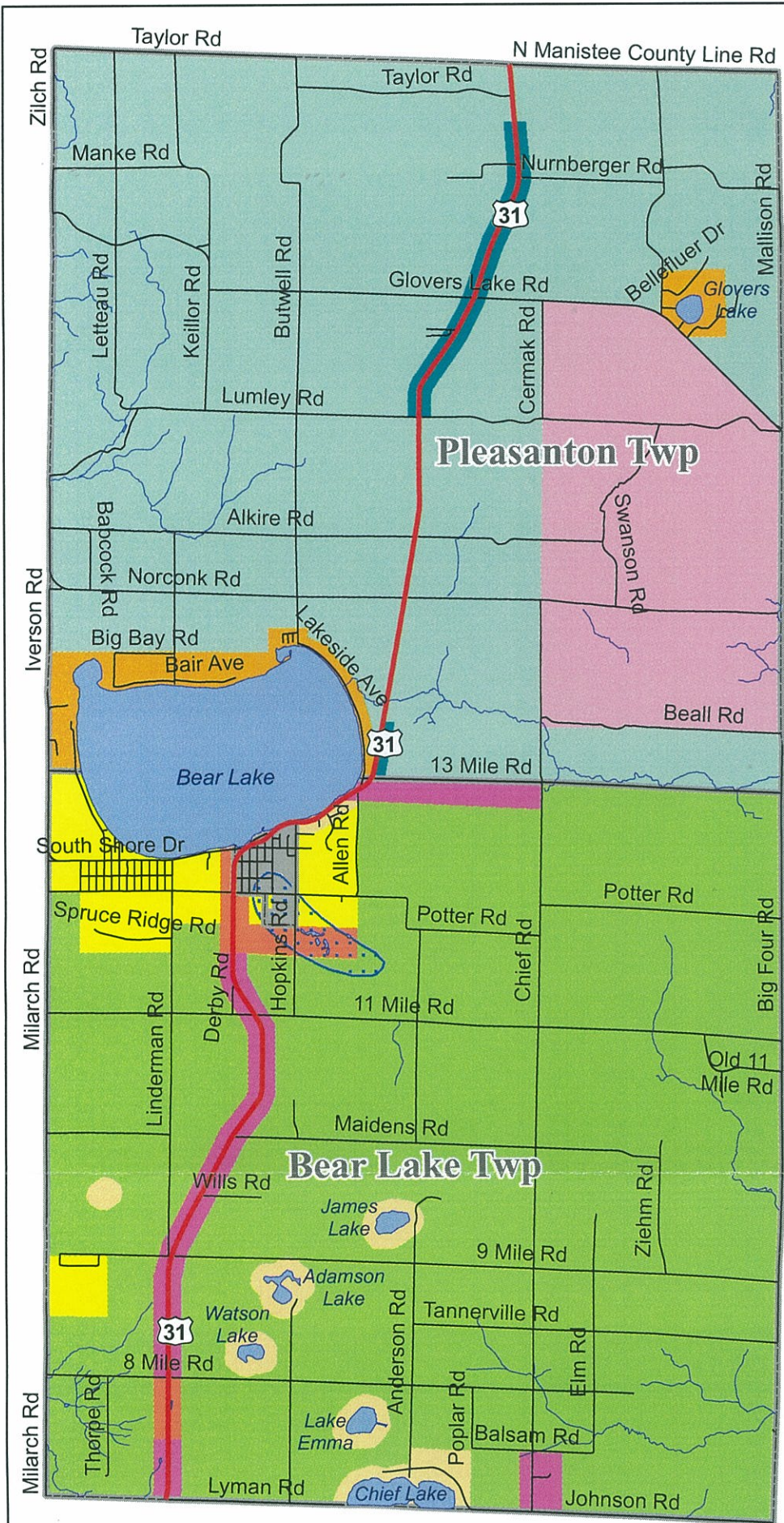
0 0.45 0.9 1.8 2.7 Miles

Map Prepared October 2007 by:



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Bear Lake Community

Map 1

Zoning

State Highways	Bear Lake Twp	Pleasanton Twp
Roads	Agricultural (A-1)	R-1
Lakes	Commercial (C-1)	RA-1
Streams	Multiple Use (M-1)	RA-2
Jurisdictions	Residential (R-1)	WR-1
Well Head Protection Area	Resort Residential (RR-1)	
	Village (VILL)	

Source: Manistee County Planning Department
Michigan Center for Geographic Information,
Department of Information Technology
Michigan Department of Environmental Quality

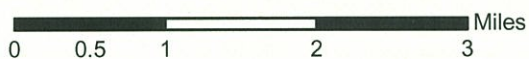
Bear Lake Community

Map 2

Future Land Use (Previous)

State Highways	Land Use Plan
Roads	Commercial
Lakes	Residential
Streams	Resource Development
Jurisdictions	Resource Limited
	Rural Residential
	Special and Unique

Source: Manistee Co. 1997, Land Use Plan Map
Michigan Center for Geographic Information,
Department of Information Technology

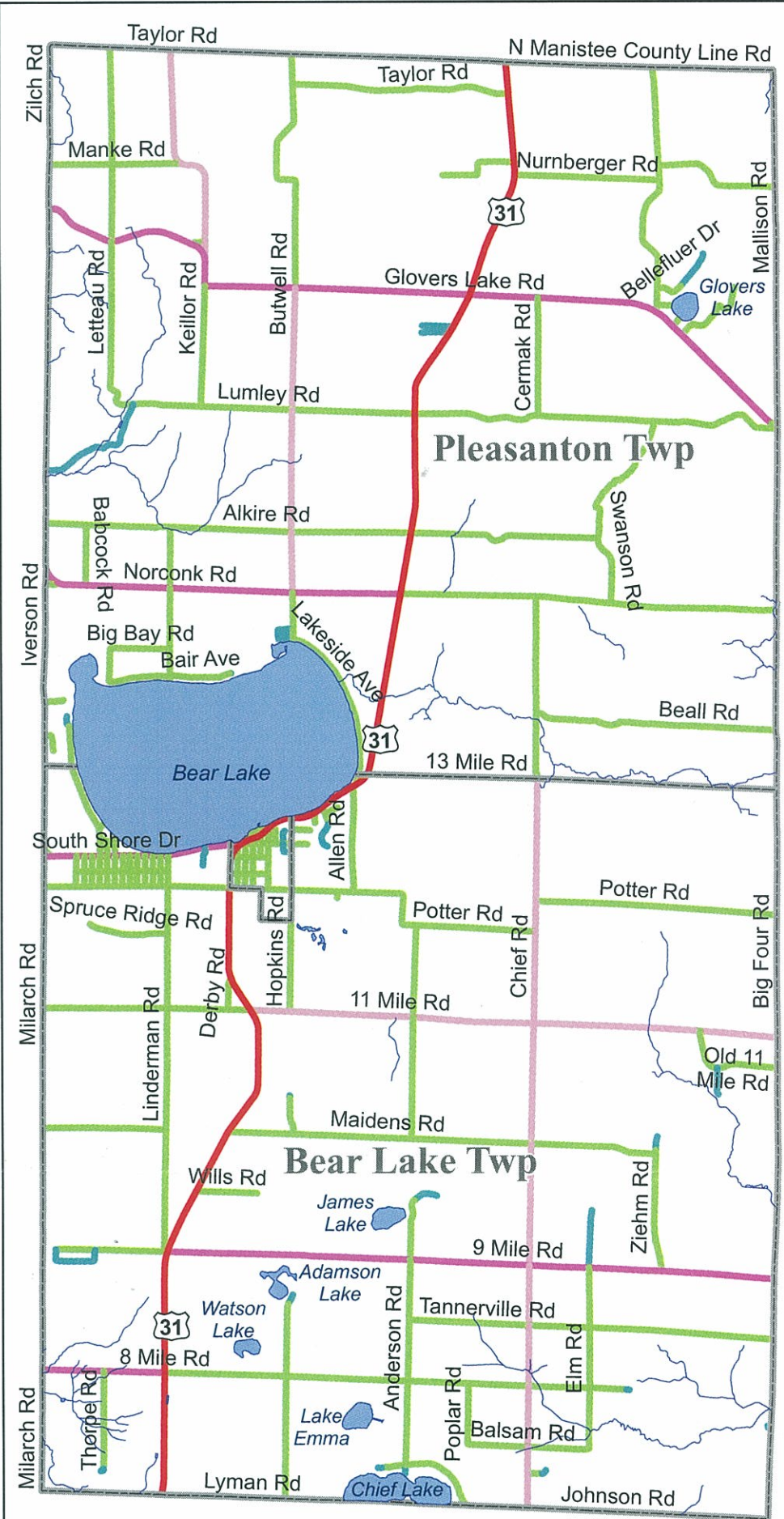
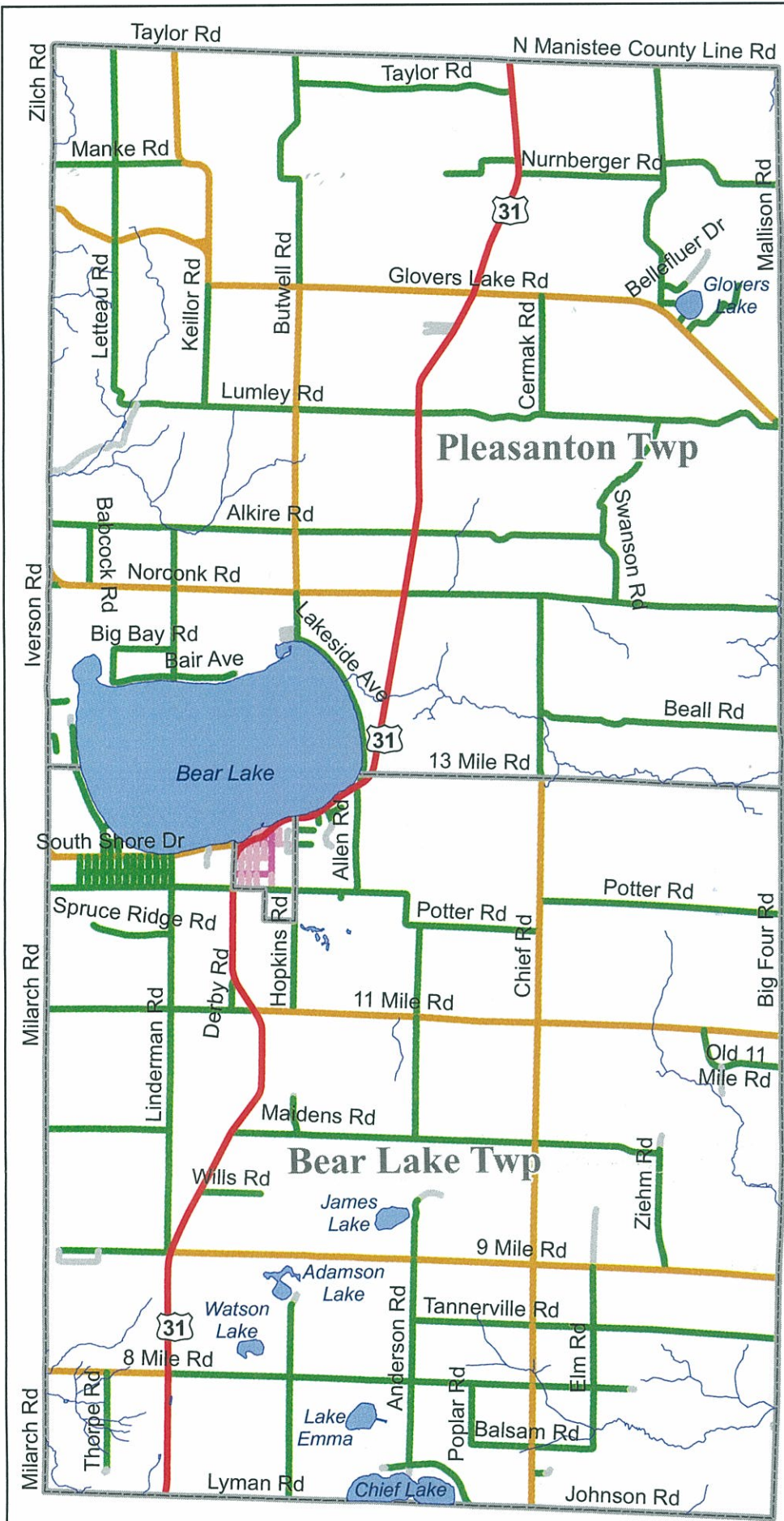


Map Prepared June 2007 by:



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Bear Lake Community
Act-51 Road Classifications

Map 3

- | | |
|---------------|------------------------|
| Lakes | Road Categories |
| Streams | State Trunkline |
| Jurisdictions | County Primary |
| | County Local |
| | City Major |
| | City Minor |
| | Unknown Classification |

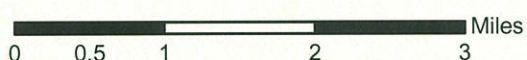
Source: Michigan Center for Geographic Information,
Department of Information Technology

Bear Lake Community
Transportation Functional Classification

Map 3a

- | | |
|---------------|-----------------------------|
| Lakes | Road Categories |
| Streams | Rural Other |
| Jurisdictions | Principal Arterial |
| | Rural Major Collector |
| | Rural Minor Collector |
| | Rural Local |
| | Not a Certified Public Road |

Source: Michigan Center for Geographic Information,
Department of Information Technology

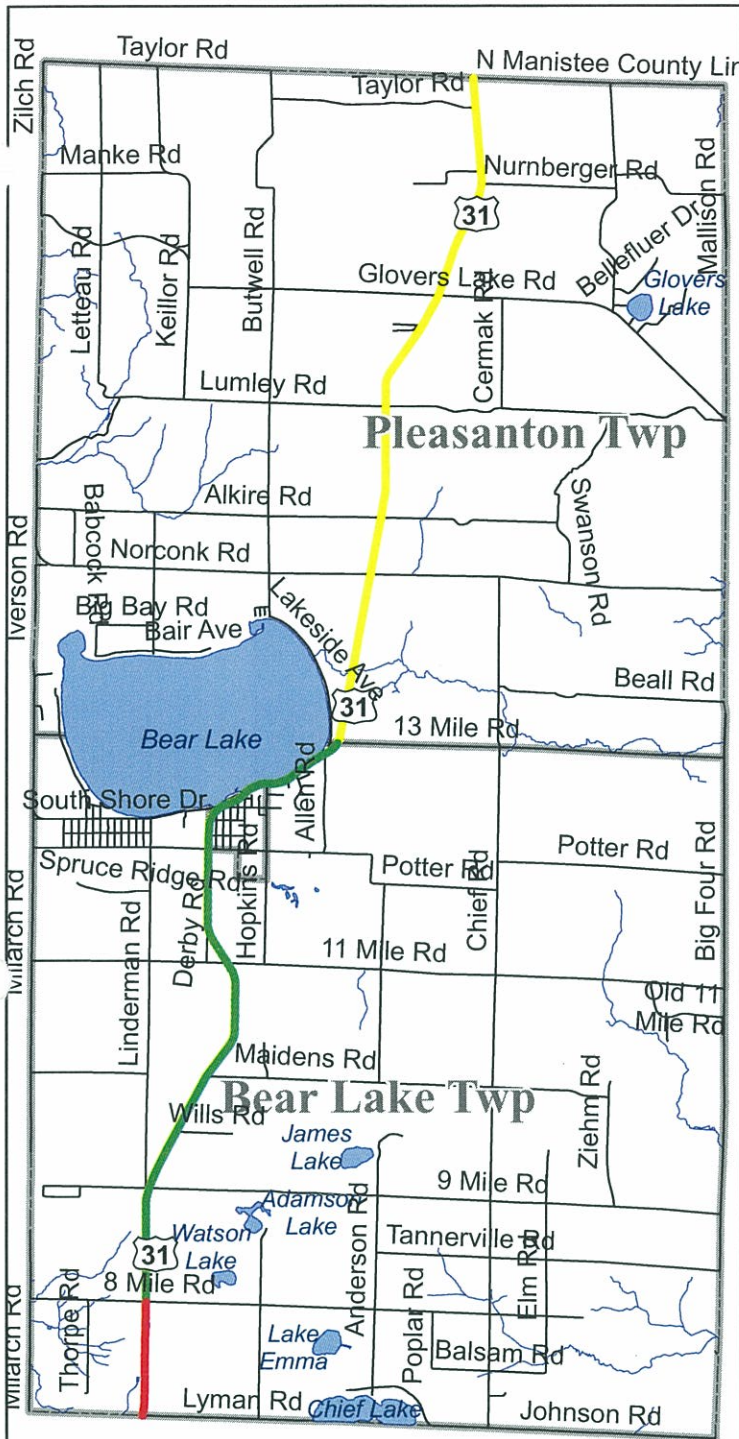


Map Prepared June 2007 by:



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Bear Lake Community Average Daily Traffic Volumes

Map 4

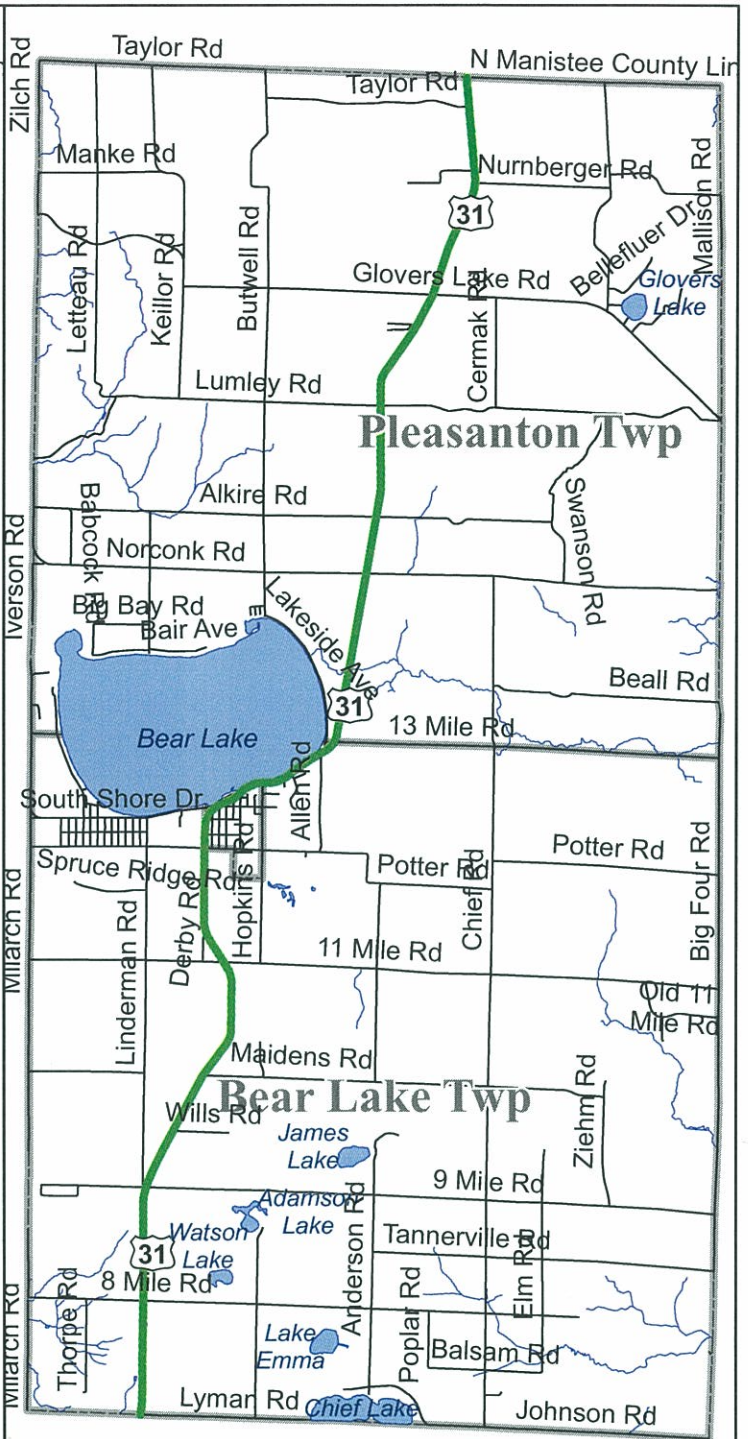
State Highways Vehicles per Day

Roads 4400

Lakes 4700

Streams 5300

Jurisdictions



Average Daily Commercial Traffic Volumes

Map 4a

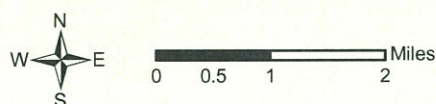
State Highways Vehicles per Day

Roads 380

Lakes

Streams

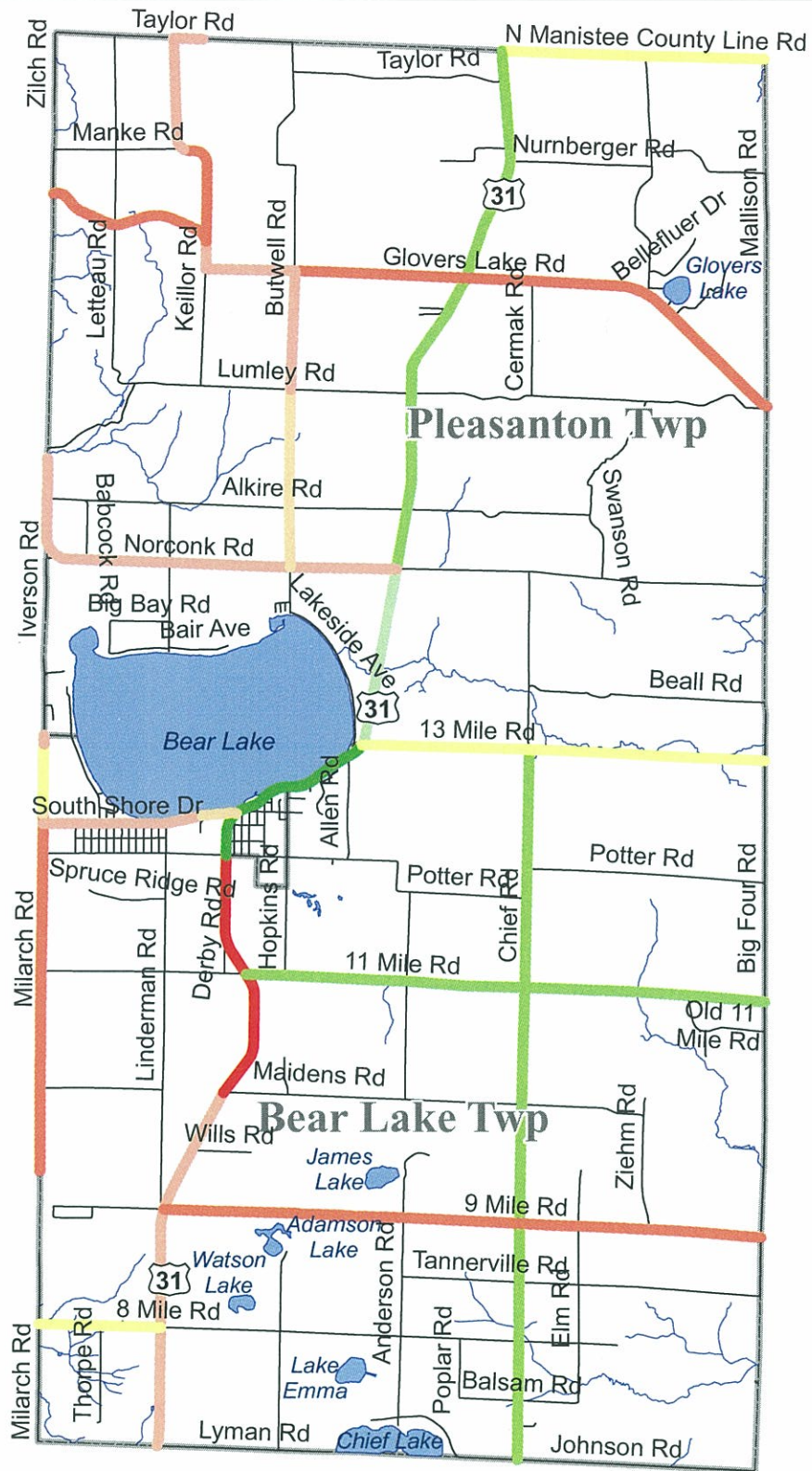
Jurisdictions



Map Prepared June 2007 by:

Source:

Michigan Center for Geographic Information,
Department of Information Technology
Michigan Department of Transportation



Bear Lake Community PASER - Roadway Rating System

Map 5

- | | | |
|----------------|---------------|---------------|
| State Highways | PASER Score | 6 - Good |
| Roads | 2 - Very Poor | 7 - Good |
| Lakes | 3 - Poor | 8 - Very Good |
| Streams | 4 - Fair | 9 - Excellent |
| Jurisdictions | 5 - Fair | |



Map Prepared June 2007 by:

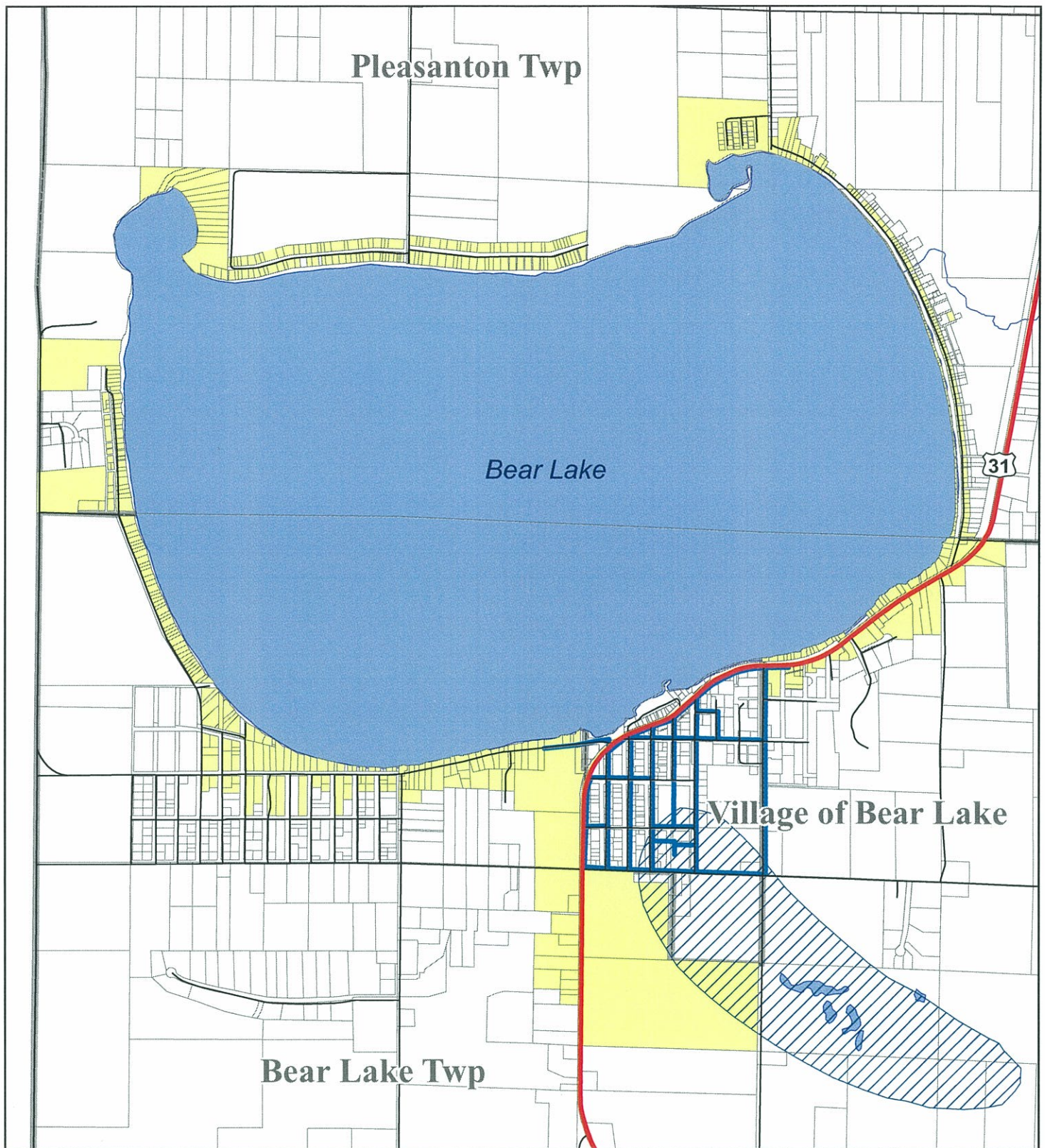


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**Partnerships
for Change**

0 0.5 1 2 Miles

Source:
Michigan Center for Geographic Information,
Department of Information Technology



Bear Lake Community **Map 6**
Proposed Sewer District, Existing Water Lines &
Community Wellhead Protection Area

- State Highways
- Proposed Sewer District
- Roads
- Lakes
- Existing Water Lines
- Streams
- ▨ Wellhead Protection Area
- ▭ Jurisdictions
- ▭ Property Lines



Map Prepared June 2007 by:

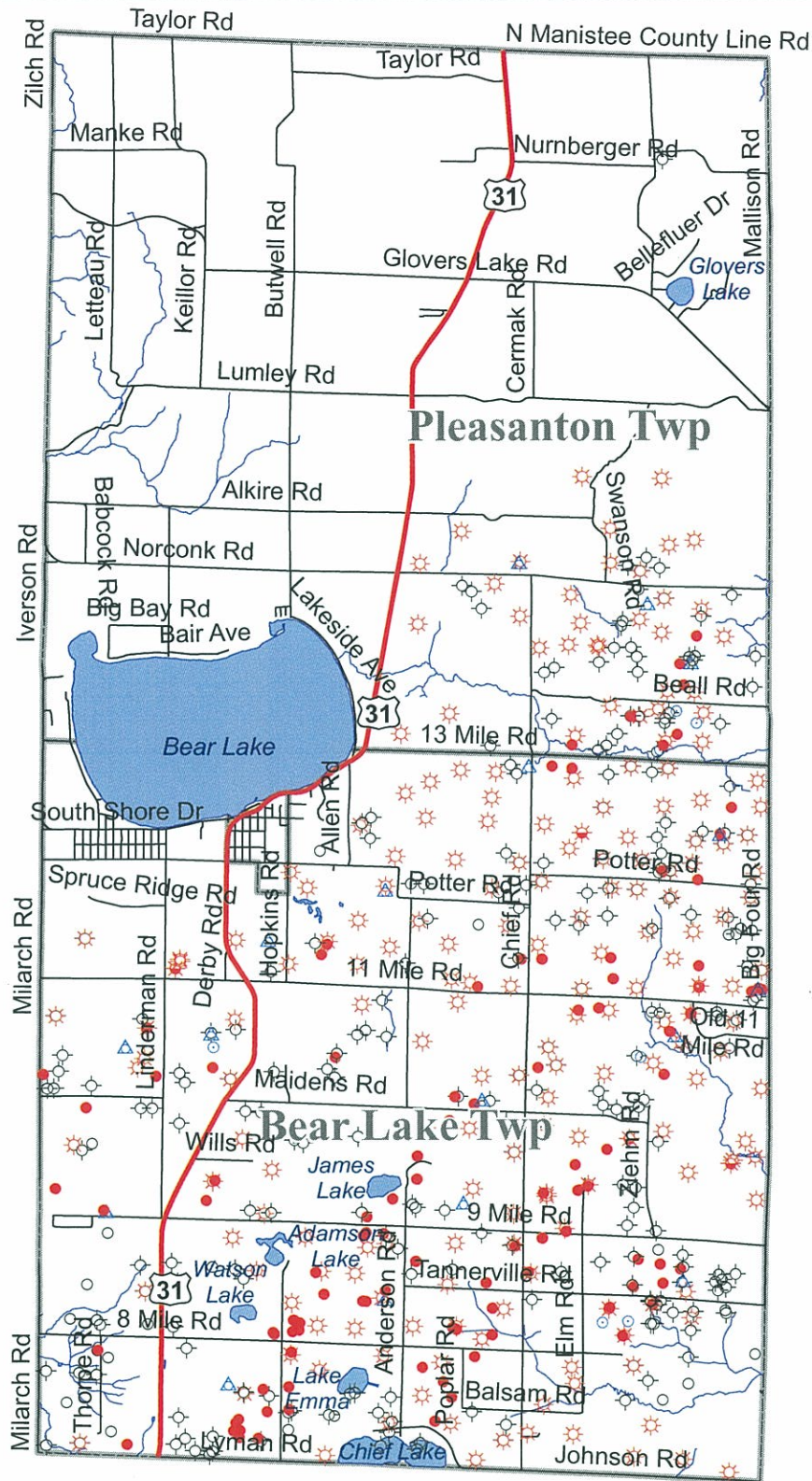


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CHANGE**

0 0.25 0.5 1 Miles

Source: Michigan Center for Geographic Information,
 Department of Information Technology



Bear Lake Community Oil and Natural Gas Wells

Map 7

Map Prepared June 2007 by:



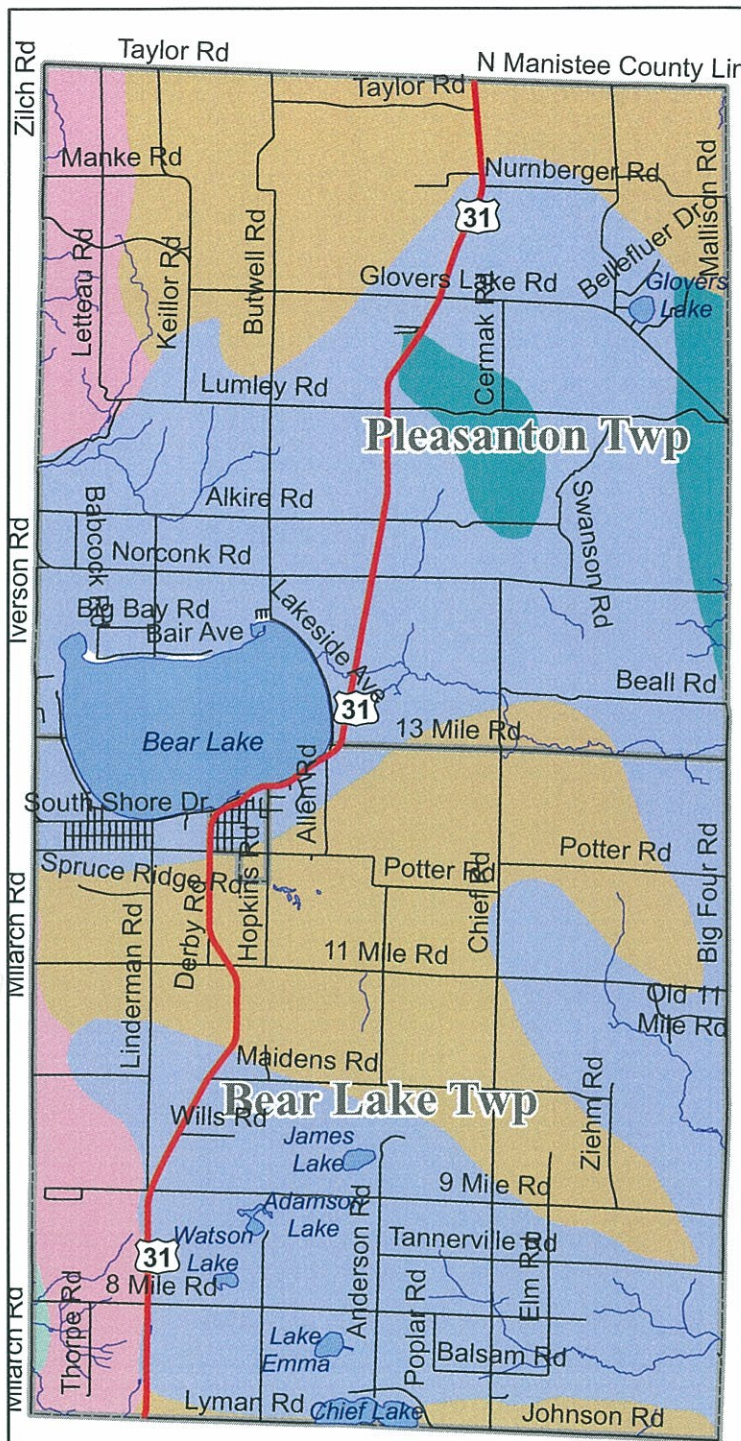
Land Information
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**Partnerships
CHANGE**

0 0.5 1 2 Miles

- | | | |
|------------------|------------------|---------------------------|
| — State Highways | Type of Well | △ Brine Disposal |
| — Roads | ● Oil | ⊕ Dry Hole |
| ■ Lakes | ☀ Natural Gas | ⊙ Water Injection |
| — Streams | ☀ Gas Condensate | ○ Permitted Well Location |
| □ Jurisdictions | | |

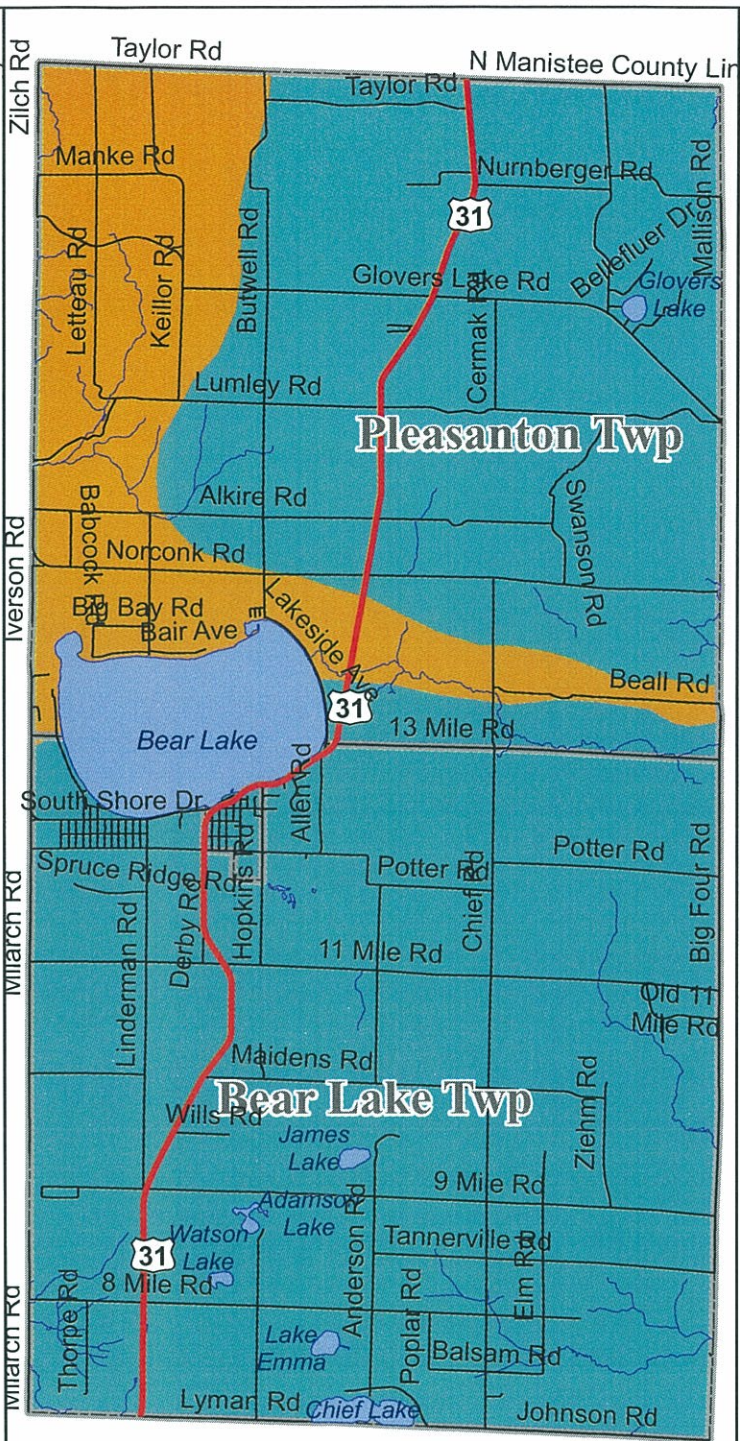
Source:
Michigan Center for Geographic Information,
Department of Information Technology



Bear Lake Community Surface Geology

Map 8

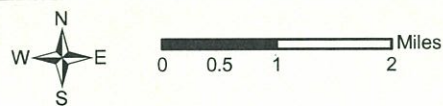
- State Highways
- Roads
- Lakes
- Streams
- Jurisdictions
- Coarse-textured glacial till
- End moraines of medium-textured till
- Glacial outwash sand and gravel and postglacial alluvium
- Lacustrine sand and gravel
- Medium-textured glacial till



Bear Lake Community Bedrock Geology

Map 8a

- State Highways
- Roads
- Lakes
- Streams
- Jurisdictions
- Antrim Shale
- Ellsworth Shale

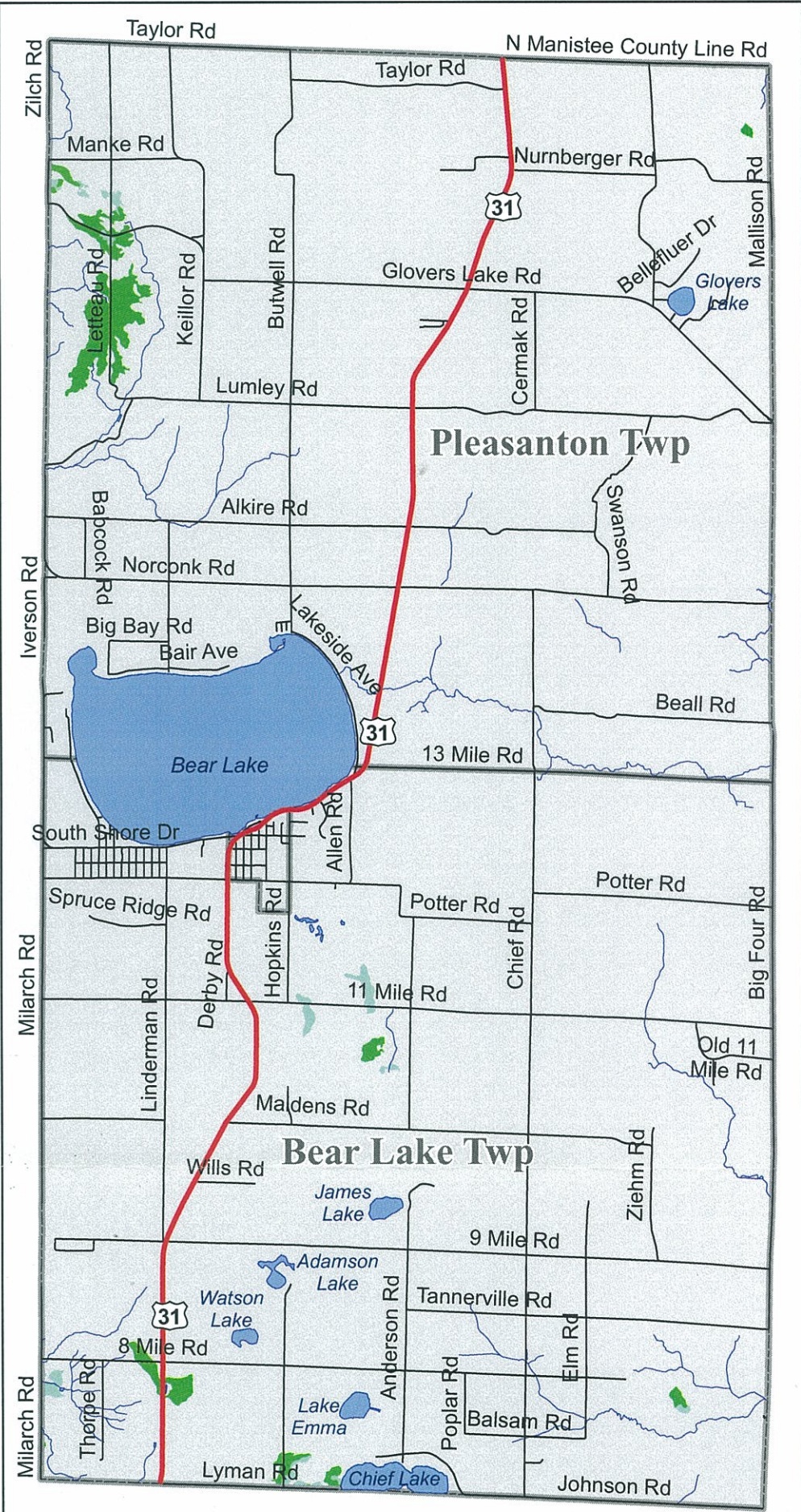
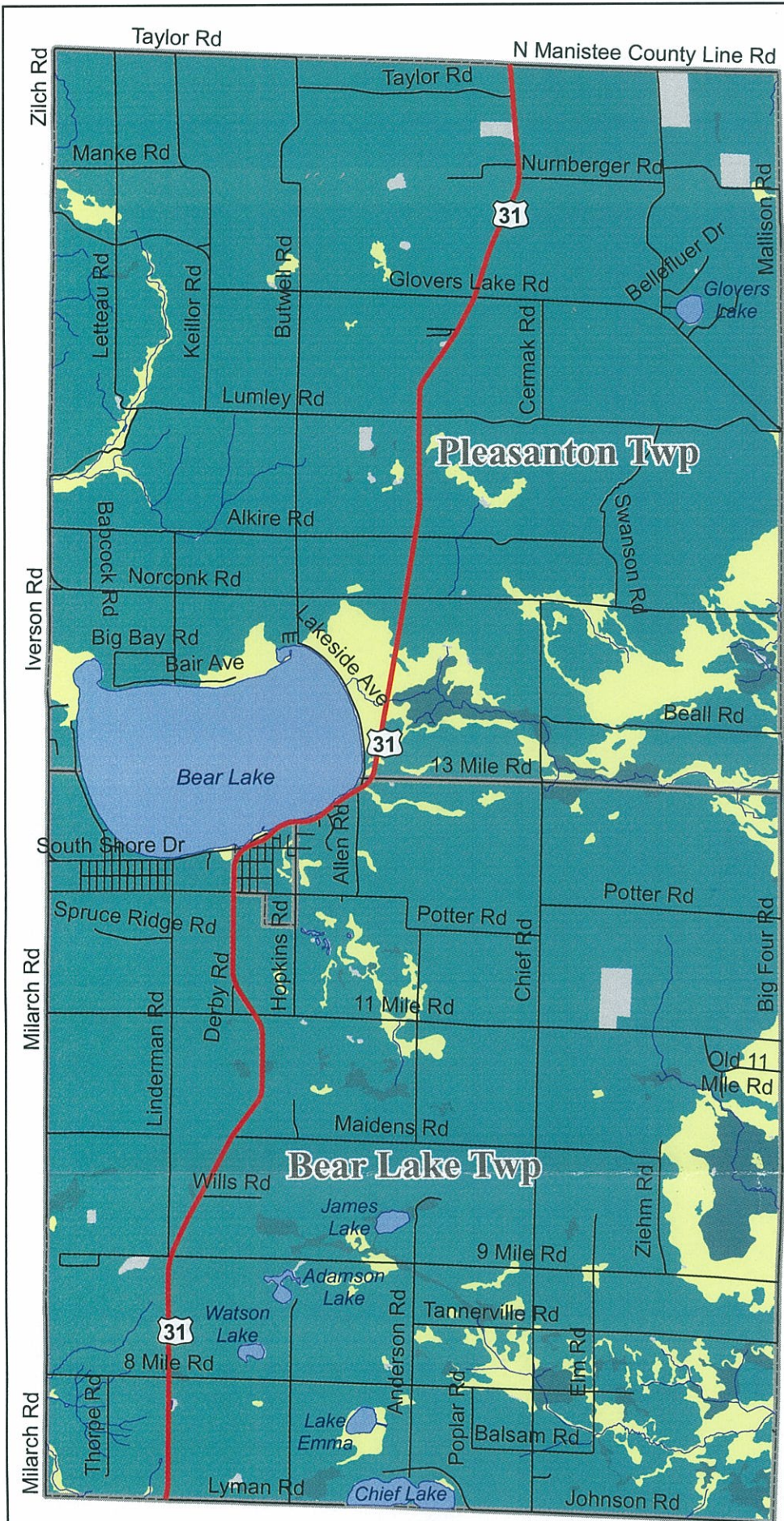


Map Prepared June 2007 by:



Source:

Michigan Center for Geographic Information,
Department of Information Technology



Bear Lake Community

Map 9

Hydric Soils

- | | |
|------------------|--------------------------|
| — State Highways | Hydric Categories |
| — Roads | ■ All hydric |
| ■ Lakes | ■ Not hydric |
| — Streams | ■ Partially hydric |
| □ Jurisdictions | ■ Unknown |

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service

Bear Lake Community

Map 9a

Prime Farmland (from soils)

- | | |
|------------------|-----------------------------|
| — State Highways | ■ Prime farmland areas |
| — Roads | ■ Prime farmland if drained |
| ■ Lakes | ■ Not prime farmland |
| — Streams | |
| □ Jurisdictions | |

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service

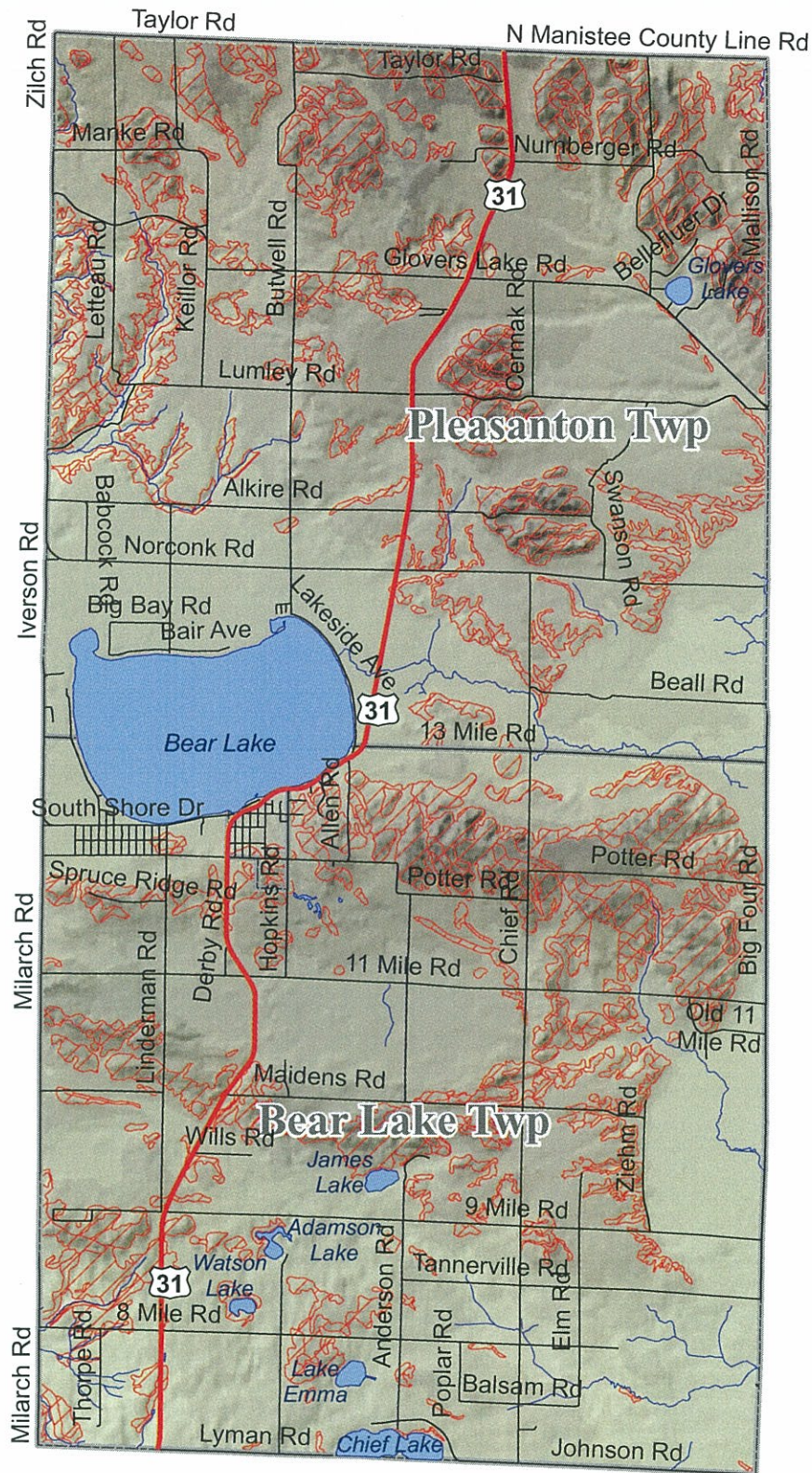


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Elevation and Slopes > 12%

— State Highways	Elevation (feet)
— Roads	605-752
— Lakes	753-813
— Streams	814-870
 Jurisdictions	871-936
/ Slope > 12%	937-1108

Map 10



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0 0.5 1 2 Miles

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service



Bear Lake Community

Map 11

Limitations for Dwellings with Basements (from soils)

— State Highways	Basement Limitation Categories
— Roads	 Very limited
— Lakes	 Somewhat limited
— Streams	 Not limited
 Jurisdictions	 Not rated

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service



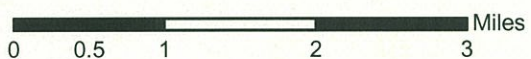
Bear Lake Community

Map 11a

Limitations for Small Commercial Buildings (from soils)

— State Highways	Limitation Categories
— Roads	 Very limited
— Lakes	 Somewhat limited
— Streams	 Not limited
 Jurisdictions	 Not rated

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service



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Bear Lake Community
Soil Associations (STATSGO)

Map 12

- State Highways
- Roads
- Lakes
- Streams
- Jurisdictions
- Leelanau-Kalkaska-Emmet
- Nester-Kawkawlin
- Rubicon-East Lake
- Tawas-Roscommon-Au Gres



0 0.5 1 2 Miles



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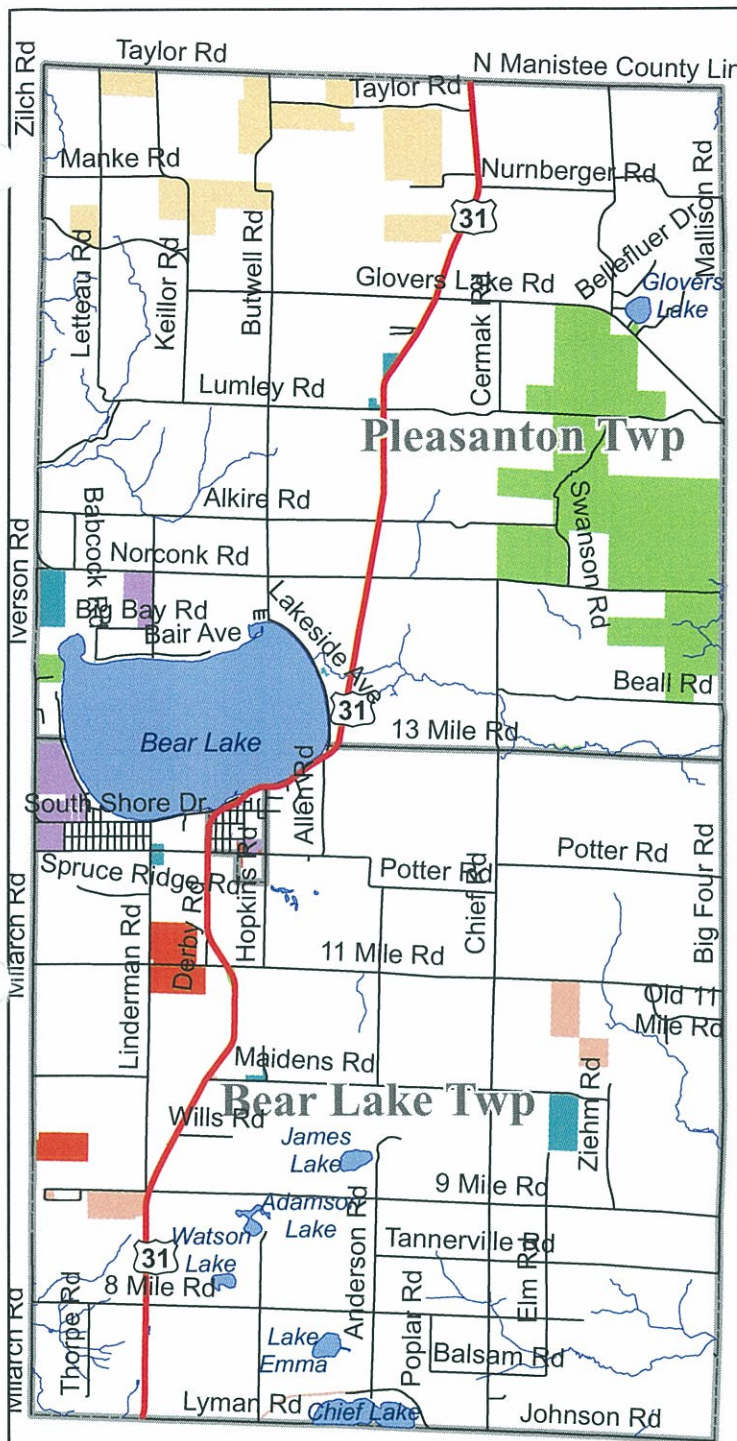


Bear Lake Community
Soil Permeability

Map 12a

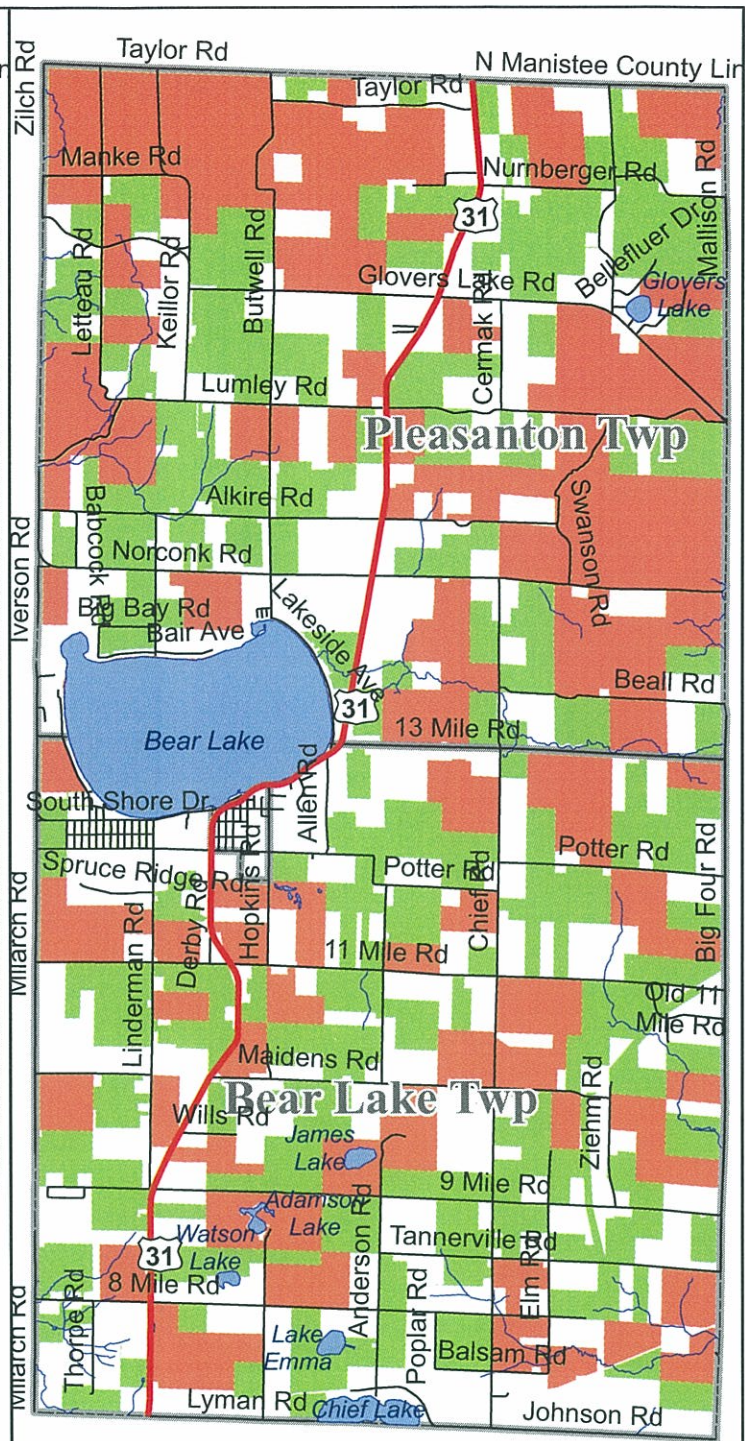
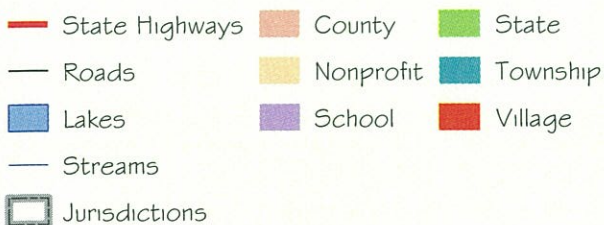
- State Highways
- Roads
- Lakes
- Streams
- Jurisdictions
- Permeability Rating
- Rapid
- Moderately Rapid
- Moderate
- Moderately Slow
- Slow
- Impermeable

Source: Michigan Center for Geographic Information,
Department of Information Technology
USDA Natural Resources Conservation Service



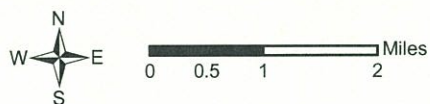
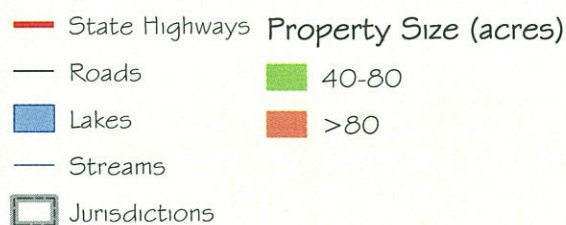
Bear Lake Community
Public Lands

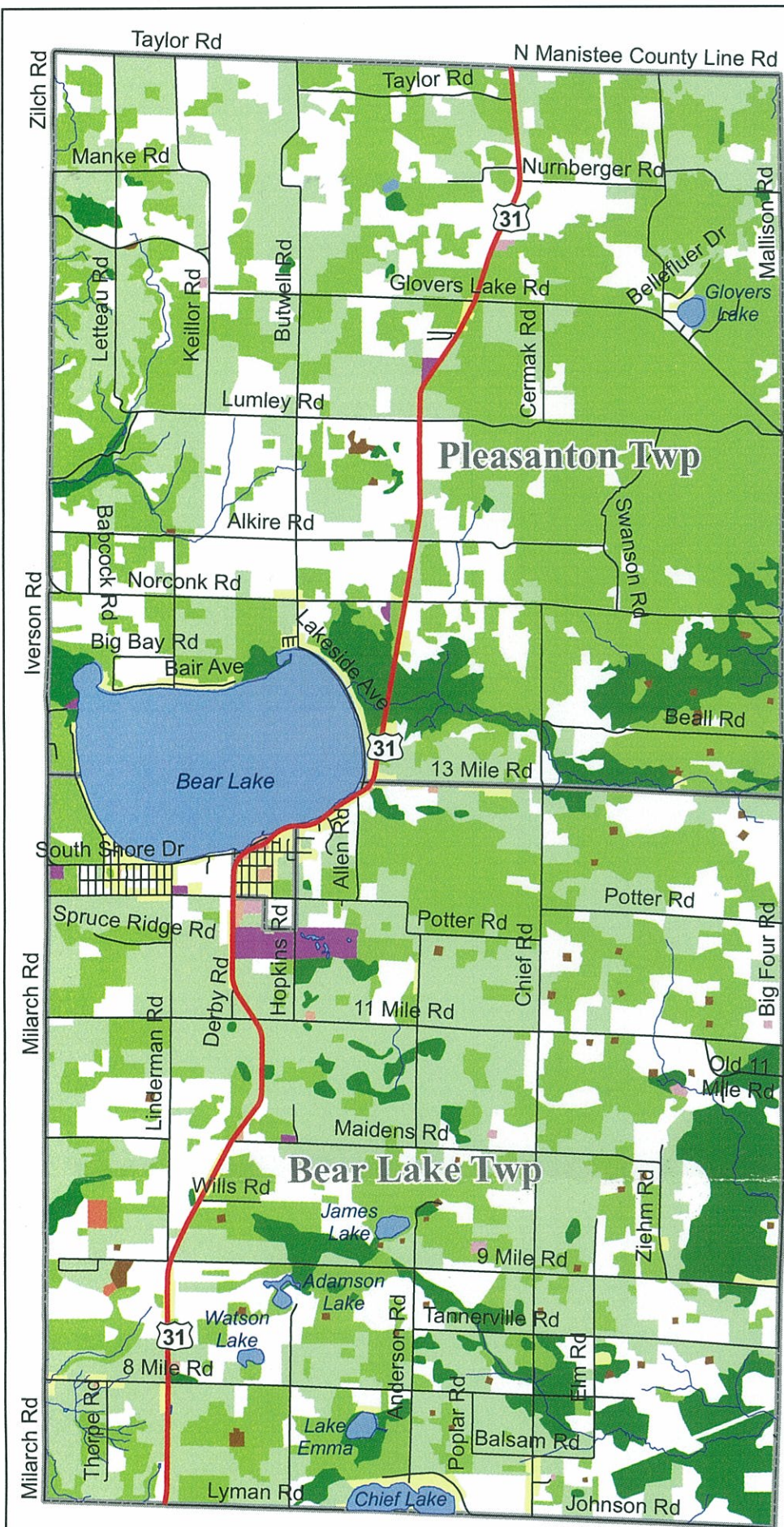
Map 13



Bear Lake Community
Large Lots

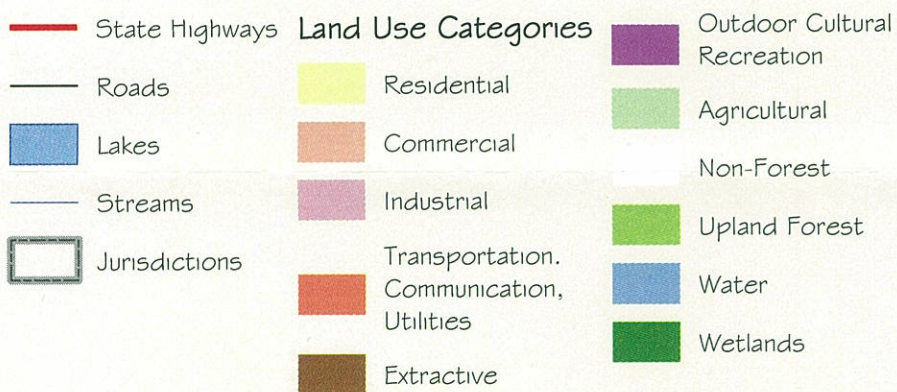
Map 13a





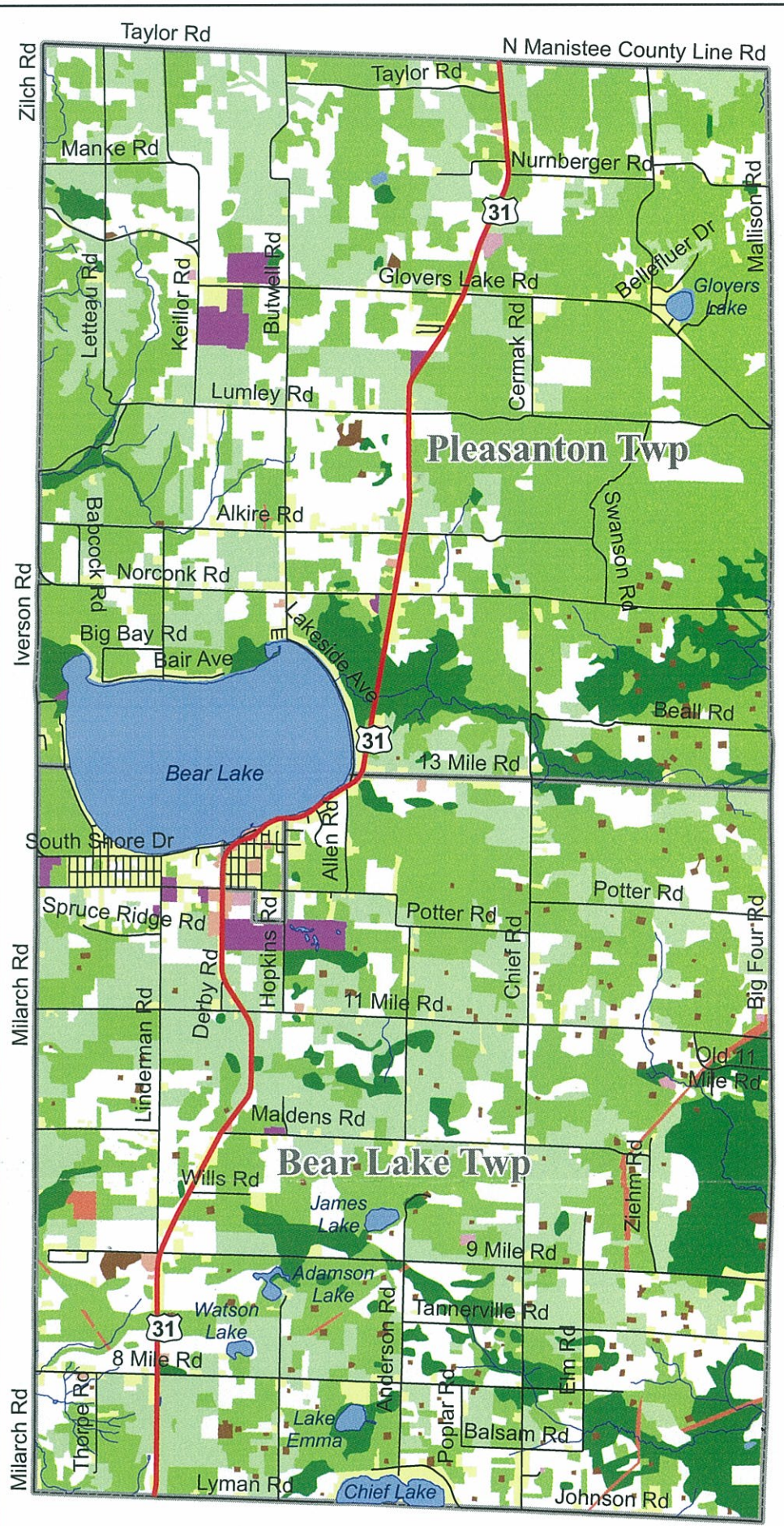
Bear Lake Community

Land Use/Land Cover - 1978



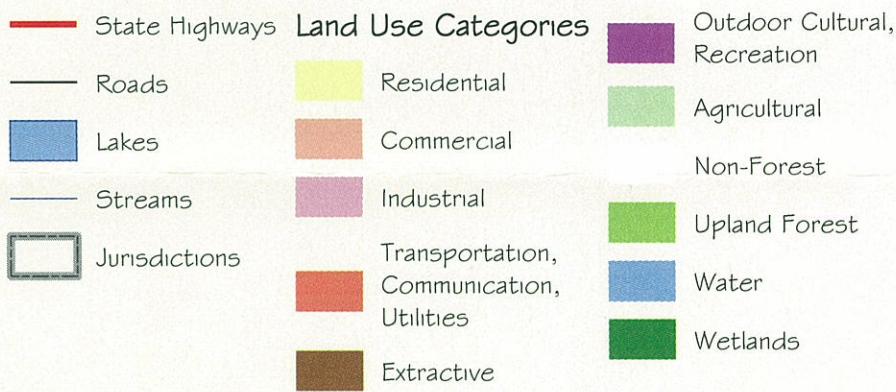
Source: Michigan Center for Geographic Information, Department of Information Technology

Map 14



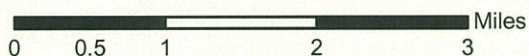
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Land Use/Land Cover - 2005



Source: Manistee County Planning & LIAA
Michigan Center for Geographic Information,
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Map 14a



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