# FAWN LAKE MANAGEMENT PLAN 2012 Update GOALS AND ACTION ITEMS

Fawn Lake Protection District (District) was formed in 2002 to monitor lake water quality and implement best management practices to maintain and improve lake water quality and quantity on Fawn Lake. The District prepared the Fawn Lake Management Plan (Plan) in 2004, with a first revision in March 2005.

District Board reviews the goals and action items contained in the Plan on a periodic basis, and is, at this time providing an update.

Since its inception, the Board, working in conjunction with the Department of Natural Resources, Adams County, and others, has undertaken many activities and studies. Highlights of these activities and studies include:

- Depth Map: The bathymetric map shows depths throughout all of Fawn Lake. A hard copy of the map was provided to all property owners. The map can now be found on the Adams County website (<a href="http://www.adamscountylwcd.net/Depth">http://www.adamscountylwcd.net/Depth</a> map FAWN.pdf).
- Aquatic Plant Community Report: Adams County performs a survey of the aquatic plants in Fawn Lake approximately every five years.
   (<a href="http://www.adamscountylwcd.net/Aquatic plant report FAWN.pdf">http://www.adamscountylwcd.net/Aquatic plant report FAWN.pdf</a>).
- Critical Habitat Report: Created in 2006, provides an understanding of important features in Fawn Lake, and identifies the one critical habitat area. (http://www.adamscountylwcd.net/Critical\_habitat\_report\_FAWN.pdf).
- Critical Habitat Map: The map, part of the Critical Habitat Report, was created in 2009, identifying a critical habitat designated area of 0.5 acres. (http://www.adamscountylwcd.net/Critical habitat map FAWN.pdf).
- Lake Classification Reports: Long Report, developed in 2008
   (<a href="http://www.adamscountylwcd.net/Lake classification long report FAWN.pdf">http://www.adamscountylwcd.net/Lake classification long report FAWN.pdf</a>, and Short Report, Developed in 2007
   (<a href="http://www.adamscountylwcd.net/Lake classification short report FAWN.pdf">http://www.adamscountylwcd.net/Lake classification short report FAWN.pdf</a>). These reports provide significant information, including:
  - o Water Quality modeling and data
  - Location and soils maps
  - Land Use information
  - Wetland areas identified

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- Shoreland information, including identification of buffer areas
- In-lake Habitat, including vegetation, fisheries, and other wildlife.
- Sediments Map: The map was created in 2006, identifying areas of Soft sediment, Mixed sediment and Hard sediment. (http://www.adamscountylwcd.net/Sediment\_map\_FAWN.pdf).
- Soils Map: The map, which can be found on Adams County website (<a href="http://www.adamscountylwcd.net/Soils\_map\_FAWN.pdf">http://www.adamscountylwcd.net/Soils\_map\_FAWN.pdf</a>) shows the soils type in the surrounding area, and also identifies the surface watershed and ground watershed. It is interesting to see the difference:
  - Surface watershed identifies the land areas that drain to the lake; and
  - o Ground watershed identifies areas from which groundwater is able to feed the lake.
- Groundwater Report: Completed in 2010, this report identifies where groundwater comes in to the lake, where lake water exits into the groundwater, and reports on water quality testing of the groundwater sources.

### Other significant efforts include:

- Development of a quarterly newsletter that is mailed to all property owners to provide information relative to lake issues and educate property owners on their role concerning the lake's health.
- Obtain and provide educational information to residents on an ongoing basis.
- Purchase of a dissolved oxygen meter and establishment of a program to obtain dissolved oxygen readings on a periodic basis during the summer months.
- Began a citizens water quality monitoring effort, which collects data on water temperature and water clarity, as well as obtaining samples that are provided to the State lab for testing. The results of these efforts can be found on the Wisconsin Department of Natural Resources website.
- Developed a dissolved oxygen reading program, monitoring six locations in the lake at various depths. Readings occur at least monthly during summer months.
- Monitoring and treatment of invasive aquatic vegetation. Invasive species are an ongoing battle in Fawn Lake. Annually treatment is applied as warranted and vegetative species are monitored to determine success of activities.
- Purchase and installation of a public handicapped accessible pier has occurred, with annual removal and installation undertaken by the Board.
- Purchase and installation of a floating pier to aid in the launching of boats from the public boat launch occurred in 2011.
- Purchase and installation of new Fawn Lake signs, to improve the public image of Fawn Lake and its watershed area.

Discussion of the Goals and Action Items, identified in the Lake Management Plan, follows:

| ITEM                       |                                                                                                                    | WHO                              | WHEN           |  |  |  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|--|--|--|
| Aquatic Species Management | Prevent the spread of and try to control invasive & noxious species                                                |                                  |                |  |  |  |
| Wanagement                 | <ol> <li>Control Eurasian watermilfoil and Curly pondweed with applications<br/>of selective herbicides</li> </ol> | WDNR<br>Fawn Lake                | Annually       |  |  |  |
|                            | 2. Update information at educational kiosk at the public boat landing                                              | Fawn Lake                        | Ongoing        |  |  |  |
|                            | Pursue financial assistance for implementation of prevention and control plan                                      | Fawn Lake<br>DNR<br>Adams County | As appropriate |  |  |  |
|                            | 4. Investigate harvesting for plant control                                                                        | Fawn Lake                        | As appropriate |  |  |  |
|                            | 5. As they become available, evaluate new technologies for plant control                                           | Fawn Lake                        | As appropriate |  |  |  |
|                            | 6. If financially feasible, proceed with recommendations from (4) & (5) above                                      | Fawn Lake                        | As appropriate |  |  |  |
| Dam                        | Maintain and Operate Fawn Dam to insure public safety, proper dam function and a stable lake level                 |                                  |                |  |  |  |
|                            | 1. Conduct annual inspections and record findings as specified in DNR standards                                    | Engineer certi-<br>fied by NAPE  | Annually       |  |  |  |
|                            | 2. Operate, inspection, and repair dam to meet Wisconsin laws                                                      | Adams County                     | As scheduled   |  |  |  |
|                            | 3. Update dam break analysis and Emergency Action Plan                                                             | Adams County                     | As required    |  |  |  |
| Approved June 2012         | 4. Implement Emergency Action Plan in times of emergencies                                                         | Adams County                     | As needed      |  |  |  |

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| Recreational Uses | Improve recreational opportunities for community residents and public                                                                                                                                                                                                                                                                        |                                              |                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------|
|                   | <ol> <li>Investigate the need and develop a plan to address capital improvements         Associated with the lake. The plan will include the following projects:         <ol> <li>Fishing pier, that is handicapped accessible, located by parking lot</li> <li>Swim area and park located on north central area of lake</li></ol></li></ol> | Adams County<br>Adams County<br>Adams County | N/A            |
|                   | Implement and enforce state laws, county and town ordinances.     Encourage residents to report violations                                                                                                                                                                                                                                   | Adams County<br>WDNR<br>Fawn Lake            | As appropriate |
|                   | 3. Stock bass, northern pike & forage fish as funding allows. Develop a plan to balance forage fish and game fish.                                                                                                                                                                                                                           | Fawn Lake<br>DNR                             | Ongoing        |
|                   | 4. Encourage Watershed property owners to implement practices that will increase wildlife                                                                                                                                                                                                                                                    | Fawn Lake<br>Adams County<br>WDNR            | Ongoing        |
|                   | Identify public users' goals and issues regarding the management of the lake                                                                                                                                                                                                                                                                 |                                              |                |
|                   | 1. Provide a survey that can be filled out by lake users.                                                                                                                                                                                                                                                                                    | Fawn Lake                                    | Complete 2005  |
| Shorelands        | Reduce nutrients entering groundwater that then enters lake  1. Distribute information to property owners about the septic system maintenance                                                                                                                                                                                                | Adams County<br>Fawn Lake                    | Ongoing        |
|                   | 2. Inventory lake shoreline to identify lake shoreline property owners who have Shoreline erosions, areas with no buffer zone & no storm water runoff mgmt                                                                                                                                                                                   | Adams County                                 | Complete 2005  |
|                   | 3. Educate lake shoreline owners who do not have riparian buffers and stormwater                                                                                                                                                                                                                                                             | Adams County                                 | Complete       |

|                                                                                                                                                  | 4. | Plan/design & offer cost share to install shoreline protection, riparian buffers, and Storm water runoff management to areas identified in inventory. Utilize Adams Soil & Water Resource Mgmt Programs & WDNR financial assistance programs  This item remains under consideration and may be acted upon in the future if funds become available. | Adams County              | Ongoing<br>Ongoing |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------|
|                                                                                                                                                  | 5. | Continue lake classification activities and provide the information to appropriate County Departments and to Township of Dell Prairie to aid with development of Smart Growth Plans                                                                                                                                                                | Adams County              | Ongoing            |
| Water Quality                                                                                                                                    | Ma | intain present water quality and prevent algae blooms                                                                                                                                                                                                                                                                                              |                           |                    |
|                                                                                                                                                  | 1. | Sample and test lake water to establish baseline water quality data. The lake will be sampled yearly for 3 years. Future testing will depend upon funding.                                                                                                                                                                                         | Adams County              | Completed          |
|                                                                                                                                                  | 2. | Analyze water quality data and develop recommendations for water quality goals                                                                                                                                                                                                                                                                     | WDNR<br>Adams County      | Completed          |
|                                                                                                                                                  | 3. | Implement Citizen Water Quality Monitoring Program                                                                                                                                                                                                                                                                                                 | Adams County<br>Fawn Lake | Completed          |
|                                                                                                                                                  | 4. | Continue Citizen Water Quality Monitoring sampling                                                                                                                                                                                                                                                                                                 | Fawn Lake                 | Ongoing            |
|                                                                                                                                                  | 5. | Develop and continue dissolved oxygen reading sampling                                                                                                                                                                                                                                                                                             | Fawn Lake                 | Ongoing            |
| Maintain lake levels that enhance water quality, provide recreation, enhance Wildlife, and meet the requirements of Wisconsin Statute Chapter 31 |    |                                                                                                                                                                                                                                                                                                                                                    |                           |                    |
|                                                                                                                                                  | 1. | Operate dam to maintain lake levels and outflows as stated by WDNR.                                                                                                                                                                                                                                                                                | Dam operator              | Annually           |

2. Gather information & develop a plan to increase the depth in east end of lake

Fawn Lake

This item remains under consideration and may be acted upon in the future if funds become available and the activity is deemed allowable by the regulatory agencies.

3. Develop bathymetric map

Fawn Lake

Completed

## Watershed —land outside Of shoreland area

#### Reduce nonpoint source pollution within the Fawn Lake Watershed

1. Identify sensitive areas in the Fawn Lake Watershed

Adams County Completed

2. Develop a plan to protect sensitive areas identified in watershed. Plan will Specifically address protecting headwater area from nonpoint source pollution

Adams County Completed

NRCS, WDNR

3. Educate landowners, agricultural producers and community about State Agricultural Performance Standards and best management practices utilizing Newsletters, meetings and individual visits

Adams County, Completed NRCS, WDNR

### Practice proper land use utilizing Comprehensive Plans and Zoning

1. Within the Fawn Lake watershed, develop and implement smart growth plans

Town of Dell Prairie, Adams County