

Wawasee Area Conservancy Foundation

Strategic Plan

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Prepared for WACF
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**Wawasee Area Conservancy Foundation
Strategic Plan**

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1. Overall structure of the strategic plan

The mission of the Wawasee Area Conservancy Foundation, approved on September 27, 1992 states: *“The Wawasee Area Conservancy Foundation is a local public foundation dedicated to the preservation and enhancement of the Wawasee Area Watershed for present and future uses”*. In addition, the Goals and Action Plan Statement reads:

The geographical area covered by WACF’s mission statement is the watershed area for lakes Bonar, Papkeechie, Wawasee and Syracuse. The common denominator for all of them is water quality. WACF is, therefore, concerned with the factors which influence and affect water quality. In addition, this lakes area is a livable pleasant environment, with a high aesthetic value, and WACF will be involved with the factors which affect this environment.

The Foundation was formed to sense, search out and solve threats to this environment and to its water quality. It is intended to be an activist group, carrying out the mapping and testing studies which look for problems and which can take the necessary steps for their solution. This can mean conservancy easements or property acquisition or educational programs or tree plantings, as examples.

To accomplish these aims, WACF will develop a plan for financing this work, using a combination of techniques, again as examples memberships, donations, grants, sponsorships and fundraisers.

To integrate and encourage communication on these goals, WACF will be establishing networks and liaisons with other organizations, creating a climate which encourages citizens to voice their interest and support to this work while minimizing unnecessary duplications.

These, and other goals and objectives to be developed, will emerge as WACF moves forward.

The four elements of WACF’s mission, or factors that effect water quality that must be addressed are: 1. Wetlands conservation, 2. Wise management of Agriculture, 3. Community commitment to controlled development and water use, 4. Preservation of water quality of the lakes

The four fundamental objectives of WACF, designed to address these issues are: 1. Land Acquisition and Management, 2. Ecological Advocacy and Action, 3. Education, 4. Development. Each of these fundamental objectives can be accomplished by a number of detailed objectives. The overall structure of the strategic plan is pictured on the following page.

Wawasee Area Conservancy Foundation

Mission

Preserve and Enhance Wawasee Area Watershed

Elements of Mission

Wetlands

The Lakes

Agriculture

Community

Fundamental Objectives

Land Acquisition and Management

Education

Fundraising

Ecological Advocacy and Action

Detailed Objectives

- Acquire land in five priority areas
- Prevent public trespassing
- Detailed management plans
- Organize stewardship teams
- Land Management database
- Increase volunteer support

- Events for children
- Educate community about WACF and conservation
- Educate lawn care companies
- Educate farmers

- Focus on capital campaign
- Grants for Harza projects
- Grants as part of Capital Campaign
- Streamline record keeping
- Expand database
- Contract out mail process

- Seawall shoreline stabilization
- Decrease effects of boat wakes
- Effects of no-wake zones on soft-stem bulrushes
- Provisions in land use plans
- Follow up Harza projects
- Water quality data

The strategic plan should use the strengths of the watershed as assets, while working to combat the threats to water quality. Therefore, the strengths and threats are outlined below.

2. Strengths of the Wawasee Area Watershed and advantages for WACF's efforts

1. *Relatively high water quality.* The phosphorus and suspended solid concentrations are particularly low for the streams in the Wawasee Area Watershed, according to Harza (2001). Therefore, WACF needs to concentrate on preventing future water quality degradation.
2. *Relatively high area of intact wetlands.*
3. *Low amount of dense urban development.* According to the Harza (2001) study, only 3% of the total land area of the watershed is urban. However, the development that is taking place tends to be directly on the major lakes and water bodies throughout the watershed.
4. *Relatively high degree of support from people living on Lake Wawasee.* An example of this is the seawall refacing demonstration project. The high level of support for this project shows that people on Lake Wawasee are willing to work with WACF.
5. *High potential for financial support.* WACF has been relatively successful in fundraising and development recently, especially with its capital campaign. This success has come mostly from residents living on Lake Wawasee and Syracuse Lake. The potential for financial support increases when other residents of the watershed are included in development efforts.

3. Threats to the Wawasee Area Watershed

1. *Runoff from property on the lakes.* This includes both homes and the other facilities directly on or very near any of the lakes. Homeowners who fertilize their lawns contribute to nutrient runoff. The South Shore Golf Club and Maxwellton Golf Club are two major sources of chemical and nutrient runoff into the watershed, which is a serious threat to water quality.
2. *Runoff from homes within the watershed but not directly on the lakes.* These homes contribute to water quality just as those directly on the lakes. However, since they are not on the lakes, it is generally more difficult to educate the community about the effects of their actions on water quality.
3. *Runoff from agriculture within the watershed.* According to the Harza (2001) report, agricultural land comprises 51% of the land in the Wawasee Area

Watershed, and thus contributes a large amount of the runoff. Farms contribute to increased nutrient runoff with fertilizer use, especially when located in highly erodible areas. Also, farm animal waste entering Turkey Creek and other streams is an issue. Government conservation programs are a useful mechanism for controlling this problem.

4. *Development of wetland areas.* This includes past and present development on or near wetlands. Many highly developed areas in the watershed are past wetlands that have been filled or altered in some way. Prevention of further wetland destruction and restoration of wetland function are two ways of increasing water quality.
5. *Development of non-wetland areas.* Development of land and clearing of vegetation leads to increased runoff of nutrients into the watershed from surrounding land. Better management of these cleared areas helps prevent excessive runoff.
6. *Increased boat traffic.* The increased number of boats as well as the greater number of large boats has negative effects on water quality. Heavy boat traffic, especially along the margins of the lakes near the wetlands, contributes to increased wave energy that decreases the extent of wetland vegetation. In addition, larger boats and boats that are driven at a speed that causes a deep draw and low prop stir up the bottom of the lakes and contribute to increased particles in the water.
7. *Land use plans for Kosciusko and Noble counties generally not enforced.* Although there are mechanisms in place for land use regulation in both counties such as zoning regulations and land use plans, these are not largely enforced. In addition, there are not provisions for water quality conservation in these plans. In the future, the planning boards of each county can be encouraged to include provisions such as the requirement of buffers along water bodies. Implementation of buffers would regulate the number of new structures that can be built on or near shorelines, as well as the renovations made to existing structures.
8. *Abuse of the lakes by boaters and other users.* The heightened use of the lakes in the watershed, especially Lake Wawasee, could lead to a decrease in water quality. Boaters who are not conscious of the ways in which their activities affect water quality could lead to an increase in fuel spills and in human waste deposited into the lakes. In addition, homeowners and lawn care companies continually dump grass clippings and leaves from properties directly on the lakes. Education of the community about the effects of such activities on water quality would help bring about changes.

Challenge to conservation of the Wawasee Area Watershed: The local community

The support of the community is essential in conservation. Therefore, community involvement should be a priority for WACF. There are several benefits to community involvement in conservation, including increased financial support, increased respect for water quality, better treatment of natural areas and WACF's properties. The community in the Wawasee Area Watershed is rather unique, and thus presents several challenges in conservation of the watershed. In order to receive both short-term and long-term support, WACF must be able to address the issue of community involvement, despite the particular challenges that exist.

The first challenge to community involvement is that a large part of the community does not own property on Lake Wawasee. Some live on another lake, and some do not live on any lake. Therefore, in order to involve the entire community, efforts to conserve water quality in the watershed must include the whole watershed.

Second, many property owners, particularly on Lake Wawasee, only reside there during the summer months. This presents a particular challenge in involving the community since most of the efforts must be done during the summer. All of WACF's activities are affected by the decrease in community throughout the fall, winter, and spring months.

4. Overall organizational planning recommendations – Planning Committee

There are five key ways in which the overall planning of WACF can be accomplished in order to use the strategic plan effectively. These should be done by the Planning Committee, with the assistance of other committees as needed.

- *Take responsibility for updating and redirecting the strategic plan*
- *Find and establish professional grant writing and procurement expertise*
- *Review WACF bylaws annually to determine if the organizational structure is satisfactory*
- *Develop a relationship with a similar conservation organization, such as the Geneva Lake Conservancy, in order to benchmark progress*
- *Find ways to streamline processes throughout the organization, especially in areas of land acquisition, land management, and development so that the objectives can be accomplished more easily*
- *Consider ways to increase effectiveness of financial operations and oversight*

5. Tables with goals and action lists for each fundamental objective

Following are outlines of the detailed objectives under each fundamental objective in table format. For each detailed objective, the applicable element(s) of the mission, general priority, goal(s) for the next 5 years, measure(s), action list and appropriate committee(s) are listed. In addition to the detailed objectives, recurring duties are listed under fundamental objectives where appropriate. These recurring duties are basic duties performed by WACF on a yearly basis.

Fundamental Objective: Land Acquisition and Management

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
W	Acquire land in priority wetland areas		Acquire at least two properties each year, or a total of 10	1. % of total prioritized wetland acres owned 2. # of acquisitions per year 3. Acres acquired 4. Protected shoreline footage	1. Call on, write letters, send cards, etc. to stay in touch with property owners 2. Inform landowners of their options via pamphlet; tell them of other success stories 3. Complete mapping of Mudd Lake and prioritization of sites 4. Continually survey potential new property sites 5. Consider acquisitions in certain nonpriority areas such as Dillon Creek, Mudd Lake, Syracuse Lake	Land Acquisition Land Acquisition, PR Land Acquisition, Ecology Land Acquisition, Ecology Land Acquisition, Ecology
			Focus on exceptionally key properties	One-off success of Hardie, Nicholas, Byrd, Ricks or Dunithan properties	1. Continue to contact in order to spark interest in selling or donation via any tool, such as fee simple, conservation easement, etc. 2. Be creative and focused to earn respect, trust and understanding of key owners 3. Use leveraging opportunities such as N. American Wetlands Act to support acquisition endeavors	Land Acquisition Land Acquisition/entire board Land Acquisition
W, C	Prevent public trespassing for hunting and dumping		Determine major public access points to properties and place WACF and "No Trespassing" signs at these points	Decrease in trash at site; evidence of hunters	1. Detailed investigation of illegal trash dumping and evidence of hunters 2. Construct signs 3. Place signs at dumping sites 4. When trash is dumped, clean up the area quickly	Land Management PR Land Management Land Management

* Elements of Mission:

W = Wetland conservation

C = Community

A = Agriculture

L = the Lakes

Fundamental Objective: Land Acquisition and Management (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
W	Develop detailed management plans for properties		Construct and implement land management plans for two properties, at least one of which will include making the site accessible for field trips, hiking, etc.	Number of management plans in use after 5 years	<ol style="list-style-type: none"> 1. Determine properties for which to write plans 2. Work with a consultant to construct plans with specific goals for each property 3. Begin to implement plans, including construction of public trails 	Land Management, Ecology Land Management, Ecology Land Management, Ecology, Education
W	Organize stewardship teams for each major zone in watershed		Land Stewards assigned to every major zone	Number of zones that have a stewardship team assigned to them	<ol style="list-style-type: none"> 1. Assign a land steward team to each property to oversee management 2. Survey each property regularly with the assistance of the land steward 3. Update records in Land Management database as needed 	Land Management, Ecology Land Management, Ecology Land Management
W	Develop and maintain a Land Management database		Database constructed, and management data recorded for every property owned	Percent of properties in database	<ol style="list-style-type: none"> 1. Develop inventory database for all properties 2. Gather information associated with each property, including tax information, survey status, maintenance needs, etc. 3. Update database on a regular basis 	Land Management, Development Land Management, Development Land Management, Development

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Fundamental Objective: Land Acquisition and Management (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
W, C	Increase volunteer efforts for land management		Implement appropriate portions of management plan for each property	1. Increase in volunteer efforts 2. Management plans accomplished	<ol style="list-style-type: none"> 1. Organize one community action day every summer month on a different property where necessary 2. Determine which properties could benefit from large projects 3. Identify local experts who could share knowledge during work day 4. Advertise events in community in order to involve many people 5. Make use of college students as interns to undertake land management projects 6. Keep records of people who help and contact them about future events 	<p>Land Management, Ecology</p> <p>Land Management, Ecology</p> <p>Ecology</p> <p>PR</p> <p>Land Management</p> <p>Development</p>

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Fundamental Objective: Ecological Advocacy and Action

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure	Action List	Committee
W, L	Continue seawall shoreline stabilization project		All seawall filled in with glacial rock	Length of seawall refaced relative to total length	<ol style="list-style-type: none"> 1. Evaluate response to demonstration project via survey of property owners after one year 2. Analyze trends in IDNR's data over one year, and then over a five year period 3. Distribute cost information and resident opinions to prospective property owners 4. Reface seawall wherever property owners approve 	Ecology, Seawall Ecology, Seawall Ecology, Seawall Ecology, Seawall
W, L	Decrease effects of boat wakes for wetland health		Implement buoys near wetlands, including Johnson Bay, Conklin Bay and Syracuse Lake wetlands	Length of wetland along which no-wake zones are implemented, relative to total length where needed	<ol style="list-style-type: none"> 1. Identify exact areas in which wakes destroy wetlands 2. Work with IDNR to determine appropriate distance from wetlands at which to place buoys 3. Place buoys and signs along edge of no-wake zone 4. In order to increase compliance, educate boaters about the effects of boats on wetland health via signs 	Ecology Ecology Ecology Education, Ecology
W	Examine effects of no-wake zones on soft-stem bulrushes		Conduct censuses before and after	Statistical test results	<ol style="list-style-type: none"> 1. Examine old photos to determine baseline state for bulrushes 2. Census populations in one future no-wake zone area where the species' presence has decreased 3. Census population in one area that will not be in a no-wake zone 4. Re-census populations after 1, 2 and 3 years with no-wake zone 5. Work with IDNR to compare results of two counts 6. Determine future course of action to ensure increased survival 	Ecology Ecology Ecology Ecology Ecology

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Fundamental Objective: Ecological Advocacy and Action (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure	Action List	Committee
W, A, C	Advocate aquatic resources provisions in land use plans of Kosciusko and Noble Counties		Talk to planning boards about inserting zoning provisions		1. Request a presentation from Planning with POWER for WACF and local planning boards 2. Determine what provisions need to be included 2. Work with the Kosciusko County Lakes Council or Indiana Lakes Management Society to lobby county planning boards	Ecology Ecology Ecology
W, L	Follow up Harza recommendations for implementation		Implement four initial projects and monitor nutrient runoff from South Shore Golf Course	Projects implemented	1. Record water quality data in lake near South Shore Golf Course 2. Estimates from 3 engineering firms for drawings for enhanced wetland on Dillon Creek, sediment trap in Bayshore Channel, check dam on Dillon Creek, check dam on Martin Creek 3. Choose engineering firm and implement the four projects	Ecology Ecology Ecology/ entire board
L	Develop and implement a standardized protocol for measuring water quality and documenting "how we are doing" relative to the Mission		Adaptive management plan in place after 5 years to ask more detailed questions where data show undesirable trends	Trends analyzed and management plan adapted accordingly	1. Take Secchi disk measurements once per month at 5 locations in Lake Wawasee, one location each in Syracuse, Bonar, Papkeechie 2. Use Secchi data to determine phosphorus and chlorophyll a levels from Carlson's TSI 3. Analyze the data trends over each year for each location, and over 5 years; compare to historical data 4. Publish an annual report detailing the state of water quality over the past year 5. Use results to ask further questions	Ecology Ecology Ecology Ecology/ entire board

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Fundamental Objective: Ecological Advocacy and Action (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure	Action List	Committee
W, A, C, L	<i>Recurring duties</i>		Regular contact with other local and national environmental organizations		1. Regular contact with organizations such as the DNR, Indiana Lakes Management Society, The Nature Conservancy, Land Trust Alliance 2. Keep in contact with other local land trusts and conservation organizations	Ecology Ecology

<p>* Elements of Mission: W = Wetland conservation A = Agriculture C = Community L = the Lakes</p>
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Fundamental Objective: Education

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
C	Hold formal educational events for children		Increase number of activities planned for fourth grade	Number of age groups for which events are held	1. Become involved in Project WET by attending one 6-hour workshop in order to receive information relevant to grades K-12 2. Talk to teachers about relevant activities, including service projects 3. Continue canoe trips for 7-10 year olds	Education Education Education
			Hold two events for high school students annually	Number of events organized for high school students	1. Talk to teachers about ways to complement existing science curricula, especially biology teacher at Wawasee High School 2. Hold one activity in fall semester, and one in spring semester	Education Education
C	Educate local community about WACF and conservation		Identify the components of the Wawasee area community and implement programs to educate all	Community identified and programs implemented	1. Identify components of the community; include those who affect and are affected by the watershed 2. Develop ways to educate each constituent group within community 3. Update WACF brochure to detail past activities and landowners' options for conservation	Education, entire board Education PR, Education
C, L	Educate lawn care companies about effects of lawn care on water quality		Construct and distribute a pamphlet detailing proper mowing, fertilizing and landscaping practices for water quality	Number of lawn care companies whose practices change over 5 years, via survey before and after	1. Prepare a flier similar to the one by Michigan State to distribute to lawn care companies 2. Survey lawn care companies after 2-3 years	PR, Education PR, Education

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Fundamental Objective: Education (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
A, L	Educate farmers in the watershed about the effects of runoff on water quality		Increase amount of highly erodible land in watershed that is under CRP	Increase in number of acres in the watershed in CRP	<ol style="list-style-type: none"> 1. Assess list of HEL sites by talking to district foresters or local Farm Services Agency Offices 2. Identify which highly erodible land is under CRP, which is not, and which CRP land will expire soon 3. Distribute information about the benefits of CRP to farmers who own land not in the program 4. Encourage those whose contracts are about to expire to renew their contracts 	<p>Ecology</p> <p>Ecology</p> <p>Education</p> <p>Education</p>
			Educate farmers about animal waste and water quality	Number of farmers contacted	<ol style="list-style-type: none"> 1. Identify places in the watershed where animal waste is a problem 2. Contact the soil board for prevention alternatives 3. Talk to farmers where necessary 	<p>Ecology</p> <p>Ecology</p> <p>Ecology, Education</p>
C	<i>Recurring duties</i>		Regular articles in newspapers and community mailings, annual meeting for community	Articles published, annual meeting organized	<ol style="list-style-type: none"> 1. Produce at least one newsletter mailed to sponsors, certain potential sponsors and interested members of the "community" 2. Write articles for WPOA's Neighbors guide 3. Inform newspapers about WACF educational events 4. Invite sponsors, promote general community attendance and arrange the annual meeting 	<p>PR</p> <p>PR</p> <p>PR, Education</p> <p>PR</p>

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Fundamental Objective: Fundraising

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
C	Focus diligently on \$3.5 million Capital Campaign		\$2.3 million left in next 1.5 years	% of 2.3 donated	<ol style="list-style-type: none"> 1. Complete calls on identified families who attended Tobias gathering 2. Identify the new set of potential donors 3. Have a gathering to make a presentation in late Summer 2001 or Spring 2002 4. Develop and initiate plan to contact business community 5. Plan to obtain grants from other foundations and groups 	<p>Development</p> <p>Development</p> <p>Development</p> <p>Development</p> <p>Development</p>
C	Modify development database in order to streamline record keeping and mail query process		Upgrade database to be more versatile and easier to use	Turnaround time decrease	<ol style="list-style-type: none"> 1. Determine budget allowed for database upgrade 2. Hire a consultant to design database and convert to new format 3. Establish streamlined processes for data entry, mailing and thank-you letters 	<p>Development</p> <p>Development</p> <p>Development</p>
W	Apply for grants to fund projects that stem from Harza Engineering Feasibility Study		After design phase, apply for grants to implement four proposed projects	Grants applied for and obtained; projects started	<ol style="list-style-type: none"> 1. After desired firm is chosen, apply for additional grants based on cost estimate 	<p>Development, Ecology</p>
W	Apply for grants as part of Capital Campaign		Apply for grants in order to leverage conservation purchases	Grants applied for; amount of money awarded	<ol style="list-style-type: none"> 1. Identify appropriate grants to fund conservation efforts 2. Apply for grants as part of \$3.5 million, in lieu of donations 	<p>Development, Land Acquisition</p> <p>Development</p>

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Fundamental Objective: Fundraising (continued)

Mission*	Detailed Objective	General Priority	Goals for next 5 years	Measure(s)	Action List	Committee
C	Expand database		Keep records of first-time volunteers	Up to date records	1. Obtain volunteer names and interests from action days and other events 2. Maintain separate databases for major sponsors and volunteers 3. Regular communication to sponsors and volunteers: send renewal notices to sponsors annually; send notice of upcoming events to volunteers	Development Development Development, PR
C	Consider contracting out the mail process for increased efficiency		Use independent service to assist with mailings, including printing, folding, stuffing, stamping and sealing	Decrease in turnaround time and volunteers needed to send mailings	1. Identify local company that could provide printing and mailing services 2. Work with company to maximize quality and accuracy while minimizing price	Development Development
C	<i>Recurring duties</i>		Four regular mailings sent per year, plus publishing of annual sponsor donor results	Mailings sent on time	1. Tax letters sent before January 20th to all contributors donating \$250 or more 2. May solicitations to sponsors and non-sponsors 3. Annual meeting notice (August) 4. Fall follow-up mailing to sponsors who have forgotten 5. Publish list of sponsor donations annually	Development Development Development Development Development, PR

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Appendix

Fundamental Objective and Detailed Objective Background

Fundamental Objective: Land Acquisition and Management

Acquire land in priority wetland areas

This is the most visible aspect of WACF's efforts. Of particular interest is to establish protection or ownership in regard to 5 key properties: Hardie, Nicholas, Byrd, Ricks and Dunithan. Continue to pursue, where appropriate, the tool of conservation easement to reduce cost and to leverage funds.

Prevent public trespassing for hunting and dumping

Many properties have been illegally trespassed upon for both hunting and dumping. Signs in areas where this trespassing occurs would help raise awareness that such activity is illegal. In addition, when dumping does occur, quick clean up will lower the likelihood of further dumping.

Develop detailed management plans for properties

Without proper management of WACF's properties, the conservancy does not serve its mission to protect and enhance the watershed. For example, unless a wetland site is cleared of trash and certain invasive plant species, it cannot function properly. WACF should aim to complete and implement management plans for at least two properties in the next five years. In addition, a more general protocol should be developed for each property. Such a protocol would include the assignment of a steward for each property as well as an inventory of tax information.

Organize stewardship teams for each major zone in watershed

For each major wetland area within the watershed, a group of individuals should act as stewards. The stewardship team should perform regular site assessments of each property, including surveys and maintenance evaluations. The team should also lead clean-up efforts or other management projects on each property.

Develop and maintain a Land Management database

A system should be developed by which the management records for each property are managed. This database should include the tax information, maintenance needs, special conditions attached to the deed, and date of purchase of each property.

Increase volunteer efforts for land management

In order to implement land management plans for WACF's properties, volunteer efforts for routine land management tasks must be increased. To increase volunteer efforts, organize three or four land management days per summer. If these were coordinated

with a talk or demonstration from a local expert, they would likely be well attended. The demonstration should relate to the work being done or to the specific property. These events should be advertised to the community, and a list of volunteers should be kept for future mailings.

Another way to increase volunteer efforts would be to use college students as interns to do special land management projects. These could include noxious weed removal or building special viewing areas for use with education or development activities.

Fundamental Objective: Ecological Advocacy and Action

Continue seawall shoreline stabilization project

The seawall demonstration project has been received well by residents. Next summer, participating residents should be surveyed about their experiences. This will help WACF determine how it can work with other residents more efficiently in order to reface the rest of the seawall. The survey should include questions about how much residents would be willing to pay for the refacing, and ask for suggestions regarding future projects. In addition, data being taken by the DNR should be examined. Then, information about the demonstration project should be distributed to potential participants for the next phase.

Decrease effects of boat wakes for wetland health

The continuation of the buoy project, in cooperation with the IDNR would accomplish this objective.

Examine effects of no-wake zones on soft-stem bulrushes

Old photos of the wetlands surrounding Lake Wawasee and Syracuse Lake show soft-stem bulrushes where they do not currently exist. Many biologists believe that their diminishing presence is due to increased wave activity. In order to study the effects of wave activity on soft-stem bulrushes, one or two sites should be selected to be censused. The number of plants in the current population should be counted before no-wake zones are in place. Approximately one, two and three years after no-wake zones are implemented, the population should be censused again. The trend should be examined via a statistical comparison between the abundances at different times.

Advocate aquatic resources provisions in land use plans of Kosciusko and Noble Counties

A statewide organization called Planning with POWER that is based out of Purdue aims to incorporate watershed planning with land use planning. They have made a PowerPoint presentation available to local officials. A presentation can be requested by contacting Robert McCormick: (765) 494-3627. More information can be found on the website: <http://www.planningwithpower.org>.

Follow up Harza recommendations for implementation

Develop and implement a standardized protocol for measuring water quality and documenting "how we are doing" relative to the Mission

In order to determine the state of the water in the watershed, Secchi disk measurements should be taken at several points throughout the watershed. Emphasis should be placed on areas where there is direct human contact. Five points within Lake Wawasee, including the middle of the lake, as well as one point each in Syracuse, Bonar, and Papkeechie Lakes are recommended. Data should be taken monthly at each location. These data should be examined after each year to determine yearly as well as long-term trends. In addition, previous Secchi disk measurements taken in the middle of Lake Wawasee should be examined with new measurements from the same point. These data should then be converted to total phosphorus and chlorophyll *a* levels via Carlson's TSI. In areas where Secchi measurements are low, or chlorophyll and phosphorus are high, further testing can be done to answer more detailed questions.

Road salt used in the watershed could contribute to decreased wetland health due to increased chloride. In order to determine how much road salt affects the health of the watershed, more research should be done. The amount of road salt used, as well as the chloride levels in the watershed should be examined.

Each year, an annual report detailing the state of water quality in the watershed should be published. The Secchi disk depths and corresponding Carlson's TSI values from the middle of Lake Wawasee should be published in this report. In addition, the annual report could include information on the state of zebra mussels in the watershed and any special studies being done by the DNR or other groups. This report could be sent to the community in the watershed, as well as the DNR and other local agencies. In addition, communication of water quality data with a similar organization that has its own data would be helpful to benchmark WACF's efforts.

Fundamental objective: Education

Hold formal educational events for children

Project WET (Water Education for Teachers) is a program based on promoting awareness of water resources. Its aim is teachers and resource managers. A 6-hour workshop costs \$12 and provides a curriculum guide for K-12, as well as activity ideas.

More information can be obtained from the national website: <http://www.projectwet.org> or the Indiana website: <http://www.in.gov/dnr/soilcons/wet>. Of particular interest is the annual Water Festival sponsored by Project WET, held nationwide on Water Education Day in September. A free set of materials for hands-on exhibits will be sent to schools and communities that apply.

Educate local community about WACF and landowners' options for conservation

The groups of people comprising the Wawasee area “community” must be defined before education of the local community can begin. The community should include all people who have an effect on, or are affected by the Wawasee Area Watershed. These may include property owners, lawn care operators, public boaters, commercial operators, renters and farmers.

Once the community is defined, programs can be developed to educate all groups that comprise the community. Annual efforts could include ecology fairs to educate local residents, a regular workshop or seminar, an increase in the number of newsletters mailed from one per year to four per year, and presentations at neighborhood association meetings. The WACF brochure should be updated also to include more recent conservation activities, as well as a guide to conservation options for landowners. In addition to these annual events, special events should be used to address issues concerning the community as they arise.

Educate lawn care companies about effects of lawn care on water quality

Six local lawn care/landscaping companies have been contacted, most of which are very small. All of the people surveyed were somewhat aware of environmental impacts of both mowing and fertilizing. All would be interested in receiving more information on water quality concerns. Construction of a handout similar to that distributed by Michigan State Extension would be useful in educating these companies. MSU’s handouts can be found at <http://www.turf.msu.edu>. Then, approximately two years later, a second survey should be conducted to detect any changes in practices.

Educate farmers in the watershed about the effects of runoff on water quality

The diagnostic/feasibility study done by Commonwealth identifies several places in the Wawasee Area Watershed in which there is field erosion on highly erodible land (HEL). It is important to reassess these areas and find new sites throughout the watershed on which HEL exists. Talking to farmers about CRP, and distributing information about their options would be effective. Sam Sinclair of the local soil board should be contacted for assistance.

Fundamental Objective: Fundraising

Focus diligently on \$3.5 million Capital Campaign

In order to acquire and manage the desired wetlands throughout the watershed, \$3.5 million must be raised. Thus far, WACF has raised approximately \$1.2 million. Over the next 1.5 years, \$2.3 million must be raised. This money will come from a focused effort, including follow-up contacts to potential sponsors and additional fundraising parties.

Apply for grants to fund projects that stem from Harza Engineering Feasibility Study

Grants for the design phase of several projects recommended by the Harza Engineering Feasibility Study have already been obtained. These projects are the enhanced wetland on Dillon Creek, the sediment trap in Bayshore Channel, the check dam on Dillon Creek, and the check dam on Martin Creek. Once the firm and design plans for these projects are finalized, WACF should seek grant money for their construction phase.

Apply for grants as part of Capital Campaign

Modify development database in order to streamline record keeping and mail query process

Expand database

The database should be expanded regularly to include first-time sponsors and volunteers. A database that is updated regularly will ensure that sponsors and volunteers are contacted regularly and that their money and services are used effectively.

Consider contracting out the mail process for increased efficiency