

Water Quality and Natural Resource Protection Master Plan and Zoning Ordinance Assessments

Alpena County

Funding provided by
Great Lakes Restoration Initiative, USEPA

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Water Quality and Natural Resource Protection MASTER PLAN AND ZONING ORDINANCE ASSESSMENTS

The report contains master plan and zoning ordinance reviews for communities in the county.

Section 1 – Master Plan Reviews

- County Report

- Comparison of community planning

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- Individual Community Sheets

Introduction

NEMCOG received funding from the U.S. EPA Great Lakes Restoration Initiative to work with communities in the Lake Huron Watershed in Northeast Michigan. The effort promotes collaboration between citizens, organizations, communities, & agencies within the Lake Huron Watershed. Outreach and educational activities will provide greater understanding of environmental conditions and identify roles of individuals and communities in protecting their natural resources.

The project has identified common resource related issues & promoted environmentally responsible decision making. Primary focus for the technical assistance component is with coastal communities. Education efforts targeted all communities within the Lake Huron watershed area of northeast Michigan.

Purpose

One component of the program has been to conduct reviews of community planning and zoning activities for our coastal counties. This report provides an assessment of master plans in the coastal counties to determine each community's level of commitment to resource conservation and water quality protection. The report enables communities to understand how they fit into an overall effort to provide a greater level of water resource protection and may encourage neighbors to collaborate.

Project Area

The City of Alpena and all townships except Wellington have exercised their authority under state statutes to administer their own planning and zoning. Therefore each township has a zoning administrator, planning commission and zoning board of appeals that administers its zoning. The planning commissions are responsible for overseeing the master plan, recreation plan and zoning ordinance. The Township Board is the governing body responsible for managing finances and making policy decisions. With the exception of Alpena Township, townships do not have staff, but rely on elected officials to conduct township business.

In January of 2000, Alpena County reestablished a County Planning Commission after being dissolved in 1985. Since local jurisdictions have chosen to administer their own zoning, the county does not administer zoning at the county level.

Planning and Zoning are the principal tools that local communities have to manage growth, preserve community character, protect property values and enhance the economic viability of the area. Planning helps establish and focus the desired future of the community and zoning ordinances are used as one of the primary ways to implement the community master plan and achieve the goals of the community.

Section 1

Master Plan Reviews



Procedure for completing the analysis

For analysis to be performed, the most recent master plan was obtained from each community. Every effort was used to obtain the most current plan, however in one case the plan was over 30 years old.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions evaluated water resource protection, environmental protection, forests and wildlife. A listing of the evaluation questions can be found at the end of this report. Each question was then rated for how well the plan met the criteria with a value from 2 to 0. A rating of 2 means "Yes, Criteria Was Met," 1 means "Minimally with Comments," and 0 means "Missing." There are a total of 23 questions, with 2 points possible for each question, giving a possible total score of 46. The values were totaled, and the Master Plans were then rated.

Summarize findings

The Master Plans for Alpena County, City of Alpena, as well as the townships of Green, Maple Ridge, Ossineke, Sanborn, and Wilson all have master plans with strong goals in place to protect water resources. Of these Ossineke, Sanborn and Wilson have strong goals to protect and provide undisturbed natural areas.

Goals and policies related to stormwater management, groundwater protection, and impervious surface reduction are lacking in many community master plans. Forests, wildlife habitat, wetlands, and threatened and endangered species are not adequately address in many community master plans. Healthy forests, wetlands and greenbelts provide essential habitat for wildlife, both game and nongame species. In addition, these same critical components of the rural landscape contribute to maintaining water quality in streams and lakes, which in turn equates to healthy fisheries.

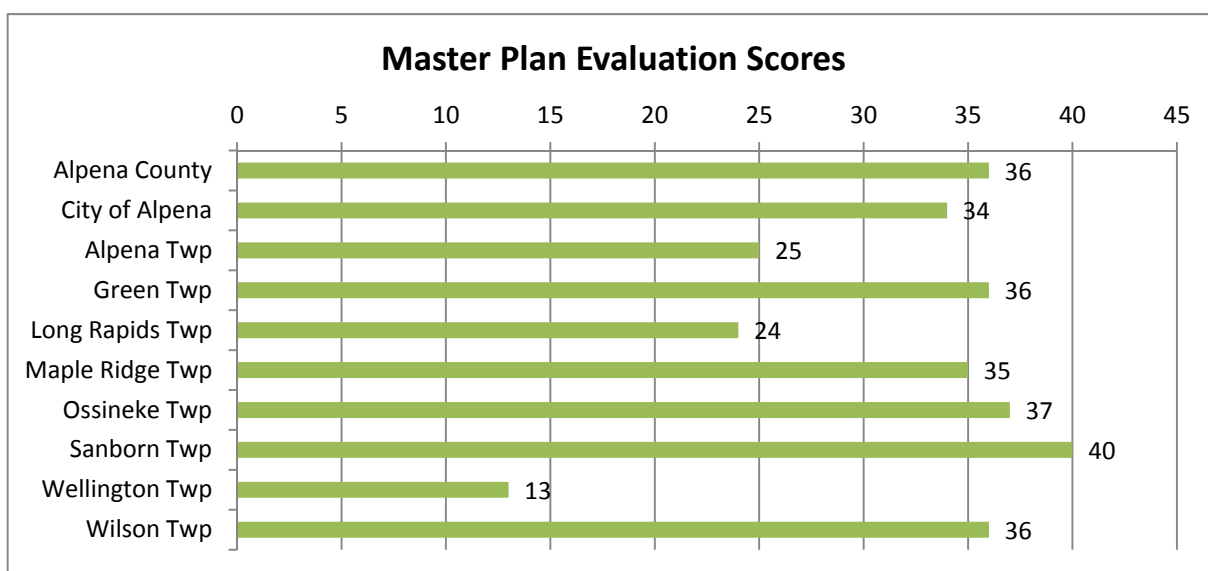
Communities with cumulative master plan scores of 35 or greater are clearly on the right path towards protections of water resources and natural resources. When updating their master plans communities are encouraged to review other master plans particularly those with scores greater than 35 points, see below chart. Collaboration with adjacent communities would allow communities to work towards common goals of water quality protection and resource conservation.

Communities in Alpena County

The following table shows a summary tally of community's ratings by criteria. There were a total of eight master plans reviewed. For example, all eight of the master plans adequately identified the watersheds.

Master Plan Review – Section 1			
Criteria	Adequate Number of Communities	Minimal Number of Communities	Absent Number of Communities
Does Master Plan exist?	10	0	0
Does the Master Plan specifically identify the watershed(s) in which the community is located?	8	1	1
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	8	2	0
Does it identify and map groundwater recharge areas?	6	3	1
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	7	2	1
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	8	1	1
Does the Master Plan identify stormwater management as an important community policy?	7	2	1
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	2	2	6
Does the Master Plan include identification and protection of Wildlife corridors?	6	3	1
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	7	2	1
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	1	0	9
Master Plan Review – Section 2			
Does the master plan provide information on the forest resources in the community?	9	1	0
Does the master plan provide information on the wildlife resources in the community?	7	3	0
Does the master plan provide information on	4	1	5

threatened and endangered species?			
Does the master plan provide information on the soils and soils constraints?	9	1	0
Does the master plan address forest and wildlife resources in the goals and objectives section?	9	0	1
Does the master plan address forest and wildlife resources in the future land use section?	7	3	0
Does the master plan address groundwater protection in the goals and objectives section?	8	1	1
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	6	2	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	4	0	6
Does the plan address Septic Systems maintenance in the goals and objectives section?	3	1	6
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	2	7	1
Does the plan address Floodplain Protection in the goals and objectives section?	0	0	10
Total:	138	38	54



Alpena County

Master Plan Adopted: 2013

Master Plan Review Score: 36/46

The Alpena County Master Plan has been rated “Very Good” or “Satisfactory” in ten of the categories. Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to wetland restoration and establishing wildlife corridors. The areas of concern for this plan are reduction of impervious surfaces, septic system maintenance, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use			
Groundwater	X		
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space	X		
Soils	X		
Statement(s) of Intent	X		
Stormwater	X		
Water Resources	X		
Wetlands		X	
Wildlife		X	
Undisturbed Natural Areas			X

City of Alpena

Master Plan Adopted: September 4, 2007

Master Plan Review Score: 34/46

The City of Alpena Comprehensive Plan is strong in most areas, and has been rated “Very Good” or “Satisfactory” in the majority of categories. Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to forest resources in future land use, groundwater protection, conservation easements, and threatened/ endangered species. The areas of concern for this plan are the reduction of impervious surfaces, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests		X	
Future Land Use	X		
Groundwater		X	
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space		X	
Soils	X		
Statement(s) of Intent	X		
Stormwater	X		
Water Resources		X	
Wetlands	X		
Wildlife		X	
Undisturbed Natural Areas			X

Alpena Township

Master Plan Adopted: August 9, 2004

Master Plan Review Score: 25/46

The Alpena Township Comprehensive Plan is rated as very good in three of the categories. Furthermore, the plan has been rated "Satisfactory" in seven categories. Resources rated "Satisfactory" can still be improved by strengthening the master plan in regards to forest resources, groundwater protection, expanding on soils and constraint definition, wildlife resources and corridors, and wetland protection and preservation. The areas of concern for this plan are forest resources in future land use, reduction of impervious surfaces, stormwater management, description of the watershed, acquisition of open space, conservation easements, septic system maintenance, threatened/ endangered species, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the "Needs Work" category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests		X	
Future Land Use	X		
Groundwater		X	
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space		X	
Soils		X	
Statement(s) of Intent	X		
Stormwater			X
Water Resources		X	
Wetlands		X	
Wildlife		X	
Undisturbed Natural Areas			X

Green Township

Master Plan Adopted: July 9, 2007

Master Plan Review Score: 36/46

The Green Township Land Use Master Plan is strong in most areas, and has been rated “Very Good” or “Satisfactory” in the majority of categories for the evaluation.

Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to open space protection, stormwater management, wetlands, wildlife resources and corridors, and septic system maintenance. Areas of concern for this plan are wetland restoration, threatened/endangered species, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use	X		
Groundwater	X		
Impervious Surface Reduction	X		
Inventory of Water Bodies	X		
Open Space		X	
Soils	X		
Statement(s) of Intent	X		
Stormwater		X	
Water Resources	X		
Wetlands		X	
Wildlife		X	
Undisturbed Natural Areas			X

Long Rapids Township

Master Plan Adopted: June 10, 2009

Master Plan Review Score: 24/46

The Long Rapids Township Master Plan is strong in many areas, and has been rated “Very Good” or “Satisfactory” in seven categories. Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to forest resources in future land use, updated inventory of water bodies with maps, and groundwater protection. The areas of concern for this plan are use of conservation easements, expanding on soils and constraint definition, wetland restoration, wildlife resources, threatened/ endangered species, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests		X	
Future Land Use		X	
Groundwater		X	
Impervious Surface Reduction			X
Inventory of Water Bodies			X
Open Space		X	
Soils			X
Statement(s) of Intent	X		
Stormwater	X		
Water Resources	X		
Wetlands			X
Wildlife			X
Undisturbed Natural Areas			X

Maple Ridge Township

Master Plan Adopted: November 3, 2010

Master Plan Review Score: 35/46

The Maple Ridge Township Master Plan is strong in many areas, and has been rated “Very Good” or “Satisfactory” in the majority of categories evaluated. The areas of concern for this plan are maps of conservation easements, statement of intent to protect water resources, wetland restoration, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use	X		
Groundwater	X		
Impervious Surface Reduction		X	
Inventory of Water Bodies		X	
Open Space		X	
Soils	X		
Statement(s) of Intent			X
Stormwater	X		
Water Resources		X	
Wetlands		X	
Wildlife		X	
Undisturbed Natural Areas			X

Ossineke Township

Master Plan Adopted: 2013

Master Plan Review Score: 37/46

The Ossineke Township Master Plan is strong in most areas, and has been rated “Very Good” or “Satisfactory” in the majority of categories evaluated. Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to septic system maintenance and wildlife conservation. The areas of concern for this plan are reduction of impervious surfaces, and wetland restoration. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use	X		
Groundwater		X	
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space	X		
Soils	X		
Statement(s) of Intent	X		
Stormwater	X		
Water Resources	X		
Wetlands			X
Wildlife		X	
Undisturbed Natural Areas	X		

Sanborn Township

Master Plan Adopted: 2013

Master Plan Review Score: 40/46

The Sanborn Township 2014 Master Plan is strong in most areas, and has been rated “Very Good” or “Satisfactory” in the majority of categories evaluated. The areas of concern for this plan are reduction of impervious surfaces, and threatened/ endangered species. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use	X		
Groundwater	X		
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space	X		
Soils	X		
Statement(s) of Intent	X		
Stormwater	X		
Water Resources	X		
Wetlands	X		
Wildlife		X	
Undisturbed Natural Areas	X		

Wellington Township

Master Plan Adopted: 1979

Master Plan Review Score: 13/46

The Welling Township Land Use Plan is weak in many areas, and has been rated “Very Good” or “Satisfactory” in only a few categories. This would be expected due to the age of the master plan. Resources rated “Satisfactory” can still be improved by strengthening the master plan in regards to forest resources in future land use. The areas of concern for this plan are forest resources, groundwater protection, reduction of impervious surfaces, acquisition of open space, conservation easements, statement of intent to protect water resources, septic system maintenance, wetland protection and preservation, wildlife corridors, threatened/ endangered species, and preservation of undisturbed natural areas. The master plan is reviewed and adopted every five years. At the next review, areas in the “Needs Work” category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests			X
Future Land Use		X	
Groundwater			X
Impervious Surface Reduction			X
Inventory of Water Bodies	X		
Open Space			X
Soils	X		
Statement(s) of Intent			X
Stormwater			X
Water Resources			X
Wetlands			X
Wildlife			X
Undisturbed Natural Areas			X

Wilson Township

Master Plan Adopted: May 12, 2010

Master Plan Review Score: 36/46

The Wilson Township Master Plan is strong in most areas, and has been rated "Very Good" or "Satisfactory" in all of the categories evaluated. Resources rated "Satisfactory" can still be improved by strengthening the master plan in regards to reduction of impervious surfaces, stormwater, wildlife and open space protection. The master plan is reviewed and adopted every five years. At the next review, areas in the "Needs Work" category should be considered for updating to protect the well-being of the watershed.

Resource	Very Good	Satisfactory	Needs Work
Forests	X		
Future Land Use	X		
Groundwater	X		
Impervious Surface Reduction		X	
Inventory of Water Bodies	X		
Open Space		X	
Soils	X		
Statement(s) of Intent	X		
Stormwater		X	
Water Resources	X		
Wetlands	X		
Wildlife		X	
Undisturbed Natural Areas	X		

Section 2

Zoning Ordinance Reviews



Promoting collaboration between citizens, organizations, communities, & agencies within the Watershed.

Community Zoning Ordinances

Zoning ordinances were reviewed using criteria related to water resource and natural resources protection. The following table shows the criteria and includes a tally of scores for all of the zoning ordinances reviewed. For example, for question 2, six of the communities have fee systems to cover all costs associated with the review of proposal applications or appeals, including any professional reviews. Individual community score sheets follow the table.

Zoning Reviews - Communities in Alpena County			
Criteria	Present	Minimal	Absent
Zoning Ordinance: Administrative	Number of Communities	Number of Communities	Number of Communities
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources'	0	5	2
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	6	0	1
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?"	7	0	0
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits'	3	2	2
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?	3	1	3
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?	0	1	6
Zoning Ordinance: Site Plan Review			
7. Does the Zoning Ordinance require Site Plan Review?	7	0	0
8. Is the Site Plan required to indicate all existing natural features'	6	0	1
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	4	2	1
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review	0	2	5
Zoning Ordinance: PUD			
11. 12. Does ordinance include Planned Unit Development (PUD) provisions?	5	1	1
12. 13. Do PUDs require inclusion of a minimum open space threshold?	2	1	4

Zoning Ordinance: Open Space			
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?	3	3	1
14. Does the open space have to be managed in a natural condition?	0	3	4
15. Are allowable uses in the open space restricted to low impact uses?	0	2	5
16. Is open space required to be protected through a conservation easement or other similar mechanism?	3	1	3
Zoning Ordinance: Special Districts			
17. Districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management	7	0	0
18. Overlay districts for resource protection such as waterfront or wetlands.	5	0	2
Shorelines: Setbacks Great Lakes Shoreline			
19. If the community has a Great Lakes Shoreline, does it use an Overlay District, or other tools, to protect the shoreline with setbacks? SCORE: 100' or greater = 2 50' to 99' = 1 Less than 50' = 0	0	0	2
20. For a Great Lakes Shoreline, does the Zoning Ordinance delineate a separate minimum setback and/or other protection measures for dunes and high risk erosion areas?	0	0	2
Shorelines: Setbacks Inland Lakes			
21. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	1	6	0
Shorelines: Setbacks Streams			
22. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	1	6	0
Shorelines: Protection strips			
23. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	2	3	2
24. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	3	4	0
25. Does Zoning Ordinance specify the degree of	4	2	1

vegetation which may be removed in the riparian buffer zone or greenbelt?			
26. Does it specify the use of native plant species in the riparian buffer zone?	1	4	2
27. Are invasive and exotic plants prohibited from being used?	0	0	7
Shorelines: Density			
28. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	5	2	0
Shorelines: Keyhole/Funneling			
29. Does the Zoning Ordinance include keyhole prevention provisions by placing restrictions on the size and type of multi-boat launch and docking sites?	0	0	7
Shorelines: Road Ends			
30. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?	0	0	7
Shorelines: Marinas			
31. Does the community regulate marinas by using special land use provisions or other tools?	0	1	6
Stormwater: Construction and Redevelopment			
32. Does the community regulate stormwater as part of the Zoning Ordinance?	5	0	2
33. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?	3	1	3
34. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?	0	4	3
35. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?	1	1	5
36. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?	0	0	7
Septic Systems			
37. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?	0	0	6
38. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?	6	0	0

Groundwater Protection			
39. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?	4	0	3
40. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?	4	1	2
41. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?	4	0	3
Impervious Surface Reduction: Lot Coverage			
42. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?	5	1	1
43. Does Zoning Ordinance allow location of bio-retention, rain gardens, filter strips and swales in required setback areas and common areas?	0	7	0
44. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	5	0	2
45. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	6	0	1
46. Does the Zoning Ordinance require minimum landscaping standards in parking lots?	3	1	3
47. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?	1	1	5
Floodplains			
48. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?	3	0	4
49. If yes, does is there ordinance language that regulates floodplain development?	2	2	3
50. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?	0	0	7
51. Does the Zoning Ordinance require floodplains to be identified on site plans?	4	0	3
TOTAL	134	71	140

Appendix A

Community Master Plan Review Sheets

Alpena County Master Plan Review

Name of Jurisdiction: Alpena County

Date Completed: November 12, 2013

Master plan Title: Alpena County Master Plan 2013

Last updated: October 29, 2013

Master Plan Review – Section 1		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. October 29, 2013	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes. Thunder Bay Watershed 3-2	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Preserve the natural environment by protecting groundwater, surface water, air quality, fisheries and wildlife, forests, farmland, waterfront lands, wetlands, and scenic vistas.	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Preservation of open space, not specifically directed towards water resource protection.	2
Does the Master Plan identify stormwater management as an important community policy?	Yes. 8-12, 4-21	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	No.	0
Does the Master Plan include identification and protection of Wildlife corridors?		1
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	yes	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
Total Points Section: 17		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes 4-27	2
Does the master plan provide information on the wildlife resources in the community?	Yes 4-23 thru 4-27	2
Does the master plan provide information on threatened and endangered species?	Yes. 4-26, 4-27	2
Does the master plan provide information on the soils and soils constraints?	Yes. 4-11 thru 4-15	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes.	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes.	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes.	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes.	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	Yes. 8-8, 8-12, 8-13	2
Does the plan address Septic Systems maintenance in the goals and objectives section?	No.	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes. Protection	1
Does the plan address Floodplain Protection in the goals and objectives section?	No.	0
Total points for this section:		19
Total Score for Sections 1 & 2:		36

Alpena Township

Master Plan Review

Name of Jurisdiction: Alpena Township

Date Completed: November 12, 2013

Last updated: August 9, 2004

Prepared by: Wade-Trim, Inc.

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. August 9, 2009	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	No.	0
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes. 3-10 thru 3-15.	2
Does it identify and map groundwater recharge areas?	Yes. 3-10 thru 3-11.	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.		2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes page 6-8	1
Does the Master Plan identify stormwater management as an important community policy?	Yes. Requires proper drainage. 3-7.	1
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	No.	0
Does the Master Plan include identification and protection of Wildlife corridors?	Yes, goals	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes, goals	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No.	0
TOTAL POINTS SECTION 14		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Does the master plan provide information on the forest resources in the community?	Yes. 3-8, 5-4.	2
Does the master plan provide information on the wildlife resources in the community?		1
Does the master plan provide information on threatened and endangered species?	No.	0
Does the master plan provide information on the soils and soils constraints?	Yes. 3-7, 3-8.	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes. 6-8.	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes. 7-2.	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes. Mention water resources. 6-8.	1
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	No.	0
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No.	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	No.	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes minimal	1
Does the plan address Floodplain Protection in the goals and objectives section?	No.	0
		11
	Total:	25

City of Alpena

Master Plan Review

Name of Jurisdiction: City of Alpena

Date Completed: August 25, 2013

Master plan Title: City of Alpena Comprehensive Plan

Master Plan Review – Section 1		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. September 4, 2012	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes. Natural resources map.	1
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	Through stormwater mgmt	1
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes. Resource conservation future land use area, protecting buffers and natural areas. Mention of water resources.	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
TOTAL POINTS SECTION 18		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	Mention of discouraging use of invasive species.	1
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes. Short mention	1
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	No	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes	2
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
	16	
		Total: 34

Green Township

Master Plan Review

Name of Jurisdiction: Green Township

Master plan Title: Green Township Land Use Master Plan

Last updated: July 9, 2007

Master Plan Review – Section 1		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. July 9, 2012.	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes. Suggested development of a water quality program with neighboring communities.	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	1
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	Yes	2
Does the Master Plan include identification and protection of Wildlife corridors?	Yes. Protection of wildlife areas. No specifics	1
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes. Limit development around Natural and Wetland Areas. No specifics.	1
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	Yes	2
Total points this section: 19		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes, small mention of preserving proper hunting lands and practices	1
Does the master plan provide information on threatened and endangered species?	No	0
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	Yes	2
Does the plan address Septic Systems maintenance in the goals and objectives section?	Yes	1
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes. Protection	1
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
	Total points this section	17
	Total:	36

Long Rapids Township Master Plan Review

Name of Jurisdiction: Long Rapids Township
 Name of Reviewer: Richard Deuell
 Master plan Title: Long Rapids Township Master Plan
 Last updated: June 10, 2009

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. June 10, 2014.	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes. Needs Map	1
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes. Needs Map	1
Does it identify and map groundwater recharge areas?	Yes. Needs Map	1
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes. Greenbelt recommendation	1
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	no	0
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	1
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes. General mention of studies and programs for many ecosystems	1
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
Total Points Section: 12		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes. Needs Map	1
Does the master plan provide information on the wildlife resources in the community?	Yes. Mention of importance of Hunting to the community.	1
Does the master plan provide information on threatened and endangered species?	No	0
Does the master plan provide information on the soils and soils constraints?	Yes. Needs map.	1
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes. Mention of timber harvesting and hunting	1
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	1
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	Yes	2
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes. Protection	1
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
	Total this section	12
	Total:	24

Maple Ridge Township

Master Plan Review

Name of Jurisdiction: Maple Ridge Township
 Master plan Title: Maple Ridge Township Master Plan
 Last updated: November 3, 2010

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. November 3, 2015	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes. Needs Map	1
Does it identify and map groundwater recharge areas?	Yes. Needs Map	1
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes. Mention of greenbelt	1
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	Yes	2
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes. Goals and future land use	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
Total Points Section: 17		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	Yes	2
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	1
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	Yes	2
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes. Mention of protection	1
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
	Total this section	18
	Total:	35

Ossineke Township

Master Plan Review

Name of Jurisdiction: Ossineke Township
 Master plan Title: Ossineke Township Master Plan
 Last updated: 2014

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes.	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	No	0
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
TOTAL POINTS SECTION 18		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	Yes	2
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	Yes	2
Does the plan address Septic Systems maintenance in the goals and objectives section?	No	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes. Mention Protection	1
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
		19
		Total: 37

Sanborn Township

Master Plan Review

Name of Jurisdiction: Sanborn Township
 Master plan Title: Sanborn Township 2014 Master Plan
 Last updated: 2013

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes. Drafted must be adopted.	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	No	0
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
TOTAL POINTS SECTION 18		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	yes	2
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	Yes	2
Does the plan address Septic Systems maintenance in the goals and objectives section?	Yes	2
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes	2
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
		22
		Total: 40

Wellington Township

Master Plan Review

Name of Jurisdiction: Wellington Township
 Master plan Title: Wellington Township Land Use Plan
 Last updated: 1979

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	No	0
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	No	0
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	No	0
Does the Master Plan identify stormwater management as an important community policy?	No	0
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	No	0
Does the Master Plan include identification and protection of Wildlife corridors?	No	0
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	No	0
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
		6

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	No	0
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	No	0
Does the master plan address forest and wildlife resources in the future land use section?	Mentioned	1
Does the master plan address groundwater protection in the goals and objectives section?	No	0
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	No	0
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	No	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	No	0
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
		Total: 13

Wilson Township

Master Plan Review

Name of Jurisdiction: Wilson Township
 Master plan Title: Wilson Township Master Plan
 Last updated: May 12, 2010

Master Plan Review – Section 1 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does Master Plan exist? (If yes, note when scheduled for review again in Comments section) OR	Yes	2
Does the Master Plan specifically identify the watershed(s) in which the community is located?	Yes	2
Does the Master Plan have a complete inventory of lakes, rivers, and wetlands, with maps of their locations?	Yes	2
Does it identify and map groundwater recharge areas?	Yes	2
Does the jurisdiction's Master Plan have a specific and focused goal or statement of intent to protect water resources? If yes, note it in Comments section.	Yes	2
Does the Master Plan include goals for community acquisition or conservation of Open Space to protect surface water, ground water, and wetlands?	Yes	2
Does the Master Plan identify stormwater management as an important community policy?	Yes	2
Does the Master Plan call for minimizing impervious surfaces in new construction and redevelopment projects to reduce stormwater runoff and improve infiltration?	Yes. Mention of screened parking areas	1
Does the Master Plan include identification and protection of Wildlife corridors?	Yes	2
Does the Master Plan identify and call for preservation of undisturbed Natural Areas and/or Natural River designations for surface water and ground water?	Yes	2
Does the plan acknowledge the importance of well-constructed and maintained road stream crossings on the quality of stream and water resources?	No	0
Total Points this Section: 19		

Master Plan Review – Section 2 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Does the master plan provide information on the forest resources in the community?	Yes	2
Does the master plan provide information on the wildlife resources in the community?	Yes	2
Does the master plan provide information on threatened and endangered species?	No	0
Does the master plan provide information on the soils and soils constraints?	Yes	2
Does the master plan address forest and wildlife resources in the goals and objectives section?	Yes	2
Does the master plan address forest and wildlife resources in the future land use section?	Yes	2
Does the master plan address groundwater protection in the goals and objectives section?	Yes	2
Does the plan address retention or restoration of waterside greenbelts or buffers in the goals and objectives section?	Yes	2
Does the plan address use of conservation easement to protect open space in the goals and objectives section?	No	0
Does the plan address Septic Systems maintenance in the goals and objectives section?	No	0
Does the plan address Wetland Protection and Restoration in the goals and objectives section?	Yes	1
Does the plan address Floodplain Protection in the goals and objectives section?	No	0
	Total points this section	15
	Total:	34

Appendix B

Community Zoning Ordinance Review Sheets

City of Alpena

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: City of Alpena, Alpena County

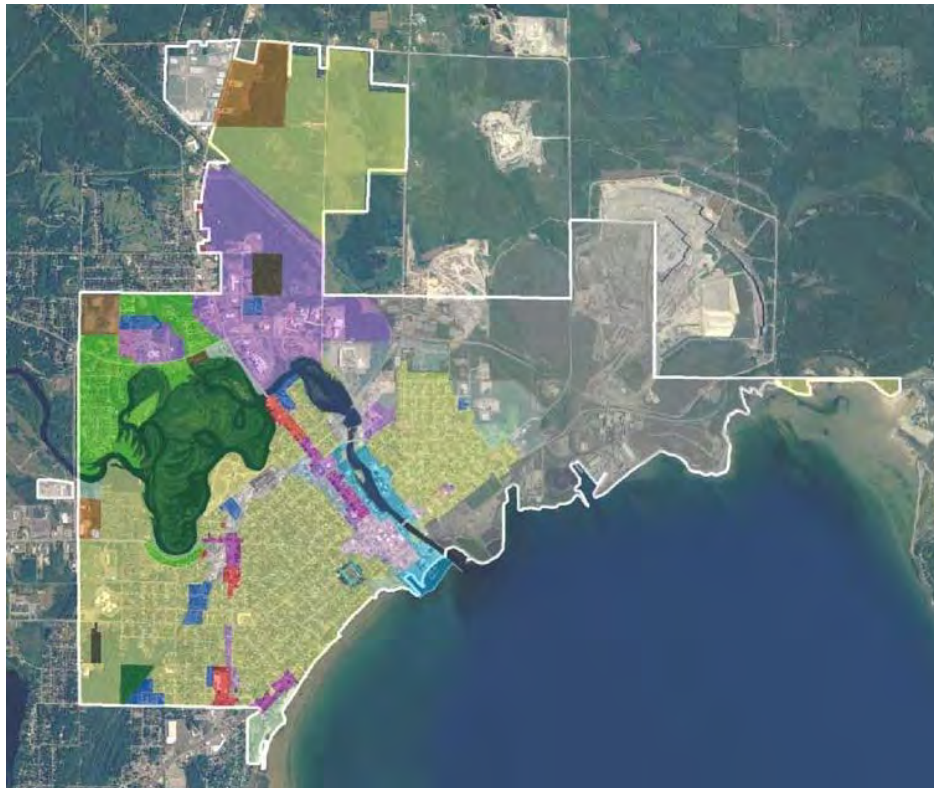
Date Completed:

Name of Reviewer: RL Deuell

Zoning Ordinance Title: City of Alpena Zoning Ordinance

- Last amended: 2010

- Prepared by: City of Alpena with assistance from NEMCOG



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a

watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Adequate

II. Shorelines - Lacking

III. Stormwater Management - Adequate

IV. Groundwater and Wellhead Protection - Strong

V. Impervious Surface Reduction - Strong

VI. Other Relevant Elements - Strong

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?	A. WATERFRONT SETBACK To provide minimum setback standards in the Zoning Ordinance to protect surface water resources and flood plains from adverse construction or alteration, these measures are deemed to be the minimum necessary in order to: <ul style="list-style-type: none"> • Avoid structural encroachment of the natural waters and waterways, except in the situation of uses traditionally depending upon direct water access. • Promote high water quality through the encouragement of an undisturbed natural area to trap nutrients and sediment from entering natural waters, and to prevent erosion. • Protect the natural environment of streams and lakes for wildlife habitat purposes and to preserve, to the extent practical, the natural image of landscapes. 	1
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	if the Planning Director determines that review of the application and/or participation in the review process or appeal by qualified professional planners, engineers, attorneys, or other professionals is necessary or advisable, then the applicant shall deposit with the City Clerk such additional zoning fees in an reasonable amount determined by the Planning Director equal to the estimated additional costs.	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?"	SECTION 9.0 ENFORCEMENT SECTION 9.7 VIOLATIONS	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?	Floodplains, performance standards, filled areas, industrial land uses, soils erosion and sedimentations permit, wind energy..... COMPLIANCE WITH OTHER STATUTES AND REGULATIONS: Site plans shall conform to all applicable requirements of federal, state, and local statutes, and approval may be conditioned on the applicant receiving necessary federal, state, and local permits before the actual zoning permit is granted.	2
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?	Staff shall have the authority to conduct a pre-application meeting with the applicant/developer to assist them in understanding the site plan review process and other ordinance requirements; and to provide insight as to what portions of their proposed development may be of special concern to the Planning Commission. Except for Planned Unit Developments, this conference is not mandatory, but is recommended for small and large projects alike	1
6. Does the Zoning Ordinance include	Site Plan Review Section: IMPACT STATEMENT:	1

requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?	Staff may require a statement which addresses the following as applicable to the type of use: Statements relative to the impact of the proposed development on soil erosion, drainage patterns, shoreline protection, wildlife habitat, air pollution, water pollution (ground and surface), noise pollution and the aesthetics and scale of development in terms of the surrounding environment. Statement of the impact of the development with respect to noise, dust, fire hazard, fumes, odors, vibration, smoke, or excessive light.	
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?		2
8. Is the Site Plan required to indicate all existing natural features?	Natural features, topography, water features	2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?		2
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?		0
Zoning Ordinance: PUD		
11. 12. Does ordinance include Planned Unit Development (PUD) provisions?	PLANNED UNIT DEVELOPMENT DISTRICT	2
12. 13. Do PUDs require inclusion of a minimum open space threshold?		0
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?		1
14. Does the open space have to be managed in a natural condition?		0
15. Are allowable uses in the open space restricted to low impact uses?		0
16. Is open space required to be protected through a conservation easement or other similar mechanism?		0
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	Conservation and Resources District	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?		0
TOTAL POINTS SECTION I		20
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Shorelines: Setbacks Great Lakes Shoreline		
1. If the community has a Great Lakes Shoreline, does it use an Overlay District, or other tools, to protect the shoreline with setbacks? SCORE: 100' or greater = 2 50' to 99' = 1 Less than 50' = 0	With the exception of property located within the Waterfront Development (WD) District, any property which borders on Lake Huron or the Thunder Bay River shall be subject to waterfront setbacks for buildings and uses, as follows: 1. Principal structures shall observe a minimum setback of thirty-five (35) feet from the documented Ordinary High Water Mark in all Districts. Accessory structures, parking lots, and other impervious surfaces, except boat docks, boat houses, boat slips, ramps, or marinas, pump houses, or other water-dependent uses, shall observe a minimum setback of fifteen (15) feet from the documented Ordinary High Water Mark in all Districts.	0
2. For a Great Lakes Shoreline, does the Zoning Ordinance delineate a separate minimum setback and/or other protection measures for dunes and high risk erosion areas?		0
Shorelines: Setbacks Inland Lakes		
3. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	See above	1
Shorelines: Setbacks Streams		
4. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	See above	1
Shorelines: Protection strips		
5. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?		0
6. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	US-23 Overlay-To preserve natural resources and water quality, a greenbelt shall be established and maintained on all property within fifteen (15) feet of the delineated boundary of a wetland and the top-of-bank of any existing or developed drainage ditch.	1
7. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?		0
8. Does it specify the use of native plant species in the riparian buffer zone?		0
9. Are invasive and exotic plants prohibited from being used?		0

Shorelines: Density		
10. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0		1
Shorelines: Private Shared Lake Access; Keyhole/Funneling		
11. Does the Zoning Ordinance include Private Shared Lake Access provisions that regulate number of back lots using the shared waterfront lot, development of shared lot, and docks?		0
Shorelines: Road Ends		
12. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?		0
Shorelines: Marinas		
13. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION II		4
TOTAL POINTS POSSIBLE		26

III. Stormwater Management		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?	Site Plan Review	2
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?	Storm water detention, retention, transport, and drainage facilities shall be designed to use or enhance the natural storm water system on site, including the storage or filtering capacity of wetlands, watercourses, and water bodies, and/or the infiltration capability of the natural landscape. Storm water facilities shall not cause flooding or the potential for pollution of surface or groundwater, on-site or off-site.	2
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?	City Stormwater Management Ordinance	1
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?		0
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION III		5
TOTAL POINTS POSSIBLE		10

IV. Groundwater and Wellhead Protection

2=Yes; 1=Yes, minimally with comments; 0=missing

Criteria	Citation and Comments	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?	P. Groundwater and Surface Water Protection:	2
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?	DATA REQUIRED FOR GROUNDWATER PROTECTION: All businesses or facilities which use or generate hazardous substances in quantities greater than one hundred (100) kilograms (approximately two hundred twenty (220) pounds) or ninety-five (95) liters (approximately twenty-five (25) gallons) per month, whichever is less, or stores greater than one hundred (100) kilograms (approximately two hundred twenty (220) pounds) or ninety-five (95) liters (approximately twenty-five (25) gallons), whichever is less shall submit the following:	2
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?	State and federal requirements for storage, spill prevention, record-keeping, emergency response, transport and disposal of hazardous substances, hazardous wastes, liquid industrial waste or potentially polluting materials shall be met. No discharge to surface water or groundwater, including direct or indirect discharges of waste, waste effluent, wastewater, pollutants, or cooling water, shall be allowed without approval from state, county and local agencies as required by law.	2
TOTAL POINTS SECTION V		6
TOTAL POINTS POSSIBLE		6

V. Impervious Surface Reduction

2=Yes; 1=Yes, minimally with comments; 0=missing

Criteria	Citation and Comments	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?		2
2. Does Zoning Ordinance allow location of bio-retention, rain gardens, filter strips and swales in required setback areas and common areas?	Not listed in ordinance	1
Impervious Surface Reduction: Parking Lots		
3. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	9. Reduction of Parking Spaces/Land Banking:	2
4. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	8. Collective Parking:	2
5. Does the Zoning Ordinance require minimum landscaping standards in parking lots?		2
6. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		2
TOTAL POINTS SECTION VI		10
TOTAL POINTS POSSIBLE		10

VI. Other Relevant Elements		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?		2
2. If yes, does is there ordinance language that regulates floodplain development?	FLOODPLAINS Datum utilized in conjunction with the Federal Emergency Management Agency Flood Insurance Rate Map Number 2600100005 B, as amended, shall control all construction in accord with standards established to minimize flood hazards. For construction within the 100-year floodplain, the lowest floor of the structure must be elevated one (1) foot above the 100-year flood elevation.	2
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?	WATER FEATURES: Location and elevations of existing and proposed water courses and water bodies, including county drains and man-made surface drainage ways, floodplains, and wetlands.	2
TOTAL POINTS SECTION VII		6
TOTAL POINTS POSSIBLE		8

Score: 52

Total Possible: 98

Percent of total possible score: 53%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Alpena Township

Date Completed: January 2014

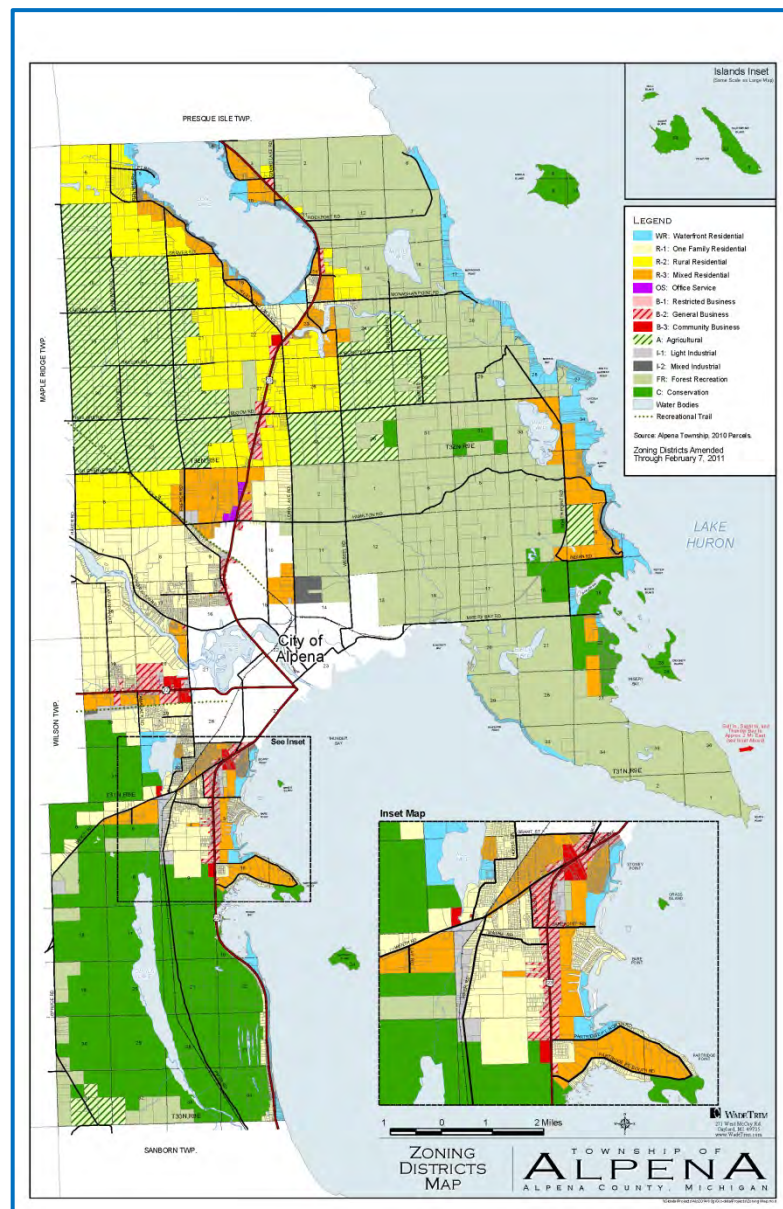
Name of Reviewer: R. L. Deuell

Zoning Ordinance Title: ZONING ORDINANCE of Alpena Township

- Creation date: August 15, 1983.

- Last amended: February 19, 2010

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

- I. Basic Zoning Elements - Adequate**
- II. Shorelines - Adequate**
- III. Stormwater Management - Adequate**
- IV. Sewer/Septic - Adequate**
- V. Groundwater and Wellhead Protection - Lacking**
- VI. Impervious Surface Reduction – Strong**
- VII. Other Relevant Elements - Lacking**

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?	References in Conservation , Forest Recreation and Waterfront Residential zoning Districts	1
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	Sec. 2006. Fees:	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	Article XX – Administration “Municipal Civil Infraction”	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?	No dredging or filling can occur in the Greenbelt without a Soil Erosion and Sediment Control Permit issued under Part 91 of PA 451 of 1994, as amended and any other applicable permits from Michigan Department of Environmental Quality or U.S. Army Corps of Engineers.	1
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?		0
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?	Sec. 1811. Site Plan Review (All Districts):	2
8. Is the Site Plan required to indicate all existing natural features?		2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	No dredging or filling can occur in the Greenbelt without a Soil Erosion and Sediment Control Permit. Private Roads - When applicable, a permit is also required from the County under the Soil Erosion and Sediment Control Act.	1
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?		0
Zoning Ordinance: PUD		
11. Does ordinance include Planned Unit Development (PUD) provisions?	Just reference to PUD but no PUD standards	1
12. Do PUDs require inclusion of a minimum open space threshold?		0
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?	Sec. 1822. Open Space Preservation @ density in the FR District	1
14. Does the open space have to be managed in a natural condition?	No reference	0

15. Are allowable uses in the open space restricted to low impact uses?	No reference	0
16. Is open space required to be protected through a conservation easement or other similar mechanism?	Will remain perpetually in an undeveloped state by means of a conservation easement, plat dedication, restrictive covenant, or other legal means that runs with the land.	2
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	Conservation and Forest Recreation Districts	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?		0
TOTAL POINTS SECTION II		17
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments & citation	Points
Shorelines: Setbacks Great Lakes Shoreline		
1. If the community has a Great Lakes Shoreline, does it use an Overlay District, or other tools, to protect the shoreline with setbacks? SCORE: 100' or greater = 2 50' to 99' = 1 Less than 50' = 0	Great Lakes shoreline treated same as inland lakes and streams.	0
2. For a Great Lakes Shoreline, does the Zoning Ordinance delineate a separate minimum setback and/or other protection measures for dunes and high risk erosion areas?		0
Shorelines: Setbacks Inland Lakes		
3. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	For lots which border on a lake or a stream, the minimum structure setback on the waterfront side shall be twenty-five (25) feet from the ordinary high water mark.	1
Shorelines: Setbacks Streams		
4. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	For lots which border on a lake or a stream, the minimum structure setback on the waterfront side shall be twenty-five (25) feet from the ordinary high water mark.	1
Shorelines: Protection strips		
5. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	A greenbelt shall be established and maintained on all property located within twenty-five (25) feet of the ordinary high water mark of a lake or stream.	1
6. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	A greenbelt shall be established and maintained on all property located within twenty-five (25) feet of the ordinary high water mark of a lake or stream.	1
7. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	Strongly recommended that at least 70% of the lot width at the water line shall be kept in natural vegetation; either trees, shrubs, herbaceous plants or unmowed grass.	1
8. Does it specify the use of native plant species in the riparian buffer zone?		0
9. Are invasive and exotic plants prohibited from being used?		0
Shorelines: Density		
10. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0		2

Shorelines: Keyhole/Funneling		
11. Does the Zoning Ordinance include keyhole prevention provisions by placing restrictions on the size and type of multi-boat launch and docking sites?		0
Shorelines: Road Ends		
12. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?	???	0
Shorelines: Marinas		
13. Does the community regulate marinas by using special land use provisions or other tools?		1
TOTAL POINTS SECTION III		8
TOTAL POINTS POSSIBLE		26

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?	Sec. 1813. Stormwater Retention:	2
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?	required to retain on site all stormwater drainage in excess of natural conditions. This provision may require stormwater retention ponds where appropriate. An exception can be made for water leaving the site via an existing stormwater pipe, or through other stormwater facilities which will be developed at the same time as the proposed new use.	1
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?	All stormwater facilities, including detention or retention ponds, shall be designed at minimum to handle a storm with the projected frequency of once every ten years (ten year design storm).	1
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?		0
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION V		4
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?		2
TOTAL POINTS SECTION VII		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?		0
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?		0
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?		0
TOTAL POINTS SECTION IX		0
TOTAL POINTS POSSIBLE		6

VII. Other Relevant Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?		2
2. If yes, does is there ordinance language that regulates floodplain development?		0
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?		0
TOTAL POINTS SECTION X		2
TOTAL POINTS POSSIBLE		8

VI. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?	35% lot coverage including waterfront	2
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	In the instance of dual function of off-street parking space where operating hours of building do not overlap, the Planning and Zoning Commission may grant an exception by reducing the total number of spaces required. Planning and Zoning Commission may approve a total reduction of not more than thirty percent (30%) of the required number.	2
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	Two or more buildings or uses may collectively provide the required off-street parking in which case the required number of parking spaces shall not be less than the sum of the requirements for the several individual uses computed separately.	2
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?	Parking areas. In off-street parking areas containing greater than 20 spaces, at least five percent (5%) of the total parking area shall be used for interior landscaping.	2
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?	These access management requirements pertain to properties fronting on M-32 and U.S. 23	1
TOTAL POINTS SECTION IV		10
TOTAL POINTS POSSIBLE		10

Score: 42

Total Possible: 100

Percent of total possible score: 42%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Green Township

Date Completed: 2014

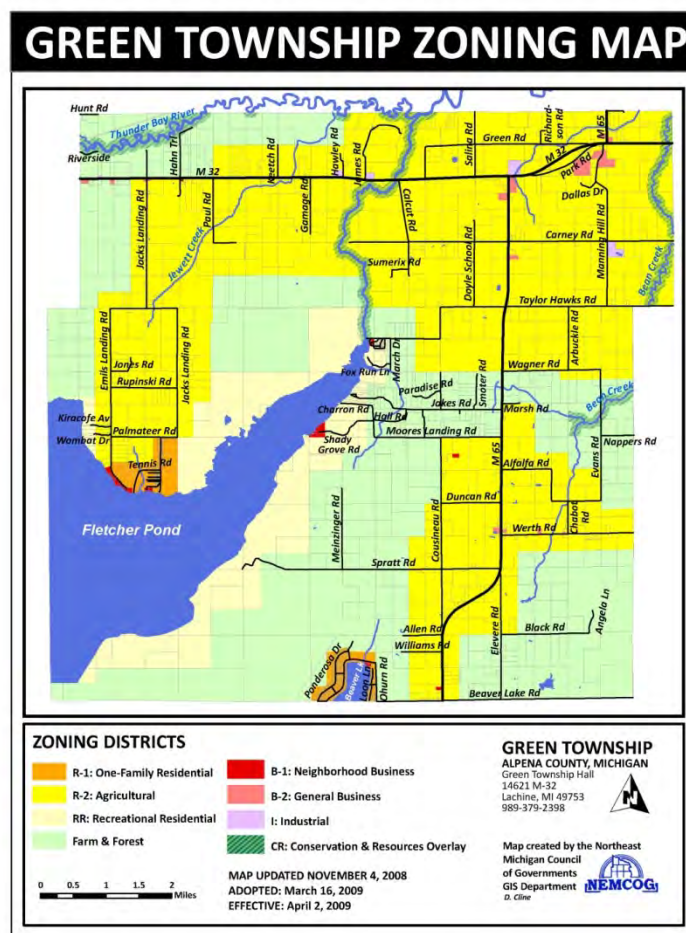
Name of Reviewer: R. L. Deuell, AICP

Zoning Ordinance Title: Green Township Zoning Ordinance

- Last amended: April 2, 2009

- Prepared by: Green Township and NEMCOG

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each

community is unique, both its resource and its constituent base; there are several key “common ground” zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means “Yes, Criteria Was Met,” **1** means “Minimally with Comments,” and **0** means “Missing.” The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Adequate

II. Shorelines - Adequate

III. Stormwater Management - Adequate

IV. Sewer/Septic - Adequate

V. Groundwater and Wellhead Protection - Strong

VI. Impervious Surface Reduction - Strong

VII. Other Relevant Elements - Adequate

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?		0
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	Section 10.6 – Fees review of the application and/or participation in the review process or appeal by qualified professional planners, engineers, attorneys, or other professionals is necessary or advisable,	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	Section 10.8 - Violations and Penalties Any person, partnership, limited liability company, corporation, association or other entity who creates or maintains a nuisance per se or who violates or fails to comply with this Ordinance or any permit issued pursuant to this Ordinance shall be responsible for a municipal civil infraction and shall be subject to a fine of not more than five hundred and 00/100 (\$500.00) dollars.	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?	Compliance with other Statutes and Regulations: Site plans shall conform to all applicable requirements of state and federal statutes and the Green Township Master Plan, and approval may be conditioned on the applicant receiving necessary state and federal permits before the actual zoning permit is granted.	1
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?	Pre-application Conference: The Zoning Administrator, Planning Commission Chair and/or Planning Commission shall have the authority to conduct a pre-application meeting with the applicant/developer to assist them in understanding the site plan review process, and other ordinance requirements; and to provide insight as to what portions of their proposed development may be of special concern to the Planning Commission. Pre-Application Meeting: The procedure of application and approval of a PUD permit shall include one (1) or more informal conferences between the applicant and Zoning Administrator.	2
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?	Article 7: Plot Plans & Site Plan Requirements & Review	2

8. Is the Site Plan required to indicate all existing natural features?	Boundary dimensions of environmental features such as forests, water bodies, wetlands, floodplains, high risk erosion areas, slopes over twenty-five (25) percent, drainage and other similar features.	2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	All site plans shall comply with the terms of the Alpena County Soil Erosion and Sedimentation Control Ordinance and Stormwater Ordinance. It shall be the applicant's responsibility to provide documentation of compliance with these County Ordinances.	2
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?		0
Zoning Ordinance: PUD		
11. 12. Does ordinance include Planned Unit Development (PUD) provisions?	Section 9.21 – Planned Unit Development (PUD)	2
12. 13. Do PUDs require inclusion of a minimum open space threshold?		0
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?	Multiple-Family Dwelling Units	1
14. Does the open space have to be managed in a natural condition?		0
15. Are allowable uses in the open space restricted to low impact uses?		0
16. Is open space required to be protected through a conservation easement or other similar mechanism?		0
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	CR Conservation and Resources District FF-1 Farm and Forest District	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?	CR Conservation and Resources District The Conservation and Resources Overlay District includes the river channel and extends landward radially or at right angles from the ordinary high water mark four hundred (400) feet on both sides of the Thunder Bay River and portions of Bean Creek (see Green Township Zoning Map).	2
TOTAL POINTS SECTION II		20
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments & citation	Points
Shorelines: Setbacks Inland Lakes		
1. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	Any property which borders on or contains a natural river, stream, pond, or lake, which is identifiable on the U.S. Geological Survey Maps of Green Township, shall be subject to waterfront setbacks for buildings and uses	2
Shorelines: Setbacks Streams		
2. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	Any property which borders on or contains a natural river, stream, pond, or lake, which is identifiable on the U.S. Geological Survey Maps of Green Township, shall be subject to waterfront setbacks for buildings and uses	2
Shorelines: Protection strips		
3. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	This vegetative strip shall be fifty (50) feet wide.	2
4. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	This vegetative strip shall be fifty (50) feet wide.	2
5. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	At least seventy (70) percent of the lot width at the water line shall be kept in its natural vegetative state with trees, shrubs, herbaceous plants or unmowed grass located thereon.	2
6. Does it specify the use of native plant species in the riparian buffer zone?	Natural vegetative state	1
7. Are invasive and exotic plants prohibited from being used?		0
Shorelines: Density		
8. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	Conservation & Resources 150' Thunder Bay River and portions of Bean Creek	2
Shorelines: Private Shared Lake Access		
9. Does the Zoning Ordinance include Private Shared Lake Access provisions that regulate number of back lots using the shared waterfront lot, development of shared lot, and docks?		0
Shorelines: Road Ends		
10. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?		0
Shorelines: Marinas		
11. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION III		13
TOTAL POINTS POSSIBLE		22

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?	Section 3.25 - Stormwater Retention The property owner or developer is required to retain on site all stormwater drainage in excess of natural conditions. This provision may require stormwater retention ponds where appropriate. An exception can be made for water leaving the site via an existing stormwater pipe, or through other stormwater facilities which will be developed at the same time as the proposed new use.	2
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?	Storm water detention, retention, transport, and drainage facilities shall be designed to use or enhance the natural storm water system on site, including the storage or filtering capacity of wetlands, watercourses, and water bodies, and/or the infiltration capability of the natural landscape. Storm water facilities shall not cause flooding or the potential for pollution of surface or groundwater, on-site or off-site.	2
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?	All stormwater facilities, including detention or retention ponds, shall be designed at minimum to handle a storm with the projected frequency of once every ten years (ten year design storm).	1
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?	Storm water facilities shall conform to the requirements of the Alpena County Drain Commissioner.	1
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION V		6
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?	Setbacks for septic systems must meet those minimum requirements set by the District Health Department.	2
TOTAL POINTS SECTION VII		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection**2=Yes; 1=Yes, minimally with comments; 0=missing**

Criteria	Citation and Comments note any comments and citation	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?	Section 3.26 - Groundwater Protection and Hazardous Substances A. State and federal agency requirements for storage, spill prevention, record keeping, emergency response, transport and disposal of hazardous substances and polluting materials shall be met. No discharges to groundwater, including direct and indirect discharges, shall be allowed without required permits and approvals. B. All toxic wastes shall be disposed of in accordance with all state or federal laws, rules and regulations governing the disposal of specific toxic substances.	2
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?	Detailed standards for groundwater protection. The project and related improvements shall be designed to protect land and water resources from pollution, including pollution of soils, groundwater, rivers, streams, lakes, ponds, and wetlands.	2
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?	No discharge to surface water or groundwater, including direct or indirect discharges of waste, waste effluent, wastewater, pollutants, or cooling water, shall be allowed without approval from state, county and local agencies.	2
TOTAL POINTS SECTION IX		6
TOTAL POINTS POSSIBLE		6

VI. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?	Schedule of regulations ranges from 30% to 75% (industrial commercial)	1
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	Parking Lot Deferment: Where the property owner can demonstrate that the required amount of parking is excessive or where there will be a dual function of parking spaces between two uses where operating hours do not overlap, the Planning Commission may approve a smaller parking area.	2
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	Two (2) or more buildings or uses may collectively provide the required off-street parking. In which case the required number of parking spaces for the individual uses may be reduced by up to twenty-five (25%) if a signed agreement is provided by the property owners. Such parking requirements shall bind future owners of parcels and shall be recorded with the Register of Deeds office.	2
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?	Parking Lot Landscaping 1. Separate landscaped areas shall be required either within or at the perimeter of parking lots. There shall be one (1) tree for every eight (8) parking spaces. A minimum distance of three (3) feet shall be established between proposed tree or shrub plantings and the backside of the curb or edge of the pavement.	2
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		0
TOTAL POINTS SECTION IV		8
TOTAL POINTS POSSIBLE		10

VII. Other Relevant Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?	In September of 2012 FEMA completed a Countywide Flood Insurance Study and DFIRM (Digital Firm) Status for Alpena County. Green Township has chosen to <u>not</u> participate in the NFIP at this time.	0
2. If yes, does is there ordinance language that regulates floodplain development?	Any filling or construction within flood plains or wetlands, or other environmental areas protected by State Law, or other laws, shall require appropriate permits from the government unit or agency having jurisdiction.	2
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?	Boundary dimensions of environmental features such as forests, water bodies, wetlands, floodplains, high risk erosion areas, slopes over twenty-five (25) percent, drainage and other similar features.	2
TOTAL POINTS SECTION X		4
TOTAL POINTS POSSIBLE		8

Score: 58

Total Possible: 96

Percent of total possible score: 60%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Long Rapids Township

Date Completed: 2014

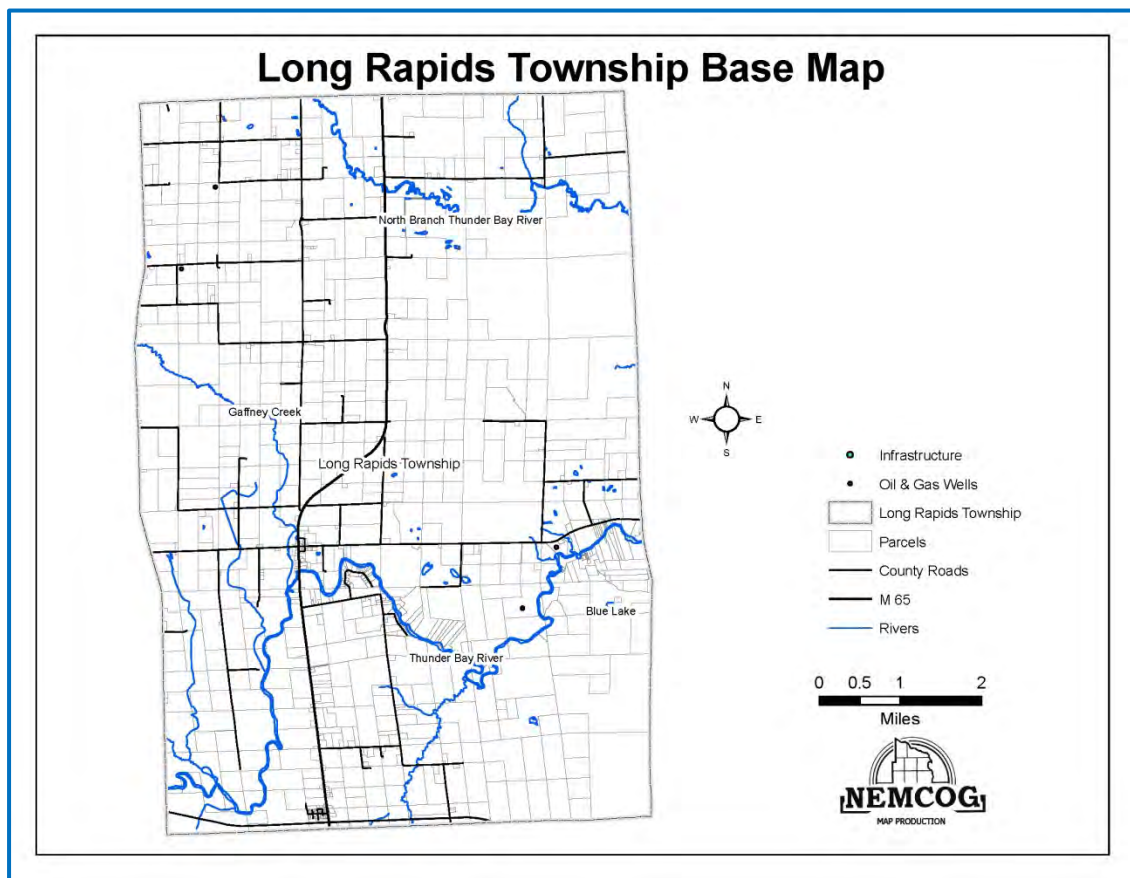
Name of Reviewer: R.L. Deuell

Zoning Ordinance Title: Long Rapids Township Zoning Ordinance

- Creation date: Made and passed this 13th day of September, 1990.

- Last amended: All amendments through July 24, 2008.

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Adequate

II. Shorelines - Adequate

III. Stormwater Management - Lacking

IV. Sewer/Septic - Adequate

V. Groundwater and Wellhead Protection - Lacking

VI. Impervious Surface Reduction - Lacking

VII. Other Relevant Elements - Lacking

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?	<i>"proper use of land and natural resources may be encouraged or regulated"</i> <i>"to regulate areas that have unique land resource problems or need special attention."</i>	1
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	Such fee shall be for the purpose of payment for the administrative costs and services expended by the Township in the implementation of this Section and the processing of the application. Such fee may be used to reimburse another party retained by the Township to provide expert consultation and advice regarding the application.	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	Article XVIII - Enforcement, Penalties And Other Remedies	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?		0
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?		0
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?		2
8. Is the Site Plan required to indicate all existing natural features?	It shall also show the location of wells, septic tank, drain field, access drive, and any river, streams, lakes, or public roads fronting the property." The location of unusual environmental features, such as streams, wetlands, shorelines, etc. The location, size, and slope of all subsurface drainage facilities.	2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?		0
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?		0
Zoning Ordinance: PUD		
11. Does ordinance include Planned Unit Development (PUD) provisions?		0
12. Do PUDs require inclusion of a minimum open space threshold?		0
Zoning Ordinance: Open Space		

13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?		0
14. Does the open space have to be managed in a natural condition?'		0
15. Are allowable uses in the open space restricted to low impact uses?		0
16. Is open space required to be protected through a conservation easement or other similar mechanism?		0
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	Environmental Conservation District Reduce the danger to public health by protecting the quality and quantity of surface and groundwater supplies from conflicting land-use activities	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?	Environmental Conservation District All land area along rivers, streams or tributaries for a horizontal distance of 1/4 mile (1320 feet) or to an appropriate physical boundary from the water's edge thereof. Those river systems include: Thunder Bay River, Gaffney Creek and Bean Creek.	2
TOTAL POINTS SECTION II		13
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments & citation	Points
Shorelines: Setbacks Inland Lakes		
1. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0		1
Shorelines: Setbacks Streams		
2. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0		1
Shorelines: Protection strips		
3. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	No lakes or impoundments	0
4. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	100' greenbelt	2
5. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	A native vegetative strip of 100 feet from the water's edge shall be maintained. Selective tree cutting and such other sound forestry practices as may be necessary to maintain the vegetative strip in a healthy, erosion-resistant condition.	2
6. Does it specify the use of native plant species in the riparian buffer zone?	native vegetative strip	2
7. Are invasive and exotic plants prohibited from being used?		0
Shorelines: Density		
8. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	220 feet of shoreline frontage	2
Shorelines: Keyhole/Funneling		
9. Does the Zoning Ordinance include keyhole prevention provisions by placing restrictions on the size and type of multi-boat launch and docking sites?		0
Shorelines: Road Ends		
10. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?		0
Shorelines: Marinas		
11. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION III		10
TOTAL POINTS POSSIBLE		22

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?		0
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?		0
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?		0
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?		0
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION V		0
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?		2
TOTAL POINTS SECTION VII		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?		0
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?		0
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?		0
TOTAL POINTS SECTION IX		0
TOTAL POINTS POSSIBLE		6

VI. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?		0
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?		0
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?		0
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?		0
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		0
TOTAL POINTS SECTION IV		0
TOTAL POINTS POSSIBLE		10

VII. Other Relevant Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?	2012 FEMA completed a Countywide Flood Insurance Study and DFIRM (Digital Firm) Status for Alpena County. Long Rapids Township has chosen to <u>not</u> participate at this time.	0
2. If yes, does is there ordinance language that regulates floodplain development?		0
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?		0
TOTAL POINTS SECTION X		0
TOTAL POINTS POSSIBLE		8

Score: 24

Total Possible: 96

Percent of total possible score: 25%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Maple Ridge Township, Alpena County

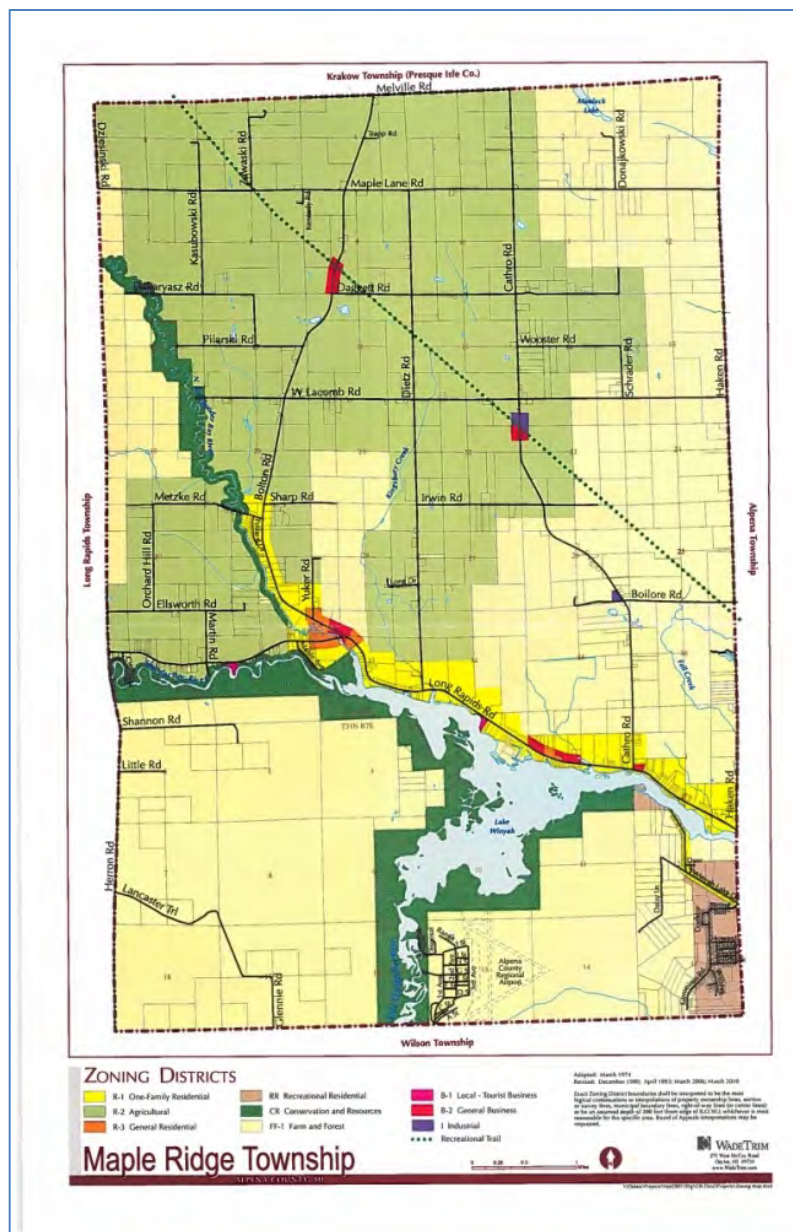
Date Completed:

Name of Reviewer: R.L. Deuell

Zoning Ordinance Title: Maple Ridge Township Zoning Ordinance

Last amended: 2009

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Adequate

II. Shorelines - Adequate

III. Stormwater Management - Lacking

IV. Sewer/Septic - Adequate

V. Groundwater and Wellhead Protection - Lacking

VI. Impervious Surface Reduction - Adequate

VII. Other Relevant Elements - Adequate

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?		0
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?		0
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	SECTION 1700. ENFORCEMENT Civil Infraction	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits		0
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?		0
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?	SECTION 1708. SITE PLAN REVIEW:	2
8. Is the Site Plan required to indicate all existing natural features?		0
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	No site plan or plat shall be approved unless it includes soil erosion and sediment control measures in accordance with the technical standards of the Alpena County Soil Conservation District. These protections measures shall apply to all developments on sites of three (3) acres or more, and shall include preventative soil erosion measures, both during and after any site work related to the development.	2
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?		0
Zoning Ordinance: PUD		
11. 12. Does ordinance include Planned Unit Development (PUD) provisions?	ARTICLE XIV - PLANNED UNIT DEVELOPMENT	2
12. 13. Do PUDs require inclusion of a minimum open space threshold?	SECTION 1400. OPEN SPACE SUBDIVISIONS;	1
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?		2
14. Does the open space have to be managed in a natural condition?		1
15. Are allowable uses in the open space restricted to low impact uses?		1

16. Is open space required to be protected through a conservation easement or other similar mechanism?		1
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	ARTICLE VIII- CR CONSERVATION AND RESOURCES DISTRICT	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?	Unless otherwise illustrated on the Zoning Map, the CR District boundaries shall be deemed to extend landward radically or at right angles from the ordinary high water line of rivers, streams, lakes, or impoundment waters appearing on the Zoning Map, to a depth of four hundred (400) feet and to a depth of four-hundred (400) feet from the right of way line of any scenic highway or scenic trail, path or road as mapped.	2
TOTAL POINTS SECTION I		18
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Shorelines: Setbacks Great Lakes Shoreline		
Shorelines: Setbacks Inland Lakes		
1. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	In the case of lots bordering lakes, rivers, or streams, the waterfront side is the front lot line.	1
Shorelines: Setbacks Streams		
2. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	In the case of lots bordering lakes, rivers, or streams, the waterfront side is the front lot line.	1
Shorelines: Protection strips		
3. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	In CR District 70'. Other districts no protection strips	1
4. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	In CR District 70'. Other districts no protection strips	1
5. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	In CR District 70'.	1
6. Does it specify the use of native plant species in the riparian buffer zone?	In CR District 70'.	1
7. Are invasive and exotic plants prohibited from being used?		0
Shorelines: Density		
8. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	CR – 150' R-1 – 100'	2
Shorelines: Private Shared Lake Access; Keyhole/Funneling		
9. Does the Zoning Ordinance include Private Shared Lake Access provisions that regulate number of back lots using the shared waterfront lot, development of shared lot, and docks?		0
Shorelines: Road Ends		
10. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?		0
Shorelines: Marinas		
11. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION II		8
TOTAL POINTS POSSIBLE		22

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?		0
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?		0
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?		0
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?		0
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION III		0
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?		2
TOTAL POINTS SECTION IV		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?		0
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?		1
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?		0
TOTAL POINTS SECTION V		1
TOTAL POINTS POSSIBLE		6

VI. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?		2
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?		0
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	3. In the instance of dual function of off-street parking spaces where operating hours of uses do not overlap, the Board of Appeals may grant an exception by reducing the total number of spaces required.	2
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?		0
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		0
TOTAL POINTS SECTION VI		4
TOTAL POINTS POSSIBLE		10

VII. Other Relevant Elements		
2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?		2
2. If yes, does is there ordinance language that regulates floodplain development?	CR District	1
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?		0
TOTAL POINTS SECTION VII		3
TOTAL POINTS POSSIBLE		8

Score: 36

Total Possible: 96

Percent of total possible score: 38%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Ossineke Township

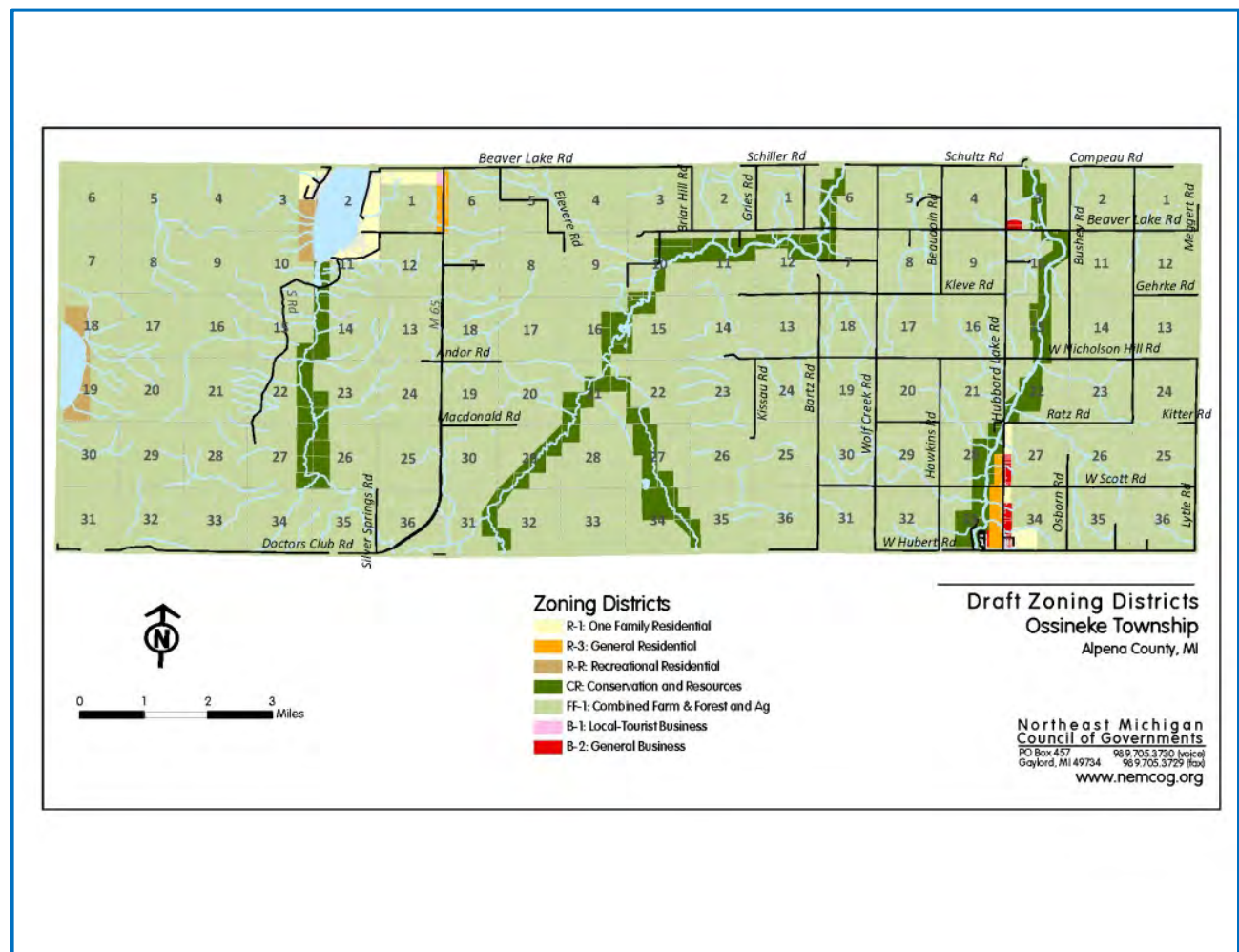
Date Completed: 7-25-14

Name of Reviewer: Richard Deuell

Zoning Ordinance Title:

Last amended: Currently being amended

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Adequate

II. Shorelines - Adequate

III. Stormwater Management - Lacking

IV. Sewer/Septic - Adequate

V. Groundwater and Wellhead Protection - Strong

VI. Impervious Surface Reduction - Strong

VII. Other Relevant Elements - Lacking

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?		1
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	Section 9.3 Fees	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	Section 9.6 Violations A. Municipal Civil Infraction: B. Inspection: C. Remedies:	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?	Requires Submissions of the "State/County Environmental Permits Checklist" COMPLIANCE WITH OTHER STATUTES AND REGULATIONS: Site plans shall conform to all applicable requirements of state and federal statutes, and approval may be conditioned on the applicant receiving necessary state and federal permits before the actual zoning permit is granted.	2
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?	Section 5.3 Pre-Application Conference Optional for all but PUD	2
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?	Plot Plans & Site Plan Review Section 5	2
8. Is the Site Plan required to indicate all existing natural features?	Plot Plan: Natural features such as forests, water bodies, wetlands, high risk erosion areas, slopes over 10%, drainage and other similar features, if determined by the Zoning Administrator to be applicable. Site Plan General: NATURAL FEATURES: Boundary dimensions of natural features such as existing trees and vegetation, forests, water bodies, wetlands, floodplains, high risk erosion areas, slopes over ten (10) percent, drainage and other similar features.	2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	COORDINATION WITH OTHER AGENCIES: The Zoning Administrator may distribute the site plan to the following for comment or recommendation prior to consideration for approval:	1
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?	RESIDENTIAL PROJECT REQUIREMENTS: Site plans for residential projects (multiple family developments and manufactured home parks) shall include the following additional information:	1

	Areas to be used for open space and recreation.	
Zoning Ordinance: PUD		
11. Does ordinance include Planned Unit Development (PUD) provisions?	No specific language but allows PUD	2
12. Do PUDs require inclusion of a minimum open space threshold?		2
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?	In PUD section	2
14. Does the open space have to be managed in a natural condition?		1
15. Are allowable uses in the open space restricted to low impact uses?		0
16. Is open space required to be protected through a conservation easement or other similar mechanism?		2
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	FF-1 Farm and Forest District and (CR) Conservation and Resources District	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?	Conservations and Resources District located along rivers	2
TOTAL POINTS SECTION II		23
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments & citation	Points
Shorelines: Setbacks Inland Lakes		
1. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	Section 3.12: Waterfront Regulations	1
Shorelines: Setbacks Streams		
2. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	Section 3.12: Waterfront Regulations	1
Shorelines: Protection strips		
3. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?		1
4. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?		1
5. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	Within twenty-five (25) feet of the ordinary high water mark, a natural vegetation strip shall be established or maintained on at least seventy percent (70%) of the	2
6. Does it specify the use of native plant species in the riparian buffer zone?	Natural vegetation strip	1
7. Are invasive and exotic plants prohibited from being used?		0
Shorelines: Density		
8. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	Not completed	1
Shorelines: Private Shared Lake Access; Keyhole/Funneling		
9. Does the Zoning Ordinance include Private Shared Lake Access provisions that regulate number of back lots using the shared waterfront lot, development of shared lot, and docks?		0
Shorelines: Road Ends		
10. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the ability to install private docks or boat hoists for the overnight mooring of boats?		0
Shorelines: Marinas		
11. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION III		8
TOTAL POINTS POSSIBLE		22

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?		2
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?		0
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?		0
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?		0
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION V		2
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?		2
TOTAL POINTS SECTION IV		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?		2
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?		2
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?		2
TOTAL POINTS SECTION V		6
TOTAL POINTS POSSIBLE		6

VI. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?		2
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	For development in any zoning district, the Planning Commission may approve a total reduction of not more than 30% of the required off-street parking spaces	2
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	If shared parking is utilized, the required parking number of parking spaces shall be reduced by 30%.	2
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?		1
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		0
TOTAL POINTS SECTION VI		7
TOTAL POINTS POSSIBLE		10

VII. Other Relevant Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?	Does not participate	0
2. If yes, does is there ordinance language that regulates floodplain development?		0
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?	Boundary dimensions of natural features such as existing trees and vegetation, forests, water bodies, wetlands, floodplains, high risk erosion areas, slopes over ten (10) percent, drainage and other similar features.	2
TOTAL POINTS SECTION VII		2
TOTAL POINTS POSSIBLE		8

Score: 50

Total Possible: 96

Percent of total possible score: 52%

Zoning Assessment

Lake Huron Watershed Community Collaboration

Name of Jurisdiction: Wilson Township, Alpena County

Date Completed: January 2014

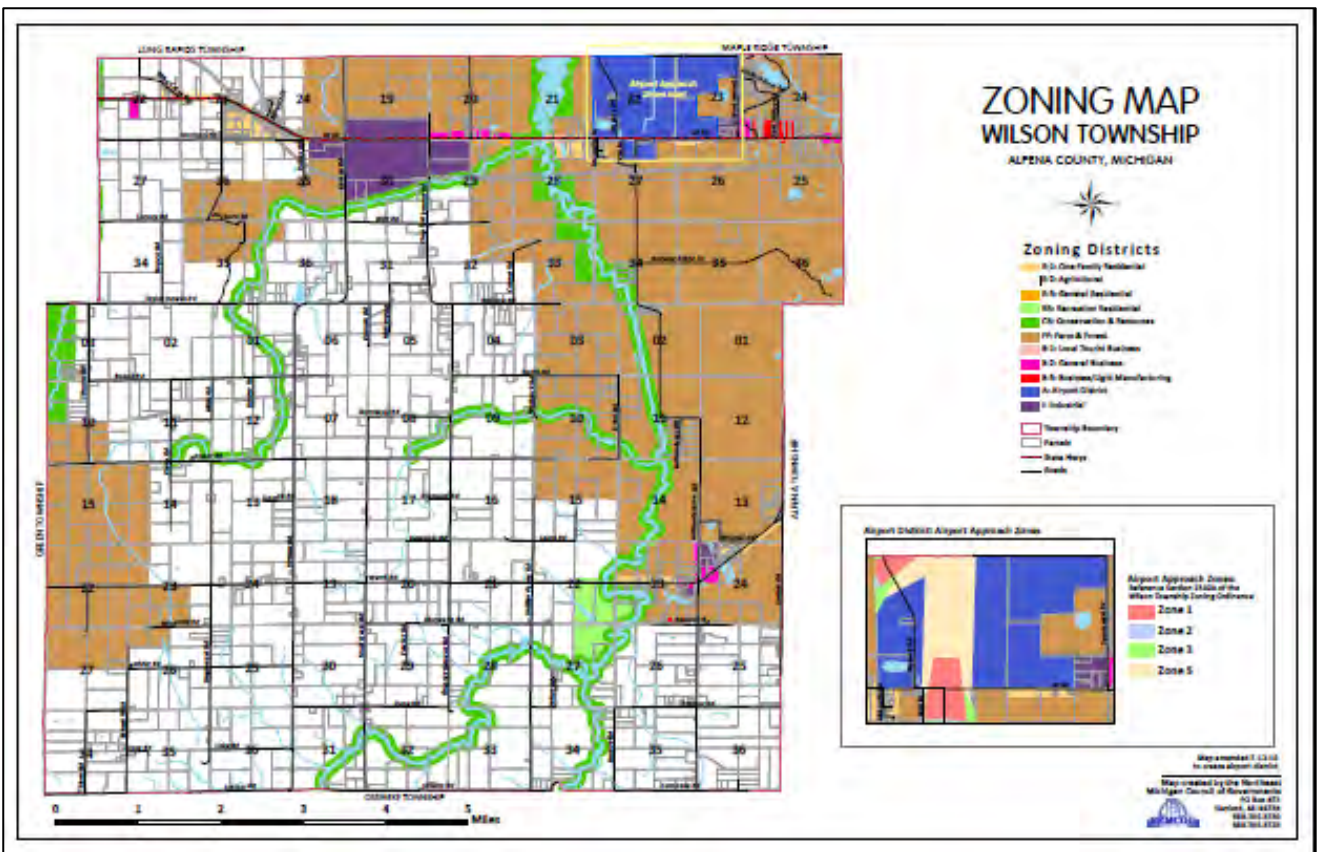
Name of Reviewer: RL Deuell

Zoning Ordinance Title: Wilson Township Zoning Ordinance

- Creation date: June 29, 1974

- Last amended: Sept. 26, 2011

Funding provided by Great Lakes Restoration Initiative, USEPA



As a part of a Lake Huron Watershed Project, we have completed a water resource protection review of your community's zoning ordinance. The review is based on a list of zoning standards related to surface and ground water quality protection. The results provide communities an opportunity to compare their current standards with recommended water quality protection approaches. While it is understood each community is unique, both its resource and its constituent base; there are several key "common ground" zoning approaches, that if adopted by all communities within a watershed, will support long term water and natural resource protection. We are hopeful your community will review the information and consider amending your ordinance to enhance water quality and natural resource protection.

Questions used in the evaluation were derived from several sources, which included Tip of the Mitt Watershed Council, Land Policy Institute and NEMCOG. The questions are grouped into the following categories: 1) basic zoning elements, 2) shorelines, 3) stormwater management, 4) sewer/septic systems, 5) groundwater and wellhead protection, and 6) impervious surface reduction. Each question was scored based on how the ordinance met the criteria. A score of **2** means "Yes, Criteria Was Met," **1** means "Minimally with Comments," and **0** means "Missing." The values for each question were totaled under each category, which was classified as strong, adequate or lacking.

Summary of Zoning Review

I. Basic Zoning Elements - Strong

II. Shorelines - Adequate

III. Stormwater Management - Strong

IV. Sewer/Septic - Adequate

V. Groundwater and Wellhead Protection - Strong

VI. Impervious Surface Reduction - Adequate

VII. Other Relevant Elements - Adequate

I. Basic Zoning Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Zoning Ordinance: Administrative		
1. Does Zoning Ordinance have a statement of purpose or intent that includes protection of water and/or natural resources?	Article 8 - CR Conservation & Resources District Because there exists in the Township, certain natural and scenic resources that should be protected and conserved to promote environmental quality and community character, this CR District is intended to apply to stream and river corridors, lake shores, impoundment waters, and/or scenic highways, as deemed appropriate	1
2. Does it include a fee system to cover costs to the community for review of proposal applications or appeals, including any professional reviews?	Such fee may be used to reimburse another party retained by the Township to provide expert consultation and advice regarding the application.	2
3. Does the Zoning Ordinance have methods in place for enforcement, including a clearly defined process for inspections and correction of violations?	Violations of the provisions of this Ordinance or failure to comply with any of its requirements, including violations of conditions and safeguards established in connection with variances and conditional uses and violations of approved site plans, shall constitute a municipal civil infraction.	2
4. Is the Zoning Ordinance proposal review process coordinated with the receipt of other applicable County, State, and/or Federal permits?	Copies of permits or waivers of permits by other agencies as may be required by statute and/or by the Zoning Administrator. If copies of permits or waivers of permits cannot be obtained, then the applicant shall show evidence that all permits required by other agencies have been filed for. No fill material shall be placed in any lake or stream within the Township unless appropriate permits are obtained from the Michigan Department of Environmental Quality. Compliance with other Statutes and Regulations: Site plans shall conform to all applicable requirements of state and federal statutes, and approval may be conditioned on the applicant receiving necessary state and federal permits before the actual Zoning Permit is granted.	2
5. Does it require a pre-application or pre-construction meeting for new development or redevelopment proposals?	PUD - Pre-Application Meeting: The developer shall meet with the Township Supervisor, Zoning Administrator and Planning Commission Chair prior to the submission of the development plan. The purpose of this meeting is to discuss early and informally the purpose and effect of this Ordinance and the criteria and standards contained herein.	2
6. Does the Zoning Ordinance include requirements for environmental assessment, at the expense of the applicant, for proposals that include a land area of five acres or more, or building over 50,000 sq. ft.?		0
Zoning Ordinance: Site Plan Review		
7. Does the Zoning Ordinance require Site Plan Review?		2

8. Is the Site Plan required to indicate all existing natural features?	The location of existing environmental features, such as streams, wetlands, shorelands, mature specimen trees, wooded areas or any other unusual environmental features.	2
9. Does the Site Plan Review process require a Soil Erosion and Sedimentation Control Plan, or coordination with County regulations?	The Planning Commission may distribute the site plan to the following agencies or any other agency deemed appropriate for comment prior to consideration for approval. The Alpena County Soil Erosion and Sedimentation Control Officer;	2
10. Does the Zoning Ordinance prohibit land clearing or soil stripping prior to site plan review?	Permits for New Use of Land - No vacant land shall be used or an existing use of land be changed to a use of a different class or type unless a Zoning Permit is first obtained for the new or different use.	1
Zoning Ordinance: PUD		
11. 12. Does ordinance include Planned Unit Development (PUD) provisions?	Section 1715. Planned Unit Developments	2
12. 13. Do PUDs require inclusion of a minimum open space threshold?	Open Space: A minimum of twenty (20) percent of the land developed in any planned unit development project	2
Zoning Ordinance: Open Space		
13. Are flexible site design criteria or incentives available to encourage developers to include open space or cluster design provisions?	In PUD	2
14. Does the open space have to be managed in a natural condition?	Shall be reserved for common open space and recreational facilities for the residents or users of the area being developed.	1
15. Are allowable uses in the open space restricted to low impact uses?	Shall be reserved for common open space and recreational facilities for the residents or users of the area being developed.	1
16. Is open space required to be protected through a conservation easement or other similar mechanism?	The open space restrictions must be permanent, not just for a period of years.	2
Zoning Ordinance: Special Districts		
17. Does the Zoning Ordinance have districts specifically designated to protect natural resources such as Resource Conservation or Forest Resource Management?	Article 8 - CR Conservation And Resources District Intended to apply to stream and river corridors, lake shores, impoundment waters, and/or scenic highways, as deemed appropriate.	2
18. Does the Zoning Ordinance have overlay districts for resource protection such as waterfront or wetlands?	Article 8 - CR Conservation And Resources District. Applies to Lake Winyah, South Branch of Thunder Bay River, Bean Creek, Butterfield Creek, King Creek and Wolf Creek.	2
TOTAL POINTS SECTION I		28
TOTAL POSSIBLE POINTS:		36

II. Shorelines 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments & citation	Points
Shorelines: Setbacks Inland Lakes		
1. Does the Zoning Ordinance require a minimum shoreline setback for inland lakes? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	On waterfront lots, the front yard setback shall be seventy (70) feet from the ordinary high water mark.	1
Shorelines: Setbacks Streams		
2. Does the Zoning Ordinance require a minimum shoreline setback for streams? SCORE: 75' = 2 25-74' = 1 less than 25' = 0	On waterfront lots, the front yard setback shall be seventy (70) feet from the ordinary high water mark.	1
Shorelines: Protection strips		
3. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Inland Lakes?	Greenbelt: A strip seventy (70) feet wide parallel to the bank of a stream or lake	2
4. Does Zoning Ordinance require riparian buffers or greenbelts, a minimum of 30' deep, on Streams?	Same as above the C & R District cover major water features if the township.	2
5. Does Zoning Ordinance specify the degree of vegetation which may be removed in the riparian buffer zone or greenbelt?	Maintained in trees and shrubs or in its natural state to carry out the requirements of the Conservation and Resources District. Trees and shrubs may be trimmed and/or pruned through the greenbelt for a view of the fronting waters and for access to a boat dock. Allows selective tree cutting in the native strip space to remove dangerous trees (windthrow hazard) or other trees and shrubs that may prevent the native strip area from being retained in a healthful growth condition.	2
6. Does it specify the use of native plant species in the riparian buffer zone?		1
7. Are invasive and exotic plants prohibited from being used?	No mention of invasive and exotic plants	0
Shorelines: Density		
8. Does Zoning Ordinance regulate the width of waterfront lots? 100' or more = 2 75'-99' = 1 Less than 75' = 0	CR - 40,000 sq. ft. and 150' width	2
Shorelines: Keyhole/Funneling		
9. Does the Zoning Ordinance include keyhole prevention provisions by placing restrictions on the size and type of multi-boat launch and docking sites?		0
Shorelines: Road Ends		
10. Does the Zoning Ordinance regulate Road Ends terminating at the edge of navigable waters, to ensure the right of public access does not include: the		0

ability to install private docks or boat hoists for the overnight mooring of boats?		
Shorelines: Marinas		
11. Does the community regulate marinas by using special land use provisions or other tools?		0
TOTAL POINTS SECTION II		11
TOTAL POINTS POSSIBLE		22

III. Stormwater Management 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Stormwater: Construction and Redevelopment		
1. Does the community regulate stormwater as part of the Zoning Ordinance?	PUD and Site Plan Review Standards for Granting Site Plan Approval: Drainage: On-site drainage shall be required.	2
2. Are stormwater management areas and facilities whether on-site or off-site, required to be designed, constructed, and maintained to prevent flooding and protect surface and ground water quality?	Appropriate measures shall be taken to ensure that removal of surface waters will not adversely affect neighboring properties. The use of detention/retention ponds may be required. Surface water on all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic or create puddles in paved areas. Catch basins may be required to contain oil filters or traps to prevent contaminants from being discharged to the natural drainage system.	2
3. Is the design of any stormwater management system required to be based upon a 25-year frequency, 24-hour duration storm event?	Not specified	1
4. Does the stormwater require runoff leaving the site to be controlled to a non-erosive velocity, both during and after construction?	Provisions shall be made to accommodate stormwater and to prevent erosion and the formation of dust. Storm water detention, retention, transport, and drainage facilities shall be designed to use or enhance the natural storm water system on site, including the storage or filtering capacity of wetlands, watercourses, and water bodies, and/or the infiltration capability of the natural landscape. Storm water facilities shall not cause flooding or the potential for pollution of surface or groundwater, on-site or off-site.	2
5. Does ordinance require that all stormwater management systems be regularly evaluated and maintained?		0
TOTAL POINTS SECTION III		7
TOTAL POINTS POSSIBLE		10

IV. Sewer/Septic 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments	Points
Septic Systems		
1. Does the Zoning Ordinance require an inspection of septic tanks by an authorized inspector? Is there a point of sale inspection requirement?		0
2. Are regulations that pertain to septic systems coordinated with the County Health Department regulations?	Septic systems meeting District Health Department #4 requirements.	2
TOTAL POINTS SECTION IV		2
TOTAL POINTS POSSIBLE		4

V. Groundwater and Wellhead Protection 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Groundwater Protection		
1. Does the Zoning Ordinance have groundwater protection standards for commercial, industrial or other uses that may cause groundwater contamination?	Section 1624. Groundwater Protection These provisions apply to uses that use, generate or store hazardous substances in quantities greater than twenty-five (25) gallons or two hundred twenty (220) pounds per month.	2
2. Is Site Plan Review used to ensure there are no unnecessary threats posed to groundwater by new or redevelopment proposals?	Section 1606. Plot Plans & Site Plan Review (All Districts) Several specific standards relate to groundwater protection. General purpose floor drains, which discharge to groundwater, are prohibited.	2
3. Does the Zoning Ordinance prohibit both direct and indirect discharge of hazardous substances to groundwater without appropriate approvals/permits?	General purpose floor drains shall be connected to an on-site holding tank.....in accordance with state and county requirements, unless a groundwater discharge permit has been obtained from the appropriate governing entity. (14) Sites at which hazardous substances, hazardous wastes, or potentially polluting materials are stored, used, or generated shall be designed to prevent spills and discharges of such materials to the air, surface of the ground, groundwater, lakes, streams, rivers or wetlands. (15) Secondary containment facilities	2
TOTAL POINTS SECTION V		6
TOTAL POINTS POSSIBLE		6

VI. Other Relevant Elements 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Floodplains		
1. If FEMA floodplain mapping has been completed, does community participate in the National Flood Insurance Program?	FEMA Completed floodplain mapping, township has not chosen to participate	0
2. If yes, does is there ordinance language that regulates floodplain development?	Reference in PUD	1
3. Does the community coordinate their efforts to protect the floodplain with adjoining communities and the county?		0
4. Does the Zoning Ordinance require floodplains to be identified on site plans?		2
TOTAL POINTS SECTION VII		3
TOTAL POINTS POSSIBLE		8

VII. Impervious Surface Reduction 2=Yes; 1=Yes, minimally with comments; 0=missing		
Criteria	Citation and Comments note any comments and citation	Points
Impervious Surface Reduction: Lot Coverage		
1. Does the Zoning Ordinance contain impervious surface area regulations or guidelines for individual lots?	Rural area 30 to 35%	2
Impervious Surface Reduction: Parking Lots		
2. Does Zoning Ordinance allow flexibility to reduce the number of parking spaces constructed, if warranted by the proposed development?	Parking Lot Deferment: Where the property owner can demonstrate that the required amount of parking is excessive or where there will be a dual function of parking spaces between two uses where operating hours do not overlap, the Planning Commission may approve a smaller parking area.	2
3. Does the Zoning Ordinance require/encourage shared use of parking between adjacent land uses? In what districts?	See above	2
4. Does the Zoning Ordinance require minimum landscaping standards in parking lots?		0
5. Does the Zoning Ordinance allow for shared driveways and in what instances and in what districts?		0
TOTAL POINTS SECTION VI		6
TOTAL POINTS POSSIBLE		10

Score: 63

Total Possible: 96

Percent of total possible score: 66%