July 29, 2013

Winnebago Waterways Phase II Lake Planning Grant proposal(s) for 8/1/13

VI.A.1. Authorizing Resolution

The Board of Directors of the Winnebago Lakes Council passed a resolution on July X, 2013 to apply to the Wisconsin Department of Natural Resources for Lake Planning grants to support the proposed Phase II projects.

Lake Planning Grants

RESOLUTION OF **The Winnebago Lakes Council, Inc.**
County of Winnebago

WHEREAS, the Winnebago Pool Lakes (Winnebago, Butte des Morts, Winneconne, & Poygan) are an important resource used by the public for recreation and enjoyment of natural beauty; and

WHEREAS, a study and examination of the lakes will lead to better understanding and will promote the public health, comfort, convenience, necessity and public welfare; and

WHEREAS, we recognize the need for responsible and holistic long-range planning to better manage the lakes, its watershed, and its use; and

WHEREAS, we recognize the need to provide information or education on the use of lakes or natural lake ecosystems, on the quality of water in lakes, or on the quality of natural lake ecosystems; and.

WHEREAS, we are qualified to carry out the responsibilities of the planning project; and

WHEREAS, we understand the importance of a continuing management program for the Winnebago Pool Lakes and intend to proceed on that course.

NOW, THEREFORE, BE IT RESOLVED THAT the Winnebago Lakes Council, Inc. requests grant funding and assistance available from the Wisconsin Department of Natural Resources under the "Lake Management Planning Grant Program" and hereby authorizes the President of the Board of Directors to act on behalf of the Winnebago Lakes Council, Inc. to:

- Submit a pair of coordinated applications (one for Lake Winnebago, and one for Lakes Butte des Morts, Winneconne and Poygan) to the State of Wisconsin for financial aid for lake planning purposes;
- sign documents;
- take necessary action to undertake, direct, and complete an approved lake planning grant; and
- submit reimbursement claims along with necessary supporting documentation within six months of project completion date.

BE IT FURTHER RESOLVED THAT the Winnebago Lakes Council, Inc. will meet the obligations of the planning project including timely publication of the results and meet the financial obligations under this lake planning grant including the prompt payment of our 33% commitment to project costs.

Adopted this day XX of July, 2013

By a vote of: _____ in favor _____ against _____ abstain
BY: _Jan Scalpone_, Secretary of Winnebago Lakes Council, Inc.

VI.A.2. Letters of Support

Due to the many jurisdictions around the Lake, various management entities, and the diverse issues affecting the System, letters of support were requested from a wide variety of stakeholders for the Phase I of this planning project (see list below). For this Phase 2 renewal we sought support letters from the original Phase I Project Lead (Calumet County) and organizations who have been providing steady representation to the Steering Team and have the interest and ability to contribute to the project goals. Letters submitted to date are as follows (attached):

- Calumet County
- Fond du Lac County
- Outagamie County
- Waushara County
- East Central Wisconsin Regional Planning Commission
- Winnebago County UW Extension
- Town of Menasha
- Fox-Wolf Watershed Alliance
- Fox Wisconsin Heritage Parkway

Additional Letters of Support received during Phase I:

- *Wisconsin Lakes Association* a bipartisan advocate for the conservation, protection and restoration of the lake resources
- *UW Extension Lakes* a partnership to protect and preserve our state waters
- *New North* is the economic development organization promoting regional branding and business in Northeast Wisconsin
- *Fox River Navigational System Authority* can assist with navigational concerns, as well as some aquatic invasive species issues
- *Wisconsin Department of Natural Resources* can assist with AIS, plant inventories, and other technical expertise
- *Fond du Lac Area Economic Development Corporation* is the EDC serving the approximate south one third of Lake Winnebago
- *Fox Cities Economic Development Corporation* is the EDC serving the approximate north half and eastern side of Lake Winnebago, as well as a portion of the System Lakes
- *Wisconsin Department of Tourism* promotes tourism in the State of Wisconsin
- *Fox Cities Convention and Visitors Bureau* promotes tourism at the north end of the Lake and surrounding Fox cities area
- *International Trade, Business and Economic Development Council* creates tourism promotional pieces for that part of the System which lies in three counties
- *Fox Cities Greenways* supports the development of trails and greenways in the Fox Valley area
- *Trout Unlimited* works to protect and restore trout fisheries and the watersheds

they depend on

- *Ducks Unlimited* is interested in protecting habitat for waterfowl, and has partnered to help eradicate phragmites in the Lake Winnebago area
- *Wisconsin Waterfowl Association* promotes healthy waterfowl habitat, education and legislation
- *Tri-County Powerboat Alliance* works to ensure waterways from New London to Lake Winnebago remain available for fair and equitable use by all recreational users
- *Senator Jessica King* was a state Senator covering a large portion of the project area who is concerned about the lack of coordination around the Lake Winnebago System
- *City of Fond du Lac* (Fond du Lac County) is one of four cities adjacent to the System
- *City of Menasha* (Winnebago County) is one of four cities adjacent to the System
- *City of Neenah* (Winnebago County) is one of four cities adjacent to the System
- *Fox Valley GIS Users Group* coordinates data collection and mapping for public GIS purposes
- *Waushara County Parks Department* and *Calumet County Parks Department* both of which maintain launches and parks on the System
- *Calumet County Health Department* brings awareness to the public about Blue Green Algae issues and is concerned about drinking water quality
- *Waushara County Land Conservation and Zoning Department* addresses shoreland runoff and building codes, and nutrient management in the northwest portion of the watershed

VI.A.5. Itemized Breakdown of Expenses

The grant application is being submitted as Phase II of a long term planning project. The project funding is requested via two proposals, for two different areas of the Winnebago System. The subject grant application is for Phase II of a lake organization project for Lake Winnebago proper (a separate application is being submitted for the Upper Pool Lakes).

Itemized Expenses

	2013-2014	
	Cash	**Donated**
1. SALARIES & WAGES		
Calumet County Staff for Shoreline Surveys		$14,651
WLC Board of Trustees and Steering Committee		$4,000
2. CONSULTING SERVICES		
Two contracted consultants	25,000	
3. PURCHASED SERVICE – Printing & Mailing		

4. PURCHASED SERVICE – other		
Boat rental		$1,500
6. SUPPLIES		
11. OTHER		
Fuel and mileage		$299
12. SUBTOTALS	**$25,000**	**$20,450**
13. TOTAL PROJECT COST ESTIMATE	**$45,450**	
14. STATE SHARE REQUESTED	**$25,000**	

Consultants: The consultant fees will include all time and material (including postage) for analyzing, research, surveys, focus groups, meetings, meeting notices, final document preparation, compilation and distribution, as well as all consultant mileage and miscellaneous expenses. The consultant will be chosen after a Request for Proposals (RFP), interview and background check. Preliminary verbal bids ranged from $75,000-95,000 for both Phase I and II of the long range project (which includes the same work being completed for the Winnebago Pool Lakes and associated rivers). DNR grants totaling $50,000 covered Phase I consultant costs. In Phase II, we are adding a request for a more specialized consultant to conduct a review of cooperative management systems for large, multi-jurisdicational, natural resource systems, thus we estimate we will require $50,000 for consultants. This proposal, covering Phase II for Lake Winnebago is budgeted at $25,000. Prior to signing a contract with the consultant Winnebago Lakes Council will ensure that the contract stipulates required deliverables and a timeline for completion.

Match: Local match will be met through in-kind contributions by project partners. For the $50,000 request in this proposal, we need to generate $16,667 in non-state match (or half those amounts -- $25,000 and $8,333 -- for this Lake Winnebago application). The primary source of match will be activities to improve inventories relevant to lake management. In particular, we will document match from Calumet County and Winnebago County activities to survey shorelines by boat in 2013 and 2014 to document sites with management issues, such as erosion, that impact water quality and habitat.

The inventory plan from Calumet County is to take photographs on regular intervals at a specific distance, overlapping to ensure the entire lakeshore is documented with photos. A GPS camera will be used to geo-locate photographs spatially in GIS. Within 35 feet of Ordinary High Water Mark (OHWM) they will record: depth and composition of vegetative buffer; slope; manmade structures such as sea walls, boat houses, docks, boat launches, and rip rap; erosion; direct drainage; and % canopy cover. Within 75 feet of OHWM, they will record buildings, land use,

and % canopy cover. A GIS database will be developed to document recorded data, upload photographs, and develop a "shoreline health score." The shoreline health score will be used to communicate the quality (or lack) of the landowners shoreline, and target local and state cost share dollars. Calumet County has estimated their costs as $16,450.45 broken down as:

- $14,651.20 in personnel (Water Resource Specialist $37.04/hr. x 120 hrs. = $4,444.80; Code Administrator: $41.59/hr. x 120 hrs. = $4990.80; Inventory Intern: $20/hr. x 160 hours = $3200; Data Entry: $20/hr. x 120 hours = $240; GIS database development: $44.39/hr. x 40 hours = $1775.60);
- $299.25 in fuel and mileage (Boat gas: 23 miles, 2 mpg, $4.50/gallon = $51.75; Mileage to/from courthouse: 450 miles x $.55 = $247.50); and
- $1,500 for boat rental ($100/day x 15 days).

Winnebago County has provided an estimate for their shoreline survey of $17,610 for personnel alone. Their estimate is based on estimates that they will use 476 hrs of staff time as follows: 80 hrs of staff time to develop forms and prep for inventory, 316 hrs for 2-3 staff to conduct the field work, and 80 hrs for staff to develop the GIS database development.

Waushara County completed a shoreline survey recently that reportedly covered all their lakefront, and the project will look into the existence of data for the west shore of Lake Poygan. There are discussions with Fond du Lac County about completing a shoreline survey in the near future so that there will be a complete dataset for the entire shoreline of the Winnebago Pool Lakes. This would be a huge accomplishment, given that the system has over 100 miles of shoreline. The cooperation that counties are showing on this goal of a complete shoreline survey would be an early and significant milestone in cooperative management of this lake system.

We will also document the time commitment of non-state staff to the Steering Committee and other activities for possible inclusion as in-kind match. Partners have also expressed interest in documenting their costs for other inventory projects listed in this application. East Central Wisconsin Regional Planning Commission has started a project to document private on-site wastewater treatment systems near all waterways. There is also a substantial increase in intern opportunities being generated by changes to general education requirements at UW Oshkosh, and several partners have been contacted about placing college interns on real-world projects. If funded, we will meet with internship coordinators at UW Oshkosh to help place interns with local partners who have access to data, and/or an interest in generating new data sets for the inventory topics we list below.

VI.A.7.a. Project Area

The long range project goal of this Lake Winnebago Action Plan is to define the best solution to a coordinated, economically sustainable, long term management approach to Lake Winnebago. The overall project will eventually address the entire Lake Winnebago System (the System includes the State's largest inland lake, Lake Winnebago, and Little Lake Butte des Morts, Lake Butte des Morts, Lake Winneconne, Lake Poygan, parts of the Upper Fox River, Lower Fox River, and Wolf River). Phase 1 was funded by Wisconsin DNR in 2012-13 to establish inventories for assets, develop a list of environmental plans, and collect stakeholder and public

input to prioritize issues for action. Because of limits to grant amounts, two separate proposals were submitted, one for Lake Winnebago, and one for the Upper Pool lakes; but the funds were used for a single, unified project. For this Phase 2 of the planning project, we are following the same proposal strategy in terms of geographic project areas for two proposals, which will be united into a single project.

Because of the vast array of issues involved, and because fish swim, water flows, and water quality have wider boundaries of surface waters, groundwater, and watershed, this project is not restricted to the counties directly adjacent to Lake Winnebago. Rather, it involves four counties adjacent to the Lake Winnebago System, one county heavily reliant on the System for drinking water and recreation, and the System itself. As action items are developed in later phases of this long range project, other counties within the watershed may need to be involved, especially with matters such as TMDLs, pollutant trading, adaptive management, nutrient management and other issues affecting water quality. The municipalities within the counties are considered stakeholders; several were engaged in Phase I activities and we will work to expand engagement in Phase II.

It is challenging to describe just Lake Winnebago in that it is part of a larger surface water complex. The Lake Winnebago System is 258 square miles in lake surface area--it is almost 1/5 of Wisconsin's total lake area. It covers 167,000 acres. It has 160 miles of shoreline in four counties (the four counties are part of the project--Calumet, Fond du Lac, Waushara and Winnebago). Bordering its shores are four cities, four villages and 20 towns. A fifth county is part of the project area as well in that almost 75,000 of the county residents rely on Lake Winnebago for their drinking water. Due to the volume of consumers of the lake water, this fifth county has been included in this project (Outagamie). The county is connected to the System via the Upper Fox River. The five counties comprise 522,000 persons and covers thousands of acres of land, much of which is in the Lake Winnebago watershed. Lake Winnebago is at the bottom of a 5,780 square mile watershed and is divided into two separate management units by the WDNR; the Upper Fox Basin (2,090 sq. miles) and the Wolf River Basin 3,690 sq. miles). The WDNR currently manages the Lake Winnebago Watershed as part of the Upper Fox River Basin. The EPA delineates the Lake Winnebago watershed from the mouth of the Fox River in Oshkosh to the dam in Neenah, which includes the subwatersheds of the Fond du Lac River (244.74 sq. miles), East Winnebago (99.4 sq. miles), North & West Winnebago (22.73 sq. miles), and the Lake itself (206 sq. miles) – in all totaling 527.87 square miles. This delineation does not include waters received from the Upper Fox River, Wolf River, and the Winnebago Pool Lakes. The Winnebago Pool Lakes, which eventually drain to Lake Winnebago via the Fox River at Oshkosh, are also divided between the two Basins. Lake Poygan and Lake Winneconne are managed as part of the Wolf River Basin; whereas Lake Butte de Morts is managed as part of the Upper Fox River Basin. However, even some of the tributaries to Lake Butte de Morts are managed as part of the Wolf River Basin. The size and complexity of the Lake Winnebago System makes managing this system very difficult, often crossing political boundaries and watershed boundaries; an indication of a real need to reassess and improve how this system is managed for water quality, recreation, and economic opportunities.

Lake Winnebago itself is adjacent to just three counties: Calumet, Fond du Lac and Winnebago. It is the largest inland body of water in the State of Wisconsin. Lake Winnebago is

approximately 138,000 acres with a maximum depth of 21 feet and an average depth of 15.5 feet. It is approximately 30 miles long and 10 miles wide. A total of 81 species of fish have been identified in the Lake. Fish include Musky, Panfish, Largemouth Bass, Smallmouth Bass, Northern Pike, Walleye, Sturgeon and Catfish. Lake Winnebago also has the largest viable population of sturgeon in the world. There are more than 60 registered fishing tournaments on the Lake.

In addition to the Lake's fishing attributes Lake Winnebago is used heavily by recreational boaters, hunters, and swimmers. Several public swimming areas, all at parks, offer the outdoors enthusiast more than just swimming. The beaches lend access to playground areas, hiking trails, and education centers.

Lake Winnebago is recognized as a Statewide Aquatic Invasive Species (AIS) Source Water. At least a dozen AIS species are found in Lake Winnebago. The most problematic are: zebra mussels (water intake pipe replacements and cleaning; shoreline and reef accumulations of shells); Eurasian Watermilfoil and curly leaf pondweed (boater access to launches, and residential channels and bays); Narrow-leaf Cattail and Phragmites (replacing native emergent vegetation in fringing marshes and sedge meadows); and common carp (disturbing shorelines and vegetation, displacing native fish). The lake has had confirmed cases of VHS virus, though outbreaks and fish kills have not been common. Rusty crayfish dominate crayfish populations in adjacent rivers and streams, and probably in the lake as well.

VI.A.7.b. Problem to be Addressed by Project

Lake Winnebago is important to the economy of the State of Wisconsin, but particularly to the counties surrounding it. This long term planning project for a Lake Winnebago Action Plan will prepare the region for coordinated, long term, comprehensive management to ensure the entire Winnebago System continues to be such a positive asset to the local communities. The planning effort will also explore options for system-wide coordination of local, state and federal governments and organizations.

A desired outcome described in the Phase I proposal remains a good description of our overarching goal:

> *To determine the best long-term lake management approach to ensure a prioritized list of issues are addressed in the most coordinated, cost effective approach of maximum benefit to the environment and stakeholders.*

For decades, plans have been developed and strategies implemented to address the environmental and social facets of the Lake Winnebago System. Some of these efforts have been lakewide, especially those completed by the Wisconsin Department of Natural Resources through their fisheries and watershed programs, including the *Winnebago Comprehensive Management Plan* (1989). The Winnebago Lakes Council was formed in 2005, and quickly provided leadership for regional planning on AIS issues, an issue that had seen many changes since 1989 in terms of new species and policies. This led to a stakeholder-generated AIS plan (2010). On the 20th anniversary of the 1989 management plan, Winnebago Lakes Council hosted a one-day conference to review progress. The consensus was that a majority of the specific

objectives in the management plan had been completed (DNR staff estimated ap[proximately three-quarters), and that the remainder represented complex problems for which solutions did not emerge or issues that had diminished in priority. Thus a new comprehensive management plan is needed. The effort in the late 1980's was led by the WDNR following a year of intensive public discussion that engaged over 3,000 stakeholders. The same approach is not seen as feasible today due to changes over the past 30 years in terms of resources available to the DNR, or even the approach to developing management plans. Thus, the current lake planning process was started in 2012 to try and fill the gap using the lake planning grant process led by local governments and organizations.

One of the key aspects of this new planning effort is that it is being led by local governments, along with municipal, state, and non-profit partners. In contrast to the WDNR management plan from 1989, the hope is that an even more comprehensive plan can be developed today, in terms of the issues addressed, the range of partners, and the roles of partners. For example, the 1989 plan led to a substantial amount of work accomplished by the area County Land and Water Conservation Departments, which tend to operate with assistance from state agencies and with knowledge of activities in adjacent counties. Other county departments, municipalities, and nonprofit organizations have also worked at addressing environmental and water quality issues, but primarily at smaller geographical scales, thus their efforts were fragmented and not uniform. As more regulations or programs affecting environmental protection, public safety, or economic development go into effect, each county and municipality must address the required changes. A more consistent and better coordinated effort by local government would maximize benefits to stakeholders and the environment, avoid duplication of services, and be more cost effective.

A coordinated approach is needed to address lake issues in several areas, such as safe and convenient navigation, search and rescue, public health and safety (e.g. toxic algae alerts), drinking water quality, aquatic invasive species education and control, aquatic plant management, citizen action activities, uniform zoning codes, shoreland restoration, manure/nutrient management, stormwater control, lake levels, emergency service and complaint mitigation, boat launch fees, ice travel regulations, water and land trails, lake-related business development, and tourism promotion. Here are three examples:

- Pollution control is important for maintaining Lake Winnebago's water quality for use as drinking water, water for industry, a world-class recreational fishery, and a recreational site for citizens and tourists. The lake is listed by the state as impaired waters based on phosphorus and sediment. Pollution control includes manure/nutrient management on the farms, erosion control throughout the watershed, stormwater control in urban areas, and permitted dischargers such as sewage treatment facilities. A cohesive approach to in the five counties and the watershed can improve water quality, particularly in terms of reducing the intensity and accumulation of algal blooms. Likely benefits include reduced operational costs for water utilities, improved waterfront real estate value, increased use of swimming beaches, and improved recreational experiences for boaters and anglers.

- Drinking water is a growing concern as more municipalities use Lake Winnebago as their source, in order to meet demand and/or to replace groundwater sources. Approximately 250,000 residents use water from the lake for their drinking water; existing plans are to

add another 42,000 people. Potable water is also provided to businesses, especially manufacturing, that need a substantial water supply for production and may increase demand if business expands.

- Aside from the environmental issues, there are other needs for a coordinated management approach to the Winnebago System to avoid duplication of efforts and to maximize on the economic development potential of the System and five counties. For example, a 2007 report revealed the economic impact of angling on the Lake Winnebago System accounted for $234 million annually and 4300 jobs. To protect that economic engine, not only do the fisheries need protection, but consideration needs to be given to the management of aquatic plants and invasive species, boat launch facilities and shore access, and attracting, retaining and marketing the businesses that support anglers (bait and tackle, boats, marinas, lodging, restaurants, etc.).

Due to the size of the system, the population of stakeholders, and the cap on the size of planning grants ($25,000), our planning effort needed to be broken up into a series of grant proposals by geography (Lake Winnebago; Upper Pool Lakes Butte des Morts, Winneconne, and Poygan) and over time (phases). Due to the number of jurisdictions around the lake, it is rare to find lakewide coordination on issues. A broad management strategy is needed to provide coordination and avoid duplication. Phase I (2012-13) had 3 main goals to help prepare us for comprehensive management planning:

1. Enhance knowledge and understanding of Lake Winnebago's fish, plant and aquatic life and their habitats.
2. Gain a better understanding of the social, environmental and political factors that affect the holistic management of Lake Winnebago.
3. Ensure maximum stakeholder involvement in inventory, plan development and management conversations, impaired water action plan discussions, and prioritization of lake issues.

Phase I has improved our inventory of lake- and watershed-related plans, studies, and regulations. Phase I also engaged nearly 1,000 members of the public in discussions, surveys, and meetings during Spring 2013. [The final report for Phase 1 is available online at www.winnebagowaterwaysreport.com]. This will provide a basis for determining which topics may be the easier, popular choices for early coordination efforts (e.g. where jurisdictional differences are small, and public interest is high). Phase I results can also help us identify topics where we have higher need and public support for coordination (e.g. where jurisdictional differences are greater, and public interest is high). Near the end of the public input period, we included polls and discussion questions around the issue of who is responsible for lake management, and should there be more coordination. There was an overwhelming 95% of survey respondents, along with positive feedback at public meetings and an online forum, in support of agencies and local municipalities working together to manage the system. During Phase I we made no attempt to define or promote any particular management structure, so we take this as strong support for the concept of coordinated lake management.

The public input collected in Phase 1 has generated the following list of commonly reported issues facing Lake Winnebago:

- Algae Blooms
- Polluted Runoff
- Invasive Species
- Excessive Vegetation
- Phosphorus and Sediment
- Erosion and Wetland Loss
- Water Level Management
- Lack of unified boat launch permit
- Inconsistent Policies across municipalities
- Enforcement of Existing Regulations
- Park and Trail Improvement
- Lack of Business Variety
- Lack of Boater Education
- Fishing Regulations

However, the "Top 3" (algae blooms, polluted runoff, invasive species) were by far the most popular discussion topics for generating ideas online and at public meetings. A common theme of managing water quality runs through many of the topics, with the public expressing their concerns in terms of sites (e.g. farms, roads), processes (erosion, wetland loss), pollutants (phosphorus, sediment, invasive species), or results (algae blooms, vegetation). There were also cross-cutting themes related to rules and enforcement (land use, sewage systems, boating, fishing), and to development (parks, trails and businesses).

The Phase 1 Final Report (www.winnebagowaterwaysreport.com) from July 2013 makes the following recommendations for next steps:

- Communicate Consistently with the Public (on project status, issues being addressed, plans to address issues)
- Engage Local Municipalities (on coordination projects)
- Engage Community Representatives (local, private, and non-profit partners)
- Define Cooperative Management (research potential approaches)
- Conduct Public Polling about Solutions and Funding Structure
- Consider and Respond to Public Opinions and Ideas
- Continue and Strengthen Steering Team and Assign Roles
- Develop a Communications and Outreach Strategy

We also note that there are efforts that should be supported if possible in a Phase II project, but may be beyond the scope or timeframe. For example, many of the water quality issues listed above are still lacking specific objectives and goals, or measurable outcomes. However, the public, when asked about approaches we should be using to improve lake management, gave high rankings to increased monitoring on the system. Specific water quality measurements are very difficult to obtain for these large shallow lakes, but a pilot project in 2005 was able to train over 100 volunteers for secchi disk measurements, and approximately 80% submitted data to the DNR (over 500 GPS-located data points for the 2005 boating season). By prioritizing the recommendations from Phase I listed above, we can see a logical path from increasing the engagement of the public in lake issues through communication, outreach and education, to establishing and sustaining the largest citizen-based lake monitoring network in the state, one that can deliver water quality data for management use.

Another long-term effort to improve water quality is the development of a TMDL (Total Maximum Daily Load) process for Lake Winnebago and its watersheds. Impaired waters in Wisconsin are addressed through a TMDL analysis, to determine the amount of a pollutant a water body can receive and still meet water quality standards. This "pollution budget" for a

water body or watershed establishes the pollutant reduction needed from each pollutant source to meet water quality goals.

A TMDL process is advancing for the Lower Fox River (LFR) Basin downstream of Lake Winnebago, which has many of the attributes we expect to consider in our watershed. The TMDL for the LFR Basin focuses on waters impaired by excessive sediment and/or high phosphorus concentrations. Phosphorus and sediment cause numerous impairments to waterways, including low dissolved oxygen concentrations, degraded habitat, and excessive turbidity. These impairments adversely impact fish and aquatic life, water quality, recreation, and potentially navigation. These pollutants reach rivers and streams from polluted runoff from farm fields, barnyards, residential yards and industrial and municipal wastewater treatment plants. The WDNR has published a report which identifies the TMDLs, load allocations, and recommended management actions that will help restore water quality in the Lower Fox River and the tributaries in the basin. Several partners in this grant application are serving on advisory committees for the LFR TMDL, which should be a distinct advantage for us to incorporate current TMDL thinking into a comprehensive lake management plan.

The Upper Fox (UF) Basin also has impaired waters and encompasses all of Lake Winnebago. The total UF Basin is 2,090 square miles, and includes more area than the 5 counties engaged in this application. As TMDL analysis and planning commences for the UF, stakeholders from Green Lake, Columbia and Adams counties will need to be included in meetings and the planning processes to address water quality and TMDLs. Our hope is that our planning project for the Winnebago Pool will make it easier to organize for the TMDL process in the larger watershed by improving communications and partnerships through planning and stakeholder engagement activities.

VI.A.7.c. Project Goals and Objectives

In the previous section, we listed 8 recommendations that emerged from Phase I of this planning effort. Some of the recommendations are action-oriented while others pertain to organization. We have generated 3 main goals from the action-oriented recommendations, and will incorporate the organizational recommendations into the workplan of Methods and Activities.

Goal 1. Improve outreach and education regarding the role and performance of local and state governments on the Winnebago Waterways.

- Objective 1.1: Develop a communications and outreach strategy for lake system information and news in the region
- Objective 1.2: Ensure that citizen engagement started in Phase I continues and grows
    - disseminate news of government responses to public input
    - Target under-represented groups for inclusion in Weigh-In on the Winnebago Waterways, surveys, or new methods (e.g. focus groups): youth, minority, business, farming, utilities, tourism, local government staff.
    - develop plans and programs to increase citizen-based monitoring with support of local and state governments

- Objective 1.3: Develop ways to meet public needs/desires for information (e.g. health warnings, boating and ice conditions, etc.) and government needs for educating the public (e.g. AIS, Fish, TMDL, stormwater)
    - Draw together partners (e.g. an educational consortium) to help implement the communications and outreach strategy
    - Develop and staff a single online source for news, information and links to local and state government websites; consider use of social media
    - Publish success stories and case studies

Goal 2. Solicit and support responses by local and state governments.

- Objective 2.1: Engage government to acknowledge public comments collected in Phase I and formulate coordinated and consistent actions and communications
    - Organize public comments for general and specific ideas relevant to particular jurisdictions, parts of the system, and the whole system
    - Organize the actions of governments and organizations, individually and in coordinated efforts, for communication to the public.
- Objective 2.2: Engage government to address gaps in planning and information identified in Phase I
    - Review existing list of gaps for completeness with local government staff and identify actions to address gaps
    - Develop inventories on the following items that were identified in the Phase 1 Gap analysis:
        - ☐ Shoreland erosion and condition (e.g. geo-referenced photographic surveys planned by county conservation staff)
        - ☐ Watershed inventories of soil loss, soil nutrient amendments (including manure), and animal units on farms
        - ☐ Watershed inventory of private on-site wastewater treatment systems, their condition, and how they are inspected and managed
        - ☐ Comparison amongst jurisdictions for local laws (e.g. shoreland zoning codes, noise regulations, ice use ordinances, hunting regulations)
        - ☐ lake education/outreach and citizen-based monitoring partners
        - ☐ water-related private businesses, jobs, and revenue
        - ☐ economic impact of recreation aside from angling (e.g. motorboating, waterfowl hunting, silent sports, birdwatching, camping).
        - ☐ lake-related tourism promotions (campaigns, materials, metrics)
        - ☐ boating safety infrastructure (e.g. buoy type, condition, location, schedule)
        - ☐ dredging needs and scheduled projects
        - ☐ aquatic plant management policies, projects, and schedules
        - ☐ waterfront/waterview trail inventory
        - ☐ updated mapping of all navigable waters
        - ☐ demographics and social capital (e.g. organizations) linked to lake use

Goal 3. Define "cooperative management" for Lake Winnebago

- Objective 3.1: Review systems for coordination and management used in other large, multi-jurisdictional public resource areas, and evaluate their potential application to Lake Winnebago.
    - Hire Consultant to conduct research and provide information about effectiveness, practicality, budget, and public/political support
- Objective 3.2: Educate public officials and citizens about the possible options, and measure their support for the general concept and specific approaches (e.g. public polling)

VI.A.7.d. Methods and Activities

For this project we anticipate using a Steering Team retained largely from Phase I, with some strategic additions. In Phase 1, the steering team representatives were primarily County staff (including UW Extension), with several DNR staff, and a single representative from the Winnebago Lakes Council. Following the recommendation from Phase 1, we will attempt to retain the core of most active Steering Team members while expanding the diversity of private and non-profit organizations represented. We also plan to organize task forces that can allow for more targeted participation by representatives from communities and private interest groups; based on objectives we anticipate that we will need task forces for communications/outreach, citizen-based monitoring, and .

Consultants will be hired to assist with specific objectives. We anticipate hiring at least two different consultants, which we will describe below as “general” and “specific”. A general support consultant with experience in organization, communication, and public engagement will assist with Goals 1 and 2. A more specialized research consultant will be hired for Goal 3, Objective 3.1. They should have experience in comparative studies of cooperative management organizations, particularly for large natural resource systems. For Objective 3.2, we plan to engage the general consultant to assist the Steering Committee with communicating and gathering public input about management options.

The general support consultant will be hired by Winnebago Lakes Council (WLC) and detailed to work closely with the Steering Committee for specific tasks and deadlines. The general support consultant will be responsible for supporting the Steering committee with meeting logistics, teleconferencing, producing agendas and minutes, and coordinating meetings with the public and public officials. This method worked very well in Phase 1 with contractor support from the Biodiversity Project.

The general support consultant should also be able to support other objectives across the project as follows:

Objective 1.1, *Communication and Outreach Strategy*: Coordinate, facilitate, record, and summarize strategic planning for communications and outreach on Lake Winnebago (the steering committee will be responsible for identifying participants, such as a task force that includes communications and outreach staff from the partners and other stakeholders).

Objective 1.2, *Public Engagement*: Continue the Weigh-In on the Winnebago Waterways effort of collecting public input online, via surveys, and in public meetings, with a focus on groups that were under-represented in Phase I. Utilize these avenues for collecting input as opportunities for disseminating news and updates to provide feedback to the public so that they remain engaged. Coordinate, facilitate, and record a task force on citizen-based monitoring.

Objective 1.3, *Information Sharing*: Following the recommendations of the Communication and Outreach Strategic Plan, the contractor will: coordinate, facilitate, and record the communications/outreach task force efforts to implement the plan; design, launch and promote an online source for news, information and links to local government and partners.

Objective 2.1, *Engage Local Governments*: Maintain and update records and summaries for public comments, including new data from Objective 1.2; provide analysis by jurisdiction for use by local government; record and collate actions of local government that address specific issues for communication to the public.

Objective 2.2, *Address Inventory Gaps*: Maintain and update inventories from Phase I with new information collected during this project (data acquisition and/or generation will be the responsibility of the partners)

Objective 3.2, *Education on Cooperative Management Systems*: coordinate efforts to present the findings and report from Objective 3.1 (work of the Specific Contractor) to public officials (mailing, survey, presentations by Steering Committee members); utilize Weigh-in on the Winnebago Waterways engagement tools (Objective 1.2 above, online, mail, and public meetings) and online news outlet (Objective 1.3 above) to present the report to the public.

To summarize, the crosscutting capabilities that we will be looking for in the general support consultant include: meeting coordination, recording and summarizing; strategic planning facilitation; information management; online and social media development; public meeting coordination; and communication and outreach experience. The WLC will have representatives on the Steering Committee should any contract management issues arise (e.g. questions about contract scope, deadlines, or deliverables). The contractor will provide the Winnebago Lakes Council with a brief progress reports and invoicing on a monthly basis. We plan to use a modified version of the RFP used in Phase 1 for soliciting a general support consultant.

The specific consultant will be hired to support **Objective 3.1** by producing a report on systems for coordination and management used in other large, multi-jurisdictional public resource areas, and evaluate their potential application to Lake Winnebago. The Steering Team will be asked to craft the RFP, particularly to help define the criteria for information that should be included in the review. For example, the contractor may be asked to provide information about effectiveness, practicality, budget, and public/political support; the systems to be reviewed may have to meet some minimum criteria for scale (area, population served) and complexity (jurisdictional levels, stakeholder diversity, ecosystem diversity). We will request that a minimum of 10 systems be reviewed. We will not limit the geographic scope of the review, as we are interested in learning about cooperative management systems that may not be well known

or in existence in Wisconsin. Though the emphasis will be on examples for cooperative management, the Steering Committee will also be consulted on the importance of reviewing systems that address the specific issues identified for Lake Winnebago (e.g. water quality). The contractor will be asked to conduct the review in stages:

1. Consultant reviews the scope of work with the Steering Committee
2. Consultant provides a preliminary list of at least 20 candidate systems. Consultant and Steering Committee will discuss the list, additional systems to consider, and important elements to include in brief reviews, leading to a prioritized list for further study.
3. Consultant provides brief analyses reviewing at least 20 candidate systems; Steering Committee selects which systems (anticipated 8-12) to move forward for full review. Consultant reviews the format and expectations for full reviews with the Steering Committee
4. Consultant provides draft report for comment by Steering Committee
5. Consultant provides a final report on cooperative management systems, including a 2-page summary and a presentation slide deck covering each system, a comparative analysis, and conclusions

VI.A.7.e. Project Products or Deliverables

Products and Deliverables are listed below by Objective:

Objective 1.1, *Communication and Outreach Strategy*: Written Strategic Plan for Communications and Outreach on Lake Winnebago.

Objective 1.2, *Public Engagement*: Consultants report on public engagement results from Weigh-In on the Winnebago Waterways (combined Phase I and II). Plan and progress towards increasing citizen-based monitoring of Lake Winnebago.

Objective 1.3, *Information Sharing*: Progress report on implementation of the Strategic Plan for Communications and Outreach on Lake Winnebago. Website location(s) for the online source for news, information and links to local government and partners.

Objective 2.1, *Engage Local Governments*: Consultants report summarizing local government actions that correspond to public concerns recorded in Objective 1.2, and communication of those actions to the public.

Objective 2.2, *Address Inventory Gaps*: Updated (Phase I) and new (Phase II) inventories, and identification of any remaining gaps.

Objective 3.1, *Review of Cooperative Management Systems*: final report and media suitable for a summary slide presentation.

Objective 3.2, *Education on Cooperative Management Systems*: Consultants report on efforts to present the findings and report from Objective 3.1 to local government officials and to the public, along with comments.

VI.A.7.f. Data to be Collected

A substantial amount of data was collected in Phase I (www.winnebagowaterwaysreport.com), to which we will add datasets listed above under Objective 2.2. In contrast to Phase I, the data to be collected are less about the lakes biotic resources and more focused on the social, economic, and quality of life conditions that affect the lake. If new information emerges that are relevant to the inventories collected in Phase I (e.g. annual fish population surveys), we will update those inventories.

The Steering Committee will identify partners best able to generate the desired data sets. County land and water conservation departments have already identified a substantial new data collection effort for shoreland conditions, and they are confident they can identify sources to inventory soil loss, nutrients, and animal units in there watersheds (e.g. nutrient management plans). East Central Wisconsin Regional Planning Commission is already working on the inventory of private on-site wastewater treatment systems for shoreline properties, and is considering an extension of the inventory to include properties located within a distance from shore and/or adjacent to surface drainage (e.g. streams, ditches). The Winnebago Lakes Council will lead on a survey of lake education, outreach, and citizen-based monitoring efforts, an inventory they have been discussing with leaders of the Lake Winnebago Quality Improvement Association of Fond du Lac County. We are confident we can identify partners willing to lead on all the inventories listed. The most significant stretch may be the economic analyses that could add to the recent survey of angling impact. The latter was a substantial survey of anglers, and a graduate student project at UW Green Bay, and it was funded by a consortium of stakeholders. In some cases, our inventory may be limited to collecting the existing economic data (e.g. assessed real estate values; sales tax records) that can be used for a future economic analysis.

In Phase 2 we also plan to broaden participation by stakeholders and specific under-represnted groups from the public. These new data will be combined with stakeholder and public input data from Phase I, for future analyses.

VI.A.7.g. Existing and Proposed Partnerships

Beginning in Phase I, we have been developing partnerships with known stakeholders to participate on committees, and also to help us recruit participation from the public. One list of partners are evidenced by the letters of support for Phase I and the current application. The report from Phase I includes lists of participants on the Steering Committee representing all the entities who have provided letters of support for Phase II (Calumet, Fond du Lac, Outagamie, Winnebago, and Waushara Counties; UW Extension; East Central Wisconsin Regional Planning Commission; Winnebago Lakes Council). This group of partners will provide continuity between Phase I and Phase II, and a core of experience for the Steering Committee. We propose

to expand the number of highly engaged partners on the Steering Committee and task forces. Our recruitment plan is to invite greater participation from the following:

- Fox-Wolf Watershed Alliance (providing leadership for TMDL development, especially the development of nutrient trading; also the organizational parent organization for NEWSC, the Northeast Wisconsin Stormwater Consortium)
- Fox Wisconsin Heritage Parkway (developing watertrails, recreational, and travel itineraries that are expanding tourism options in the system)
- At least one incorporated city (e.g. Oshkosh and Appleton were both active participants in AIS regional planning because of their investment in drinking water treatment plants)
- At least one hunter-angler focused conservation organization (past cooperation for system-wide studies and management have included the Poygan Sportsmans Club and Butte des Morts Conservation Club)

On Phase I we also identified the agriculture and business communities as stakeholders for which we sought representation. Both were participants in our public meetings where individuals often announced their business and farm interests, and were likely participants in our online and paper surveys. However, we were not successful in engaging these groups to help us with committee work, which means their perspective may be lacking from the questions we are asking of the public, our interpretations of results, and our list of information gaps. We are making it an explicit goal to address these groups in Phase II.

We also note that participation by county staff include a wide variety of expertise. The sections above note that projects from land and water conservation departments have been important to lake management, and will provide match for Phase II. Other county departments which have been meeting about System issues, and will remain technical expertise partners on this project, to be accessed as issues are discussed, including: Parks Departments (launch fees, buoy issues); GIS Staff (mapping needs); Sherriff's Departments (sharing rescue equipment, ice issues); Zoning Staff (impervious surface or building code issues), and Health Departments (Blue Green Algae warnings; community programs promoting outdoor activity for fitness).

Additionally, there are three Aquatic Invasive Species Coordinators on the System which should serve as technical staff as invasive species issues, and how to better coordinate efforts, are discussed. UW Oshkosh has grant-supported staff focused on Clean Boats Clean Waters and volunteer AIS monitoring. Sea Grant has been involved in addressing the aquatic invasive species issues as well and will continue to be used as a resource.

The following have completed extensive work to address issues affecting the System, and are considered available partners:

- The United States Army Corps of Engineers regulates the dams and will be involved in lake level discussions.
- Wisconsin Lakes Association can help with numerous issues, such as education, testing, shoreline demonstrations
- Wisconsin Lakes Partnership serves as an all encompassing educational arm that can assist in research, education, plant protection, pollutant prevention and grants
- International Business Economic Development Council does several tourism promotions of the System, but limits the promotions to the counties that are members.

- Northeast Wisconsin Stormwater Consortium (NEWSC) addresses stormwater and erosion control via education and model ordinances. They have been very valuable to four of the five counties and their municipalities.

It is anticipated the area Economic Development Corporations, Convention and Visitor Bureaus, trail groups, sustainability organizations, land trusts, and fishing, waterfowl, and powerboat clubs will become strong partners as this project progresses. Their continual involvement will be crucial to ensure all issues are addressed, and new concerns are brought forward to the managing body.

The Realtors Association of Northeast Wisconsin and some of the local builders associations may be contacted for input if land value or uniform building code issues, or lack of enforcement thereof, are identified as a priority for the new organization.

VI.A.7.h. Role of Project in Planning and/or Management of Lake

Phase 1 of this project provided a substantial inventory of issues, assessments, and recommendations specific to Lake Winnebago that can be used in WDNR and other plans which address fish, plant and aquatic life and their habitat, land use in the watershed, and other lake issues. In Phase II we will address some remaining inventory gaps identified in Phase I, to produce a combined database. Furthermore, in Phase II we will work on ways to make the inventory more useful by adding information about how local issues are being addressed by government and other stakeholders, and producing analyses of issues and actions within different geographic areas and jurisdictions. In this Phase we will also develop a communications and outreach plan to make the inventory data, as well as the actions of government and stakeholders, more accessible and more transparent to the public. We hope this will also dispel some misinformation and misconceptions that we uncovered in Phase I, and which could be detrimental to planning and management efforts on this lake system.

In Phase 1 we also collected a substantial amount of public input about lake issues and management. In Phase II we will address some under-represented groups to ensure we have a good representative list of issues. Again, the public input database will be updated and re-analyzed.

In this phase we will introduce a new element, a research component on possible cooperative management systems for use on the Winnebago Poll, a large natural resource with a substantial human population and multiple jurisdictions. This is not a common problem with Wisconsin lakes, for which people may find satisfactory management options with common approaches (e.g. the 3 types of lake management organizations in state law). But for the Winnebago Pool, we feel it is necessary to have a broader understanding of cooperative management options, and spend the time educating our population and leaders about the options, before launching into an update and expansion of the 1989 Comprehensive Management Plan.

Our expectation is that Phase II activities will allow us to determine the best lake management approach so that a prioritized list of issues can be addressed in the most coordinated, cost

effective approach of maximum benefit to the environment and stakeholders. A new comprehensive management plan and cooperative organization, in coordination with its partners, can ensure other adopted plans for the management of the Lake are implemented in a coordinated way. As *Appendix B* portrays, there are a wealth of surveys, reports, and plans that document needs, issues, and recommendations for management for the Lake. Key plans are as follows:

☐ Wisconsin Department of Natural Resources' *Winnebago Comprehensive Management Plan*

☐ All five county's *Land and Water Management Plans*

☐ *Smart Growth Plans* for the following communities: Calumet County, Outagamie County, Waushara County, Winnebago County, Town of Friendship (Fond du Lac County), Village of North Fond du Lac, City of Fond du Lac, East Central Wisconsin Regional Planning Commission (ECWRPC)

☐ Winnebago Lakes Council *Aquatic Invasive Species Strategic Plan for the Winnebago Pool Lakes*

☐ ECWRPC *Lower Fox River/Winnebago Pool Long-Range Plan*

VI.A.7.i. Timetable of Implementation of Key Activities

The following is the proposed timeline from October 2013 to December 2014. This timeline may be altered on recommendations from the Steering Committee or consultants or per the contract with the consultants. The timeline is built with the expectation that the Winnebago Lakes Council (WLC) Board of Directors meets on the 2nd Tuesday each month, the project Steering Committee meets in person on the 3rd Friday each month and by teleconference during the 1st week of the month. Milestones include:

- hire a General Consultant as soon as possible
- hire a specific project consultant by start of the new year
- Implement a strategic plan for Communications and Outreach by March
- Task Force on Citizen-based Monitoring report by January for pilot programs in spring
- conduct an in-depth review of inventory progress every other month.

☐ *October 2013*—Grant announcement; Steering Committee reviews Request for Proposal (RFP) for a general support consultant (similar in scope to consultant in Phase I) to support Objectives 1.1-1.3, 2.1-2.2, and 3.2; WLC issues RFP with October 25 deadline; Steering Committee reviews current status of inventory work for Objective 2.2, and plans coordination of work amongst partners to fill known gaps; invitations issued for expanding Steering Committee membership.

☐ *November 2013*—RFP applicants reviewed by WLC and Steering Committee, telephone interviews scheduled for a task force from the Steering Committee that includes WLC members, and contract offer reviewed for approval at Nov. 12 WLC Board of Directors Meeting. General Consultant begins support of Steering Committee with a contract terms review at the Nov. 15 Steering Team Meeting, and takes responsibility for: maintaining Weigh In on the Winnebago Waterways Website currently being maintained with support from WLC and Calumet County

(Obj. 1.2); and maintaining and updating databases for inventories and public input (Obj. 1.2, 2.1). WLC uses its annual meeting to kick-off a task force on Citizen-Based Monitoring with project partners (Obj. 1.2). Steering Committee reviews Request for Proposal (RFP) for a Specific Consultant to research cooperative management systems (Objective 3.1).

☐ *December 2013*—General Consultant presents the Steering Committee with: a plan and schedule for developing a strategic plan for Communications and Outreach (Obj. 1.1); an action list for expanding public input from under-represented groups, and begin assisting WLC to record work of a task force on citizen-based monitoring (Obj. 1.2); and demonstrate new database approach for matching issues raised by citizens (our public input database) and stakeholders to record existing programs and actions by government and stakeholder organizations (Obj. 2.1). Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2). RFP for Specific Consultant is reviewed for approval at Dec. 10 WLC Board of Directors Meeting; RFP is issued with January 6 deadline (Obj. 3.1).

☐ *January 2014*—General Consultant work continues and by month's end a draft Strategic Plan for Communication and Outreach is available for review by the Steering Committee (Obj. 1.1). General Consultant work includes: finalizing report from task force on citizen-based monitoring, and reporting on first efforts to engage under-represented groups (Obj. 1.2); and an update on database for matching issues to actions (Obj. 2.1).
Specific Consultant RFP applicants reviewed by WLC and Steering Committee, telephone interviews scheduled for a task force from the Steering Committee that includes WLC members, and contract offer reviewed for approval at Jan. 14 WLC Board of Directors Meeting. Specific Consultant begins work with a contract terms review with a task force from the Steering Team and partners (Obj. 3.1).

☐ *February 2014*—Draft Strategic Plan for Communication and Outreach is released for stakeholder and public comment, to be finalized by the Steering Committee by end of month (Obj. 1.1). General Consultant work includes: report on efforts to engage agriculture and business communities for planning input (Obj. 1.2); demonstrate use of inventory database of issues and actions to analyze progress at different levels of government, particularly municipal and county (Obj. 2.1); Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2); Specific Consultant provides preliminary list of at least 20 candidate systems for cooperative management for Steering Committee review on Feb. 21 (Obj. 3.1).

☐ *March 2014*— Steering Committee begins implementation of recommendations in the Communications and Outreach Plan by discussing partner roles and available resources, and starting a task force including stakeholders with communication and outreach missions, skills and resources. General Consultant work includes: begin implementation of Communication and Outreach plan recommendations for online portals and social media capabilities (Obj. 1.1); draft report summarizing results from engaging under-represented for planning input (Obj. 1.2); begin producing analytical reports from the inventory database of issues and actions, based on direction from the Steering Committee (Obj. 2.1); Specific Consultant provides brief analysis of at least 20 candidate systems for cooperative management for Steering Committee review on Mar. 21 and selection of systems to move forward to full review (Obj. 3.1).

☐ *April 2014*—General Consultant work includes: report on options for online portals and social media capabilities (Obj. 1.1); final report summarizing results from engaging under-represented for planning input (Obj. 1.2); complete the requested analytical reports from the inventory

database of issues and actions, based on direction from the Steering Committee (Obj. 2.1); Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2). Specific Consultant provides draft report on full analysis candidate systems for cooperative management by end of month (Obj. 3.1). General Consultant drafts a plan with Steering Committee for coordinating the cooperative management report dissemination, public meetings, and public comment (Obj. 3.2).

☐ *May 2014*—Steering Committee and WLC review progress of task force for implementing recommendations in the Communications and Outreach Plan, and best use of remaining general consultant time for Objective 1.1. The General Consultant will determine dissemination plan for analytical reports from the inventory database of issues and actions, based on Communications and Outreach Strategy and considering release of the cooperative management review report (Obj. 2.1). Specific Consultant provides final report on full analysis candidate systems for cooperative management by May 16 (Obj. 3.1); General Consultant helps coordinate the cooperative management report dissemination, public meetings, and public comment (Obj. 3.2).

☐ *June 2014*—Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2). General Consultant provides update on efforts to coordinate the release of inventory database reports (Obj. 2.1) and cooperative management report dissemination, public meetings, and public comment (Obj. 3.2).

☐ *July 2014*—General Consultant provides a report and data summarizing education efforts and feedback on the cooperative management report; Steering Team reviews any gaps and needs for further education, outreach and dissemination that can be accomplished with partners (Obj. 3.2).

☐ *August 2013*— Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2). General Consultant reviews progress on Goal 1 (Obj. 1.1-1.3) and the organizational support structures developed to date, e.g. stakeholder task forces and lead partners. Calumet County and Winnebago County report to the Steering Committee on progress with Shoreline Surveys.

☐ *September 2013*—General Consultant reviews progress on Goal 2 (Obj. 2.1-2.2) and the organizational support structures developed to date, e.g. stakeholder task forces and lead partners.

☐ *October 2013*— Steering Team conducts bi-monthly review of progress in filling inventory gaps (Obj. 2.2). General Consultant provides a draft final report of Phase II activities for review by the Steering Committee and WLC. Calumet County and Winnebago County report to the Steering Committee on the availability of data from Shoreline Surveys, incorporation into inventories, and expenditures documented as matching funds for the project.

☐ *November 2013*— General Consultant presents Final Report on Phase II to the Steering Committee and WLC by Nov. 3. Project documents are placed online along with Phase I final report, accompanied by brief summaries and an introductory video. Comments are solicited.

☐ *December 2013*— Steering Team conducts final bi-monthly review of progress in filling inventory gaps (Obj. 2.2). General Consultant provides a summary and analysis of comments submitted over 30 days (ca. Nov. 4-Dec. 4).

☐ *January 2014*— Steering Team meets to consider future lake planning needs and next steps. WLC submits final reimbursement requests to WDNR.

Future Phases

☐ *Spring 2014*—Resolutions passed by counties and calling for a comprehensive lake management plan, using project results to define scope of issues and a cooperative management approach.

☐ *Summer-Fall 2014*—Comprehensive Lake Management Plan drafted. Partnerships established, funding applications completed to address TMDLs and top three priority issues identified in Action Plan.

☐ *Winter 2014*— Comprehensive Lake Management Plan adopted by local governments and state agencies.

☐ *2015*— Management system fully established and in operation.

VI.A.7.j. Plan for Sharing Project Results

☐ The consultants shall be responsible for sharing ten hard copies and one electronic copy of all draft and final documents produced in Phase II with the WLC, who will then distribute to the Chief Executive Officers of major partners engaged in the Steering Committee (e.g. the 5 counties). It shall be the responsibility of the Chief Executive Officer to share any documentation with their staff as they see appropriate.

☐ The consultants shall also deliver an electronic version of all final documents produced in Phase II to each city, village, town within each of the five counties, and a hard copy to the libraries in the four cities adjacent to the Lake System, plus Appleton.

☐ The consultants shall share an electronic version of all draft and final documents with the Steering Committee. The Steering Committee shall be responsible for sharing it with any partners, stakeholders, those who wrote letters of support for the grant application, and local media.

☐ WLC shall forward an electronic version to the Wisconsin Department of Natural Resources, and will take responsibility for locating a final online repository (following recommendations in the Communications and Outreach Plan to be developed by the project).

VI.A.7.k. Other Information

The proposal for Phase 1 of this project included the following list of concerns associated with the lakes. The preliminary list, collected from regional experts and representatives from local governments, remains relevant for comparison to the ideas generated in subsequent stakeholder and citizen engagement activities. This preliminary list summarizes issues previously identified in plans, surveys, and from past meetings. These 'problems' are viewed as 'opportunities' to improve the lakes. They are presented in no specific order:

Need to Provide for Safe, Convenient Navigation

- Upgrade buoy placement and markings to be consistent with Coast Guard standards
- Develop and implement a system-wide boat launch fee and sticker system
- Pursue grants to improve and maintain boat launches
- Develop a system to minimize and resolve user conflicts
- Work with local governments and DNR to determine the need for adding or removing no-wake zones
- Produce and distribute navigation maps
- Sponsor boating safety classes
- Coordinate, sponsor, and/or administer law enforcement boat patrols
- Coordinate Sheriff services and equipment throughout the System
- Uniform noise and speed regulations during winter months
- Uniform harbor/channel lighting during ice conditions
- Regional lake/river system navigation coordination

Need to Address Public Health and Safety Issues

- Coordinate hazardous Blue Green Algae (BGA) monitoring/surveillance
- Coordinate BGA notification of local health departments and veterinarians
- Coordinate effective dissemination of BGA educational materials
- Promote protection of groundwater resources
- Coordinate bacteriological monitoring of beaches
- Water quality needs to be addressed more extensively as more consumers are using the System for their drinking water (clean water will also save the utilities money and reduce the rising expenses to filter the water)
- Discussion of whether public sewer and water should be installed around the System to eliminate improper wells and failing private on-site wastewater treatment systems

Water Resource Management Coordination

- Pursue grant funding for water resource and habitat enhancement projects
- Coordinate and cooperate with DNR and user groups on the development and implementation of water quality and habitat enhancement projects
- Advocate for clean water by coordinating and sponsoring information and education activities on stormwater management, reduction of runoff pollution, establishment of shoreline buffers, low oxygen levels, protection of aquatic habitat, etc.
- Work with local non-governmental organizations, schools, and universities to sponsor periodic Lake Winnebago System conferences
- Address lake level concerns

Coordination of Aquatic Invasive Species (AIS) Prevention Activities

- Coordinate boat inspection and education personnel for the 50+ boat landings on the lakes
- Provide consistent AIS signage at boat landings advising boaters of AIS laws and exclusion practices

- Coordinate volunteer surveillance monitoring for AIS
- Provide information and education coordination for anglers, boaters, schools, boater safety classes, marine contractors, etc.
- Development and/or management of AIS decontamination sites at or near boat launches
- Create a lead Coordinator vs. a county by county approach to AIS
- System-wide Aquatic Plant Management Coordination
- Development of a system-wide aquatic plant management plan
- Purchase and operation of aquatic plant harvesters for maintaining navigation lanes and removal of uprooted mats of vegetation
- Provide general education on the role of plants in healthy lakes
- Provide education to help protect specific areas containing important aquatic plant habitat
- Ensure other lake efforts to address aquatic plant management don't destroy critical fish habitat

Economic Development

- Work with local chambers of commerce and tourism groups to develop recreation maps and promote lake-based recreational opportunities
- Provide periodic updates of attractions, facilities, and events through publications and web sites
- Promote and/or sponsor events consistent with the Fox-Wisconsin Heritage Parkway
- Create a brand for the Lake Winnebago System and market it nationally
- Ordinance Oversight/Recommendations
- Ensure zoning and land and water codes are consistent, adequate, and uniformly enforced to address the nutrient management and soil loss concerns, as well as issues with shoreline development and removal of vegetation
- Develop consistent hunting regulations to avoid varying codes in an area where municipal boundaries are unknown (e.g duck hunting codes by boat)
- Coordinate Citizen Action Activities
- Develop and administer a system-wide litter pick up day
- Administer volunteer citizen lake and stream monitoring programs
- Sponsor lake appreciation events or festivals
- Develop a bike/pedestrian trail around the System to highlight the System, businesses and communities

The Lake Winnebago watershed includes the entire Upper Fox Basin, Wolf River Basin and direct drainage into the Lake Winnebago System. The watershed comprises approximately 6000 square miles. The water quality of Lake Winnebago is greatly influenced by the land use practices in the watershed; therefore, the inventories and data collected in Phase 1 will undoubtedly have to address issues in the watershed as well. Major watershed activities which can benefit from increased coordination are as follows:

- Water quality modeling done by Northeast Wisconsin Waters of Tomorrow (NEWTT) have indicated the watershed to be a major contributor of phosphorous and suspended solids to Lake Winnebago.
- Critical animal waste and soil erosion problems are intensified by the steep slopes along the Niagara Escarpment in Calumet and Fond du Lac counties. Average soil loss in all of Calumet County is estimated to be 2.7 tons per acre. These factors accelerate nutrient and sediment delivery to Lake Winnebago.
- The Winnebago Comprehensive Management Plan and the Lower Green Bay Remedial Action Plan identified this watershed as a high priority for the control of nonpoint sources of pollution.
- Numerous urban stormwater outfalls discharge to Lake Winnebago from portions of the cities of Fond du Lac, Oshkosh, Neenah, and Menasha. Storm event runoff from commercial, industrial, and residential construction sites and from plat developments in rapidly developing sections of Oshkosh, Neenah, and Menasha are also nonpoint source pollution problems. Coordination between the above parties, plus planners, developers, economic development professionals, and business owners can help address these concerns.
- Development of a Total Maximum Daily Load (TMDL) for the Upper Fox and Wolf Basins, which will include the Lake Winnebago System, is currently underway. All stakeholders with defined allocations will benefit from a coordinated effort in addressing implementation goals of the TMDL.
- Pollutant trading and/or adaptive management can play a key role in both meeting water quality goals and future TMDL allocations. Both management tools will benefit from a regional watershed effort in addressing phosphorous and sediment loading from the diverse land uses. A central organization on the Lake Winnebago System could fill a key role in these management strategies. FWWA has been instrumental in setting the stage for a pollutant trading program for that portion of the watershed in their jurisdiction; a regional entity could coordinate with FWWA to ensure the entire watershed is served.