

NATURAL AND ENVIRONMENTAL RESOURCES COMMITTEE
McHenry County Administration Building
667 Ware Road, Woodstock, IL 60098

MINUTES OF WEDNESDAY, MARCH 9, 2011:

Chairman McCann called the committee meeting to order at 8.36 a.m. The following members were present: Mary McCann, Chairman; Donna Kurtz; Pete Merkel; Marc Munaretto; Virginia Peschke and Kathleen Bergan Schmidt. Bob Nowak was absent. Also in attendance: Pete Austin, County Administrator; Cassandra McKinney, Water Resource Manager; Dennis Sandquist, Darrell Moore and Kim Kolner, Planning & Development; Patti Nomm, Health Department; Ersel Schuster, County Board; Nancy Schietzelt, Environmental Defenders of McHenry County; Bill Kreznor, William R. Kreznor & Associates; interested public and press.

Mary McCann, Chairman	
Donna Kurtz	Pete Merkel
Marc Munaretto	Bob Nowak
Virginia Peschke	Kathleen Bergan Schmidt

MINUTES: Committee members reviewed the Natural and Environmental Resources Committee minutes of January 31, 2011; February 9, 2011; and February 17, 2011. Ms. Peschke made a motion, seconded by Ms. Schmidt, to approve the minutes. Ms. Kurtz requested that a three-page memorandum prepared by her and dated March 9, 2011 concerning the input for the McHenry County Unified Development Ordinance (UDO) that was passed out to committee members during the February 17, 2011 meeting, and to members of the UDO consulting group, be included as part of the February 17, 2011 minutes. The minutes were approved, including the attachment of the three-page UDO memorandum to the February 17, 2011 minutes, with a unanimous voice vote of all ayes.

PUBLIC COMMENT: None.

PRESENTATION:

Recharge: Ms. McKinney demonstrated the "Urban Areas Hydrological Budget" ruler created by the University of Illinois Extension Service. The ruler represents 36 inches of annual rainfall. In an urban area the has approximately 29 inches of runoff, and 7 inches is lost to evaporation with zero infiltration. Therefore, there is no groundwater recharge in urban areas. On the reverse side of the ruler shows the rural areas and areas that have open space. Given 36 inches of rainfall, 27 inches is taken up by plants, 2 inches is runoff, with 7 inches going into the ground for groundwater recharge. If an urban area plants a prairie, it improves the ability of the soil to absorb water, thereby reducing runoff. Chairman McCann requested Ms. McKinney to prepare a fact sheet about the ruler relating to the relevant facts on recharge.

OLD BUSINESS:

Review of Recommendations on WRAP Section: 2: B1: Ms. McKinney provided members with a matrix of Section II, Subsection B1 which is now in landscape format as previously requested. All changes requested at the February meeting have been noted on this document. Several Committee members requested that impacts from agriculture be examined, and stronger reporting standards for high-capacity wells be included in matrix. However, the way the state regulates water, this is beyond the jurisdiction of the county. Ms. McKinney explained currently agricultural (AG) wells are exempt from any reporting criteria. That exemption goes away in the next five years which will allow the measuring of agricultural wells and the impacts they are having on the groundwater. Any new AG wells have to abide by the notification system when high-capacity wells (over 100,000 gallons per day, or in any 24-hour period) are drilled. Such wells will have to obtain approval from the Illinois State Water Survey that indicates the potential impact of each new well on the surrounding wells and water table. not be a negative impact for existing AG wells that are exempt for five years.

Ms. Peschke made a motion, seconded by Ms. Schmidt, to approve the changes as presented concerning Section II: Local Water Quantity and Quality, Subsection B1) Overarching Recommendations, as amended. The motion carried with a unanimous voice vote of all ayes.

Chairman McCann introduced Bill Kreznor, a soil scientist from McHenry County, who is on the Environmental Health Committee.

NEW BUSINESS:

Subsection B2) – Land Use and Zoning: Ms. McKinney provided members with a matrix summarizing this section.. She mentioned that the second provision has been amended from the original WRAP document. It now reads "The County should work with the local Soil and Water Conservation District and the Illinois State Water Survey to ensure all proposed high-capacity wells meet the revisions to the Water Uses Act of 1983 contained in Public Act 096-0222." As mentioned

Approved: 4-13-11

by Ed Weskerna at the last meeting, the Illinois State Water Survey is working with the local Soil and Water Conservation District to do this.. Ms. Nomm mentioned that local ordinances would require our involvement for wells that are private, semi-private and non-community and the Health Department is actively involved with large-capacity wells.

Ms. McKinney noted that the first two recommendations are on-going.

The third recommendation is for the McHenry County Department of Health to evaluate the potential to implement an inventory and monitoring program for private water wells. This could include a reminder program for annual water sample analysis. This is for evaluation with no further action until it is determined that it is something Environmental Health can actual do.. Ms. Nomm stated that currently there is not an inventory of all private wells. They do have some historic documents on private wells, and wells installed in the past three to five years have been recorded. She mentioned that AG wells require permits, and they have a list for approximately the past five to six years concerning installed irrigation wells, but many AG wells predate their list. She estimated that there are approximately 34,000 to 35,000 water wells in the County, based upon census data. Ms. McKinney mentioned that the County currently has 41 monitoring wells that report in real time and are as evenly distributed throughout the County, as public properties will allow. Mr. Merkel mentioned that municipalities keep daily records which report the amount of water being pumped. Ms. McKinney currently does an annual, voluntary survey with all the municipalities that have a community water supply well. Only 7 out of 32 municipalities completed the most recent survey.

The fifth recommendation: to consider establishing a standardized process for evaluation of existing onsite wastewater treatment systems and water wells for real estate transactions or property refinancing, etc. Currently a certified professional is not required to do some of these evaluations.. Ms. Nomm mentioned that a standard evaluation test typically includes looking at the well for construction defects and taking a water sample. Ms. McKinney stated that what is being recommended is that it be required that a standard evaluation be completed by a trained professional for every real estate transaction that involves a water well. Mr. Munaretto questioned why it would be the role of the county to set up any standardized process that is a private party issue between the landowner and the buyer, unless what is being suggested is that the local government wants to regulate a process that has largely been a private sector process. Many companies do well and septic evaluations. There are contractual relationships between buyer/seller and between mortgagor/mortgagee, and he questioned if government wants to insert itself in that process in some formal way. He does not feel there is a need to involve government in this process. Ms. Nomm mentioned that this is an item the task force felt strongly about. This has been reviewed for years by the Health Department and it does raise questions as to ways to enforce it, which would be difficult to do. She feels they could better focus their time with helping individuals who receive the reports with a better understanding of what the reports mean. Mr. Merkel questioned if the county have the authority and power to require these evaluations. Ms. Nomm mentioned that statewide, there is no requirement which states that an evaluation must be done by certain individuals with certain credentials. Mr. Munaretto stated that he does not feel this is something the County wants to become involved in and it will be placing an unnecessary burden upon the County. Due diligence is the responsibility of the buyer and not the responsibility of government. Mr. Sandquist mentioned that he did not think they would want to require an evaluation to protect the buyer. If it were going to be required, it would have to be based upon a public health concern, and neighboring properties and community water quality in general. Ms. Peschke mentioned that it may be good to establish a standardized process, but it would be up to the Association of Realtors to adopt it. She agrees with Mr. Munaretto that the County is not the entity who actually put their stamp of approval on the process. Mr. Munaretto questioned if they want a standardized form, it can be done. He does not know if it should be a policy recommendation, and he feels that this is not the province of this committee, it is the province of the Public Health Department. Chairman McCann stated that this committee would provide direction to the Health Committee. She asked if this section could be re-worded as follows: "to work with community real estate professionals to encourage standardized reporting of well and septic inspections for closing purposes." Ms. Schmidt requested that "etc." at the end of this section be removed. Mr. Munaretto mentioned that he feels it is inappropriate for this to be called a policy. Ms. McKinney will remove the word "policy" from "Policy Recommendations" in this subsection. Ms. Kurtz would like to know what other communities are doing. Ms. McKinney mentioned that this was a taskforce recommendation and she will contact representatives from the real estate community for their input and will report back to the committee at a later date. Several committee members mentioned that this is not something they want to require in the unincorporated areas of the County. Chairman McCann stated that they have two choices, eliminate the section or leave it in this subsection to evaluate. Mr. Munaretto feels that this does not rise to the level of a policy and it should not be included. Mr. Merkel agrees with Mr. Munaretto and mentioned that this should not be subject to only unincorporated areas of the county, but should also include incorporated areas of the County. Ms. Schmidt feels this subject needs more evaluation. Chairman McCann agrees with Messrs. Munaretto and Merkel and feels that it does not belong under Land Use and Zoning in the

Water Resource Action Plan at this moment. She requested that it be removed from the subsection before it is brought before the County Board.

Chairman McCann asked committee members if they would prefer to hold future NERC meetings in Conference Room A and it was the consensus of the committee to do so.

Zoning Regulations: Recommendations subsection. Prohibited practices states that the following new facilities, sites, units, or potential routes should not be located within a delineated Category A or B sensitive aquifer recharge area: low-level radioactive waste sites; municipal waste landfills; and special or hazardous waste landfills. It was the consensus of the committee to recommend this section.

Restricted Practices: Class V underground injection wells should be restricted within a delineated Category A or B sensitive aquifer recharge area. Ms. McKinney stated that a Class V underground injection well is a direct injection of untreated surface water into aquifer or gravel land for quick distribution of water. They resemble dry wells. "Restricted" could include, but not be limited to, the use of best management practices, setbacks, and pretreatment to protect groundwater quality. If Class V wells are allowed, stormwater best management practices should be required. It is not prohibiting them, but it is requiring a protective measure in front of the water entering the ground so there is not contamination of the aquifers. Mr. Munaretto mentioned that there is engineering that provides for both the pre-treatment and the filtration of this type of discharge so the utilization of best management practices makes sense. It should not be prohibited, but it should be restricted. He agrees with the language and feels it is appropriate. Mr. Sandquist feels the language is appropriate and necessary to meet one of the objectives in the Plan which references infiltration as opposed to detention and discharge to surface water bodies. Ms. McKinney stated that infiltration of the surface water into our groundwater is a good thing, but not at the expense of quality. She mentioned that there is an item that needs to be added to this section, that being that the Class V underground injection wells have to be maintained and once they do use the best management practices, there is maintenance of the wells. It was the consensus of the committee to accept this section, with the addition of language stating that the wells need to be maintained.

The first sub-section suggests minimizing intensive development activities in sensitive aquifer recharge areas. This could include leveling and compacting land surfaces.

The second sub-section suggests minimizing impervious surfaces and mass grading in recharge areas, utilizing conservation design techniques such as clustering, narrower street widths, reduced parking lot sizing, and pervious pavement. Use of pervious pavement may also require some consideration of water quality protection due to vehicle fluids, etc. She will delete the word "etc." from this sub-section. Both of these sub-sections will be completed in tandem with the UDO process.

The third sub-section suggests discouraging intensive development activities, such as industrial facilities, shopping centers, parking lots, and high density housing developments in areas designated Category A or B on the SARA map. Category A is the most permeable or infiltrative-type of soil that would be greater than 20" per hour of infiltration of water. Category B would be 6" to 20" per hour of infiltration of water. Anything not in Category A or B would be considered less desirable for aquifer recharge and would have less than 6" per hour of infiltration of water. 57% of the County falls in either Category A or B.

Ms. Kolner mentioned that in their staff reports that go to the ZBA for zoning requests, they do include the SARA map and the designation if it has any type of high or moderately-high contamination possibilities. At today's hearing Ms Kolner will be providing the ZBA with information about some of the items proposed in this Plan and provide more education on how to interpret and use the resources that are included in the staff reports in order to help the ZBA make their decisions If a development is proposed for an area of high potential for contamination, as in Category A on the SARA map, as part of the conditions the ZBA may want to add some of the other recommendations in the Plan concerning best management practices and other items concerning filtration. It is not to discourage any development, but to make sure it is done properly.

Chairman McCann asked Bill Kreznor for a summary of his experiences with municipalities and how they handle hydric soils. He has worked with the Villages of Long Grove and Lake Zurich and they have regulations governing development in lowland conservancy areas, their name for hydric soils. These communities recognize that these types of soil areas are sources of groundwater recharge, wetlands, poor bearing strength for buildings, and are often located in flood ways and

flood plains. Both of these villages have developed regulations for hydric soil areas. The areas are identified on either the published soil maps, or an individual may hire someone to perform an onsite investigation of these areas and delineate where the boundaries of the hydric soils occur. Restrictions may include impervious surface, whether it be a structure or a parking lot. Long Grove is more conservative in terms of what they regulate. In most cases, the lowland conservancy soil areas have to be left alone and in some cases you may not mow them, or you may not remove native vegetation without a permit from their Scenic Corridor or Conservancy Committee.

It was the consensus of the committee to approve the first three sub-sections under the "Development" section of Sub-section B2.

The fourth sub-section suggests using best management practices that promote infiltration and treatment to the maximum extent practical.

The fifth sub-section suggests employing conservation design techniques to the maximum extent practical in sensitive recharge areas. These techniques help preserve open space and reduce impervious surfaces.

Ms. Kurtz questioned how this matches with the Crystal Lake Watershed Ordinance. Chairman McCann mentioned that at a Stormwater Commission meeting, Crystal Lake asked them to include the provisions of the Crystal Lake Watershed Ordinance in the Stormwater Ordinance. Mr. Sandquist mentioned that the Commission has it on their agenda, but they said that they want to review what this Plan says, which is creating a countywide stormwater infiltration requirement, and then find out what it looks like and how it compares with the Crystal Lake Watershed Ordinance, and then decide, in addition to the countywide standard developed, if they want to additionally adopt the Crystal Lake standard, if the Crystal Lake standard is higher and appropriate for that watershed. This has been the topic of discussion for the TAC for the last three or four months. Ms. Kurtz requested that Chairman McCann take any approval that she would give as conditional on the Crystal Lake Watershed comparison that is being done. It was the consensus of the committee to approve the fourth and fifth sub-sections under the "Development" section of Sub-section B2, as edited.

The sixth sub-section: the review and revision to the County's subdivision ordinance as appropriate. Mr. Munaretto stated that there is other criteria within ordinances in McHenry County that provide guidance with respect to whether conservation design is more or less appropriate, so it is not the province of this committee to make those determinations and that is why the language says "require" or "promote" is wholly acceptable in his opinion. He suggested committee may want to consider changing the wording to say "require or promote where applicable" where it would be applicable in order to create clarity. Mr. Sandquist stated that when the taskforce wrote this, there were a large number of communities, including the County, which already had a conservation design ordinance. The Task Force was looking at the large picture in order to promote or encourage municipalities that do not have conservation design ordinances to adopt them. Mr. Sandquist mentioned that the word "maintain" will be added in two places in this section. Ms. McKinney will make the changes and bring this section back to the committee for their review at the next meeting. It was the consensus of the committee to approve the sixth sub-section under the "Development" section of Sub-section B2, as amended.

Subsection B2 – Land Use and Zoning – Wellhead Protection Areas via Zoning Authority. State statutes provide local governments the authority to protect groundwater recharge areas and community wellhead zones via ordinances and zoning controls. Marengo, Lake in the Hills, and Fox River Grove have adopted wellhead protection area ordinances (WHPA) that can serve as models. A detailed discussion of relevant land use related to groundwater protection tools can be found in the County's Groundwater Resources Management Plan, Report 3. It was the consensus of the committee to approve this section.

Regulated Recharge Areas (RRA) Designation section's summary is to consider obtaining a Regulated Recharge Areas Designation via 415 ILCS 5/17.3 for each municipality, as well as unincorporated McHenry County. RRA's would allow the County more authority on what happens in certain areas. There are currently no RRA's in McHenry County. Mr. Munaretto feels that this is an area that is ripe for unintended consequences; this is an area that may hurt the County as much as to help it. It was the consensus of the committee to approve this section.

REPORTS TO COMMITTEE:

McHenry County Conservation District: Mr. Merkel reported that the MCCD is working through their budget process. A retreat was held last week on budgeting and long-term financial planning. Committee members will be receiving a copy of the budget in May. One Board of Trustee position will be vacant as of June 30, 2011. This open position will be posted and the public is encouraged to apply. An updated 4-page document of information for the MCCD Trustee position will be provided to committee members by Ms. Haines upon her receipt of it from the MCCD. Chairman McCann mentioned that there may be a second committee meeting in April in order to allow appropriate time to interview candidates for this position.

Natural Hazard Mitigation Plan: None.

Agricultural Conservation Easement Farmland Protection Commission: Members provided their views concerning a memorandum dated March 2, 2011 from ACE concerning possible funding for a local food-system assessment from the McHenry County Community Foundation (MCCF). Ms. Kurtz feels the local food-system assessment is a good project, but she does not want County staff working on this project during County work hours. She feels the community should oversee this project and have their own staff or personnel handle the duties of the project. Mr. Munaretto feels that it is not appropriate for the County, in any form, to be involved in this project. Mr. Sandquist stated that the message they heard from committee members at the prior meeting was that this is a great project, it should be done, but the County should not be the lead in the project and it should not become a permanent County program. They have since met with several agencies that may be involved in this project, including the Farm Bureau and the Economic Development Corporation. Many agencies feel this is a great project and have stated that their agencies may want to participate, but none of the agencies have stepped forward and offered to be the organizing agency for this project. He mentioned that they are very cognizant of the committee's concerns that this project does not become a County program. Ms. Schietzelt requested, on behalf of the Environmental Defenders of McHenry County, if the County would allow the ACE meetings already scheduled from now to the end of 2011 be divided between ACE business and assessment topics. This would allow agencies time to obtain money, grants, and possible staffing and then take over the process by the end of 2011. Staff time is already committed to be used for these ACE meetings. Ms. Kurtz stated that she would approve this request, if two conditions occur: (1) that ACE provide a memo to the NERC Chairman stating their support of this proposal, and (2) by the end of the first meeting, an organization is identified as the lead agency for this project. She stated that the County cannot support a new program. Mr. Munaretto mentioned that the County taking on another project is not appropriate at this time and he feels strongly that they should not engage in this project. He suggested that they find a grant and then approach the committee to see whether or not they want to collaborate with the project. Mr. Merkel agrees with Mr. Munaretto's statement. Ms. Schmidt can see the value of this project, but is concerned about the County's involvement, and she agrees with the suggestions made by Ms. Schietzelt.

Mr. Munaretto left the meeting at 10:40 a.m.

Mr. Sandquist asked members if they agreed to allow staff participate at a certain level and be a part of the process for this project, along with researching grant money. Ms. Kurtz mentioned that she would not have a problem with staff researching grant money, or having County facilities used for the meetings. With her two conditions stated earlier, she does not have a problem with ACE staff's already committed time being used to assist with this project. Chairman McCann agrees with Mr. Munaretto's prior statement, and feels ACE needs to focus on its part as being a part of land use planning. Mr. Sandquist stated that it may be an unrealistic request to have an agency commit to be the lead agency of this project at the next ACE meeting. Ms. Schietzelt suggested that a lead agency be named by September, 2011. Committee members agreed with this suggestion.

In summary, members encouraged the ACE Commission to proceed with conducting a local food-system assessment with the following conditions: (1) ACE meetings scheduled from this date to the end of 2011 be divided between ACE business and food-system assessment topics and will be a transition period for a new lead agency to take over this project; (2) staff time already committed to these meetings may assist with the assessment; (3) a lead agency will be named by the end of September, 2011; and (4) staff time may be used to assist with researching grant funds to support the local food-system assessment project.

Regional Water Planning Group: None.

NPDES: National Pollution Discharge Elimination Systems:

Watershed Updates: None.

Stormwater Updates: Chairman McCann reported that the Stormwater Commission will meet this month. A Drainage Workshop for Decision Makers is scheduled for Friday, March 25, 2011 from 9:30 a.m. to 2:00 p.m. and will be held at the McHenry County Soil & Water Conservation District in Woodstock, IL. The cost is \$15.00.

Solid Waste: None.

Green Team: None.

Other: Chairman McCann mentioned that the Environmental Health Advisory Committee meets quarterly and they have been discussing salt and chlorides. Their next meeting will be in May. Future reports from this committee may be attached to future agendas.

EXECUTIVE SESSION: None.

FUTURE TOPICS:

Chairman McCann asked committee members if they would prefer to hold future NERC meetings in Conference Room A and it was the consensus of the committee to do so.

ADJOURNMENT: Mr. Merkel made a motion, seconded by Ms. Schmidt, to adjourn the meeting at 11:10 a.m. The motion carried with all members present voting aye.

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RECOMMENDED FOR BOARD ACTION/APPROVAL:

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Subsection B2) Land Use and Zoning

Restricted Practices		6 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	4 yr.	5 yr.	N/A	Notes
7	Class V underground injection wells should be <i>restricted</i> within a delineated Category A or B sensitive aquifer recharge area: "Restricted" could include, but not be limited to, the use of best management practices, setbacks, and pretreatment to protect groundwater quality. If Class V wells are allowed, stormwater best management practices should be required along with annual inspection and maintenance to ensure proper functioning of the system.										Class V underground injection wells include multiple-family and non-residential onsite wastewater treatment systems serving 20 or more individuals a day. However, Article X of the McHenry County Public Health Ordinance already includes requirements to address systems installed in rapidly permeable soils on individual sites and for new subdivisions. It is not the intent of this policy to propose additional restrictions for onsite-wastewater treatment systems.
8	Retrofitting existing drywells utilizing a treatment train and other best management practices should be encouraged. Reference the McHenry County Stormwater Ordinance for best management practices	D	D	D	D	I	I	I	I		
9	The County and Municipalities can help protect groundwater quality and quantity by passing regulations and policies that: Minimize intensive development activities in sensitive aquifer recharge areas. Minimize impervious surfaces and mass grading in recharge areas, utilizing conservation design techniques such as clustering, narrower street widths, reduced parking lot sizing, and pervious pavement. Use of pervious pavement may also require some consideration of water quality protection due to vehicle fluids- etc. Discourage intensive development activities, such as industrial facilities, shopping centers, parking lots, and high density housing developments in areas designated Category A or B on the SARA map.										Complete in tandem with the UDO process
9a	Minimize intensive development activities in sensitive aquifer recharge areas.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9b	Minimize impervious surfaces and mass grading in recharge areas, utilizing conservation design techniques such as clustering, narrower street widths, reduced parking lot sizing, and pervious pavement. Use of pervious pavement may also require some consideration of water quality protection due to vehicle fluids- etc.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9c	Discourage intensive development activities, such as industrial facilities, shopping centers, parking lots, and high density housing developments in areas designated Category A or B on the SARA map.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9d	Use stormwater best management practices that promote infiltration and treatment to the maximum extent practical. See Section B3 for additional information.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO Process--Stormwater Management Ordinance

Subsection B2) Land Use and Zoning

	6 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	4 yr.	5 yr.	N/A	Notes
9e	Employ conservation design techniques to the maximum extent practical in sensitive recharge areas. These techniques help preserve open space and reduce impervious surfaces.									
	I	I	I	I	I	I	I	I		Complete in tandem with the UDO process
10	Development Continued									
	Review and revise the County's subdivision ordinance, as appropriate, to:									
10a	require an inventory of high priority recharge areas on the site and within 200 feet of the boundary of the site, and									
	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10b	add high priority recharge areas to the list of resources to be included as a cumulative trigger for the purpose of determining if a conservation design requirements are mandatory.									
	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10c	Promote natural landscaping with native prairie grasses, trees, shrubs, and wetland plants in lieu of conventional turf grass. Natural landscaping does not require irrigation or fertilizer and can significantly enhance groundwater infiltration									
	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10d	Require or promote conservation design ordinances to help ensure that groundwater recharge is preserved, along with the more obvious natural features like oak woods, wetlands, and creeks. McHenry County and several local municipalities have adopted standards that require conservation design for subdivisions and other land developments									
	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process

Subsection B2) Land Use and Zoning

Wellhead Protection Areas via Zoning Authority	6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	4 yr	5 yr	N/A	Notes
<p>State statutes provide local governments the authority to protect groundwater recharge areas and community wellhead zones via ordinances and zoning controls. Marengo, Lake in the Hills, and Fox River Grove have adopted wellhead protection area ordinances (WHPA) that can serve as models. A detailed discussion of relevant land use related groundwater protection tools can be found in the County's <i>Groundwater Resources Management Plan</i>, Report 3. A summary:</p>										<p>PRIMARILY FOCUSED ON COMMUNITY WELLS, Health Department does have established setback standards for private and non-community wells</p>
WHPA's must first be determined										
12a Establish minimum and maximum wellhead setback distances										X
12b Identify potential contamination sources within the WHPA										X
12c Adopt protection programs, such as restricted zoning within:										
Certain land uses within zones could be restricted	D	D	D	D	D	I	I	I	I	
Permits could be required for potentially hazardous land uses within setback distances.	D	D	D	D	D	I	I	I	I	
12f Limit the location of new wells within identified setback distances of likely contaminant sources, such as industrial facilities.	D	D	D	D	D	I	I	I	I	
12g Restrict certain activities within established WHPA's										X
Regulated Recharge Areas (RRA) Designation	6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	4 yr	5 yr	N/A	Notes
13 Consider obtaining a Regulated Recharge Areas Designation via 415 ILCS 5/17.3 for each municipality as well as unincorporated McHenry County.	E	E	E	E						

Subsection B2) Land Use and Zoning

Restricted Practices		6 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	4 yr.	5 yr.	N/A	Notes
7	Class V underground injection wells should be <i>restricted</i> within a delineated Category A or B sensitive aquifer recharge area:										Class V underground injection wells include multiple-family and non-residential onsite wastewater treatment systems serving 20 or more individuals a day. However, Article X of the McHenry County Public Health Ordinance already includes requirements to address systems installed in rapidly permeable soils on individual sites and for new subdivisions. It is not the intent of this policy to propose additional restrictions for onsite-wastewater treatment systems.
7a	“Restricted” could include, but not be limited to, the use of best management practices, setbacks, and pretreatment to protect groundwater quality. If Class V wells are allowed, stormwater best management practices should be required along with annual inspection and maintenance to ensure proper functioning of the system.	D	D	D	D	I	I	I	I		
8	Retrofitting existing drywells utilizing a treatment train and other best management practices should be encouraged. Reference the McHenry County Stormwater Ordinance for best management practices	D	D	D	D	I	I	I	I		
Development:		6 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	4 yr.	5 yr.	N/A	Notes
9	The County and Municipalities can help protect groundwater quality and quantity by passing regulations and policies that:										Complete in tandem with the UDO process
9a	Minimize intensive development activities in sensitive aquifer recharge areas.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9b	Minimize impervious surfaces and mass grading in recharge areas, utilizing conservation design techniques such as clustering, narrower street widths, reduced parking lot sizing, and pervious pavement. Use of pervious pavement may also require some consideration of water quality protection due to vehicle fluids-- etc.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9c	Discourage intensive development activities, such as industrial facilities, shopping centers, parking lots, and high density housing developments in areas designated Category A or B on the SARA map.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
9d	Use stormwater best management practices that promote infiltration and treatment to the maximum extent practical. See Section B3 for additional information.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO Process--Stormwater Management Ordinance

Subsection B2) Land Use and Zoning

		6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	4 yr	5 yr	N/A	Notes
9e	Employ conservation design techniques to the maximum extent practical in sensitive recharge areas. These techniques help preserve open space and reduce impervious surfaces.	I	I	I	I	I	I	I	I		Complete in tandem with the UDO process
10	Review and revise the County's subdivision ordinance, as appropriate, to:										
10a	require an inventory of high priority recharge areas on the site and within 200 feet of the boundary of the site, and	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10b	add high priority recharge areas to the list of resources to be included as a cumulative trigger for the purpose of determining if a conservation design requirements are mandatory.	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10c	Promote natural landscaping with native prairie grasses, trees, shrubs, and wetland plants in lieu of conventional turf grass. Natural landscaping does not require irrigation or fertilizer and can significantly enhance groundwater infiltration	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process
10d	Require or promote conservation design ordinances to help ensure that groundwater recharge is preserved, along with the more obvious natural features like oak woods, wetlands, and creeks. McHenry County and several local municipalities have adopted standards that require conservation design for subdivisions and other land developments	D	D	D	D	I	I	I	I		Complete in tandem with the UDO process

Subsection B2) Land Use and Zoning

Wellhead Protection Areas via Zoning Authority		6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	4 yr	5 yr	N/A	Notes
<p>State statutes provide local governments the authority to protect groundwater recharge areas and community wellhead zones via ordinances and zoning controls. Marengo, Lake in the Hills, and Fox River Grove have adopted wellhead protection area ordinances (WHPA) that can serve as models. A detailed discussion of relevant land use related groundwater protection tools can be found in the County's <i>Groundwater Resources Management Plan</i>, Report 3. A summary:</p>											<p>PRIMARILY FOCUSED ON COMMUNITY WELLS, Health Department does have established setback standards for private and non-community wells</p>
12	WHPA's must first be determined										
12a	Establish minimum and maximum wellhead setback distances										X
12b	Identify potential contamination sources within the WHPA										X
12c	Adopt protection programs, such as restricted zoning within:										
12d	Certain land uses within zones could be restricted	D	D	D	D	D	I	I	I	I	
12e	Permits could be required for potentially hazardous land uses within setback distances.	D	D	D	D	I	I	I	I		
12f	Limit the location of new wells within identified setback distances of likely contaminant sources, such as industrial facilities.	D	D	D	D	I	I	I	I		
12g	Restrict certain activities within established WHPA's										X
Regulated Recharge Areas (RA) Designation		6 mo	12 mo	18 mo	24 mo	30 mo	36 mo	4 yr	5 yr	N/A	Notes
13	Consider obtaining a Regulated Recharge Areas Designation via 415 ILCS 5/17.3 for each municipality as well as unincorporated McHenry County.	E	E	E	E						