

SECTION 5: SET GOALS AND SELECT INDICATORS

Setting the Goals

The Steering Committee evaluated the priority resource concerns that were gathered from stakeholders throughout the Elkhart River Watershed, reviewed the goals and objectives of the greater St. Joseph River WMP, and examined the mission statement of the Elkhart River Alliance. With this information in mind, six goals were developed, which the committee hopes to achieve through the implementation of the Elkhart River WMP. The complete listing of the Elkhart River WMP's goals is as follows:

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

Objectives:

- maintain Steering Committee,
- address financial sustainability,
- address agricultural issues and concerns,
- address urban issues and concerns,
- address rural residential issues and concerns,
- educate all stakeholders,
- involve and mobilize citizen stakeholders,
- identify and establish collaborative relationships with entities within the Watershed that have potential influence on water quality in order to promote protection and improvement of the Watershed,
- communicate and participate in ongoing water quality research activities within the Watershed and identify research needs that are not being addressed,
- hire a full-time watershed coordinator, and
- establish a permanent location for activities of the Watershed.

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

Objectives:

- reduce soil erosion and sedimentation from agricultural lands,
- reduce soil erosion and sedimentation from urban lands,
- reduce soil erosion and sedimentation from rural residential lands,
- reduce erosion and sedimentation from the banks of surface waterbodies and conveyance systems, and
- provide education to boaters on the shoreline impact of wakes.

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 mL of *E. coli*.

Objectives:

- reduce *E. coli* levels from agricultural lands,
- reduce *E. coli* from urban lands,
- reduce *E. coli* from rural residential lands,
- provide education on how to deal with nuisance wildlife,
- provide education to boaters on proper disposal of wastes, and
- reduce *E. coli* from failing or non-existent septic systems.

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

Objectives:

- reduce nutrient levels from agricultural lands,
- reduce nutrient levels from urban lands,
- reduce nutrient levels from rural residential lands,
- provide education on how to deal with nuisance wildlife,
- provide education to boaters on proper disposal of wastes,
- reduce phosphate contribution from detergents, and
- reduce nutrient contribution from golf courses.

Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

Objectives:

- increase amount of open spaces in permanent protection status,
- increase and improve open space through restoration, and
- increase appreciation of open space through education.

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

Objectives:

- establish an educational subcommittee that will provide education to the stakeholders,
- establish a recreation subcommittee to improve and facilitate citizen access to the waterways of the Elkhart River Watershed,
- participate in national events that coincide with our goals,
- establish a volunteer coordination subcommittee,
- establish a local advocacy subcommittee to work with government and private organizations and to identify current local issues that impact the river/watershed,
- establish a legislative subcommittee,
- establish a research subcommittee to network with local universities and others doing water quality research in the Elkhart River Watershed,
- effectively use the print media to share and communicate past, current, and future activities of the ERA with the media, public, and current and potential ERA and ERRA members,
- effectively use electronic forms of media (TV and radio) to share and communicate past, current, and future activities of the ERA with the media, public, and current and potential ERA and ERRA members,
- create and maintain an ERA website as a clearinghouse for ERA/Elkhart River Watershed information,
- assist watershed coordinator in sampling biological, chemical, and physical data as monitoring efforts occur,
- recruit and train volunteers to monitor at a minimum, each of the 37 subwatersheds, obtaining both wet and dry weather data at each site at least twice each year, and provide continuing education opportunities for volunteer monitors, and
- promote sustainable drainage practices.

Prioritization of Objectives within the 6 Goals of the Watershed Management Plan

Prioritization of Objectives within the 6 Goals of the WMP

Objectives were prioritized by the Steering Committee at the January 17, 2008, meeting. Priorities were identified as High, Medium or Low. High priorities are those which the Steering Committee would like to accomplish within the first five years (2008 - 2012) of implementation of the WMP. Medium priorities are those which the Steering Committee would like to accomplish within the first ten years (2008 - 2017) of implementation of the WMP. Low priorities are those which the Steering Committee would like to accomplish in the next twenty years (2008 - 2027) of implementation of the WMP. These priority rankings of objectives are presented on Table 44a through f.

High Priority Objectives

The following are High priority objectives that the Steering Committee will address in the years 2008-2012:

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

- maintain a Steering Committee,
- address financial sustainability,
- address agricultural issues and concerns,
- address urban issues and concerns,
- educate all stakeholders, and
- involve and mobilize citizen stakeholders.

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

- reduce soil erosion and sedimentation from agricultural lands,
- reduce soil erosion and sedimentation from urban lands, and
- reduce erosion and sedimentation from banks of surface waterbodies and conveyance systems.

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 ml of *E. coli*.

- reduce *E. coli* levels agricultural lands,
- reduce *E. coli* levels from urban lands,
- reduce *E. coli* levels from rural residential lands, and
- reduce *E. coli* from failing or non-existent septic systems.

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

- reduce nutrient levels agricultural lands,
- reduce nutrient levels from urban lands,
- reduce nutrient levels from rural residential lands, and
- reduce nutrient contributions from golf courses

Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

- Increase the amount of open spaces in permanent protection status.

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

- establish an educational subcommittee that will provide education to the stakeholders,
- establish a recreation subcommittee to improve and facilitate citizen access to the waterways of the Elkhart River Watershed,
- establish a volunteer coordination subcommittee,
- effectively use the print media to share and communicate past, current and future activities of the ERA with the media, public and current and potential ERA and ERRA members,
- create and maintain an ERA website as a clearinghouse for ERA/Elkhart River Watershed information,
- assist watershed coordinator in obtaining professional samples as needed, and
- recruit and train volunteers to monitor at a minimum, each of the 37 subwatersheds, obtaining both wet and dry weather data at each site at least twice each year, and provide continuing education opportunities for volunteer monitors

Medium Priority Objectives

The following are Medium priority objectives that the Steering Committee will address in the years 2008-2017:

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

- identify and establish collaborative relationships with entities within the Watershed that have potential influence on water quality in order to promote protection and improvement of the Watershed, and
- hire a full time watershed coordinator.

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

- Provide education to boaters on the shoreline impact of wakes.

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 ml of *E. coli*.

- There are no Medium priority objectives for this goal.

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

- There are no Medium priority objectives for this goal.

Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

- Increase and improve open space through restoration.

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

- establish a local advocacy subcommittee to work with government and private organizations and to identify current local issues that impact the river/watershed, and
- promote sustainable drainage practices.

Low Priority Objectives

The following are Low priority objectives that the Steering Committee will address in the years 2008-2027:

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

- address rural residential issues and concerns,
- communicate and participate in ongoing water quality research activities within the Watershed and identify research needs that are not being addressed, and
- establish a permanent location for activities of the Watershed.

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

- reduce soil erosion and sedimentation from rural residential lands.

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 ml of *E. coli*.

- provide education on how to deal with nuisance wildlife, and
- provide education to boaters on proper disposal of wastes.

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

- provide education on how to deal with nuisance wildlife,
- provide education to boaters on proper disposal of wastes, and
- reduce phosphate contribution from detergents.

Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

- increase appreciation of open space through education.

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

- participate in national events that coincide with our goals;
- establish a legislative subcommittee;
- establish a research subcommittee to network with local universities and others doing water quality research in the Watershed; and
- effectively use electronic forms of media (TV and radio) to share and communicate past, current, and future activities of the ERA with the media, public, and current and potential ERA and ERRA members

Table 44a Priority Ranking of Objectives:

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

	Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
	Maintain Steering Committee.	At minimum, meet quarterly.	High	Steering	Volunteers	Volunteer/Donations/Dues
		Recruit new members.	High	Steering	Volunteers, SWCD, Education & Outreach subcommittee	Volunteer/Donations/Dues
	Address financial sustainability.	Establish a financial subcommittee who will coordinate with the ERRA on funding issues.	High	Steering	Volunteers, Full-time watershed coordinator	Volunteer/Donations/Dues
		Actively pursue funding sources (e.g. grants, donations, and membership dues).	High	Steering	Volunteers, Full-time watershed coordinator, Grant-writing subcommittee	Volunteer/Donations/Dues
		Review finances quarterly.	High	Steering	Financial subcommittee	Volunteer/Donations/Dues
	Address agricultural issues and concerns.	Establish an agricultural subcommittee that will promote the use of agricultural BMPs.	High	Steering	SWCD employees, Agricultural subcommittee, volunteers, local land-owners, NRCS, other Governmental and Non-governmental organizations (NGO's)	Volunteer/Donations/Dues, grant funding
	Address urban issues and concerns.	Establish an urban subcommittee that will promote the use of urban BMPs.	High	Steering	SWCD employees, Urban subcommittee, volunteers, local land-owners, Governmental and Non-governmental organizations (NGO's)	Volunteer/Donations/Dues, grant funding
	Address rural residential issues and concerns	Establish a task force made up of the urban, agricultural, and educational subcommittees to deal with rural residential issues and concerns.	Low	Steering	Rural/residential task force, SWCD employees, volunteers, local land-owners	Volunteer/Donations/Dues, grant funding
	Educate all stakeholders.	Establish an educational subcommittee that will provide education to the stakeholders.	High	Steering	Education and outreach subcommittee, volunteers, local university, educated professionals, governmental organizations and NGO's	Volunteer/Donations/Dues, grant funding
	Involve and mobilize citizen stakeholders.	Establish a monitoring subcommittee to recruit volunteers to assist in gathering water quality data.	High	Steering	Monitoring subcommittee, volunteers, Hoosier Riverwatch, governmental organizations and NGO's, local educational facilities including schools at all levels	Volunteer/Donations/Dues, Grant funding
		Establish a media, marketing, and website subcommittee to promote ERA activities and goals through various media formats.	High	Steering	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with governmental organizations and NGO's	Volunteer/Donations/Dues, Grant funding
		Establish a recreation subcommittee to improve and facilitate citizen access to the waterways of the Elkhart River Watershed.	High	Steering	Recreation subcommittee, volunteers, outdoor enthusiasts, Local cub and boy scout troops, Local Girl-scout troops	Volunteer/Donations/Dues, Clean-up sponsorships, fundraisers
		Establish a volunteer coordination subcommittee to assist other subcommittees in obtaining volunteers.	High	Steering	Volunteers	Volunteer/Donations/Dues
	Identify and establish collaborative relationships with entities within the Watershed that have potential influence on water quality in order to promote protection and improvement of the Watershed.	Establish a local advocacy subcommittee to work with government and private organizations and to identify current local issues that impact the river/watershed.	Medium	Steering	Local advocacy subcommittee, volunteers, local governmental representatives,	Volunteer/Donations/Dues, Grant funding
		Establish a legislative subcommittee to contact legislators and keep them informed of Elkhart River Watershed activities.	Medium	Steering	Legislative subcommittee, Local advocacy subcommittee, volunteers, local governmental representatives, State governmental representatives, Federal governmental representatives	Volunteer/Donations/Dues, Grant funding
	Communicate and participate in ongoing water quality research activities within the Watershed and identify research needs that are not being addressed.	Establish a research subcommittee to network with local universities and others doing water quality research in the Watershed.	Low	Steering	Research subcommittee, area colleges and universities, Local middle-schools and high-schools, interns, volunteers, Hoosier Riverwatch, governmental organizations and NGO's	Volunteer/Donations/Dues, Grant funding
		The monitoring and research subcommittees will work together to assist with the professional water quality monitoring.	Low	Monitoring and Research	Monitoring and Research subcommittee, area colleges and universities, Local middle-schools and high-schools, interns, volunteers, Hoosier Riverwatch, governmental organizations and NGO's	Volunteer/Donations/Dues, Grant funding
	Hire a Full time watershed coordinator.	Secure sustainable funding for a long term coordinator.	Medium	Steering	Financial subcommittee	Donations/Dues/Paid Position, Grant funding
	Establish a permanent location for activities of the Watershed.	Secure administrative infrastructure (physical location(s)).	Low	Steering	Financial subcommittee, ERA Steering Committee, ERRA	Donations/Dues

Table 44b Priority Ranking of Objectives:

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
Reduce soil erosion and sedimentation from agricultural lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Agricultural	Full-time watershed coordinator, consultant, Agricultural subcommittee, Education and outreach subcommittee, SWCDs, NRCS	IDEM, SWCDs additional funding sources, additional Grants, donations, fundraisers, USDA
	Establish and implement a cost-share program for BMP installation.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, USDA
	Identify and install demonstration sites.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, USDA
	Host field days at BMP sites.	High	Agricultural	Agricultural subcommittee, Volunteers, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time, USDA
Reduce soil erosion and sedimentation from urban lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Urban	Full-time watershed coordinator, consultant, Urban subcommittee, Education and outreach subcommittee, SWCDs	IDEM, SWCDs additional funding sources, additional Grants, donations, fundraisers
	Establish and implement a cost-share program for BMP installation.	High	Urban	Urban subcommittee, Willing participants in urban areas, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants
	Identify and install demonstration sites.	High	Urban	Urban subcommittee, Willing participants in urban areas, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations
	Host field days at BMP sites.	High	Urban	Urban subcommittee, Volunteers, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time
	Investigate additional opportunities to further reduce soil erosion from construction sites and other urban lands.	High	Urban	Urban subcommittee, Volunteers, Local advocacy subcommittee, SWCDs	Volunteer time,
Reduce soil erosion and sedimentation from rural residential lands.	Investigate opportunities to reduce soil erosion from rural residential lands.	Low	Rural Residential Task Force	Rural/Residential task force, Volunteers, Local advocacy subcommittee	SWCD, Additional sources of funding, Additional Grants, Donations
Reduce erosion and sedimentation from banks of surface waterbodies and conveyance systems.	Connect people with the programs and agencies to address these issues.	High	Bank and Drainage Task Force, Lake Associations	Bank and drainage task force, Volunteers, NGO's	SWCD, Additional sources of funding, Additional Grants, Donations
Provide education to boaters on the shoreline impact of wakes.	Connect people with the programs and agencies to address these issues.	Medium	Education, Lake Associations	Education and outreach subcommittee, Volunteers, NGO's	Volunteer

Table 44c Priority Ranking of Objectives:

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 ml of *E. coli*.

Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
Reduce <i>E. coli</i> levels from agricultural lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Agricultural	Consultant, Agricultural subcommittee, Education and outreach subcommittee, SWCDs, NRCS	IDEM, SWCD, additional funding sources, additional Grants, donations, fundraisers, USDA
	Establish and implement a cost-share program for BMP installation.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, USDA
	Identify and install demonstration sites.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, USDA
	Host field days at BMP sites.	High	Agricultural	Agricultural subcommittee, Volunteers, SWCDs, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time, USDA
Reduce <i>E. coli</i> from urban lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Urban	Consultant, Urban subcommittee, Education and outreach subcommittee, SWCDs	IDEM, additional funding sources, additional Grants, donations, fundraisers
	Establish and implement a cost-share program for BMP installation.	High	Urban	Urban subcommittee, Willing participants in urban areas, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants
	Identify and install demonstration sites.	High	Urban	Urban subcommittee, Willing participants in urban areas, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations
	Host field days at BMP sites.	High	Urban	Urban subcommittee, Volunteers, SWCDs	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time
	Investigate additional opportunities (funding and educational) to further reduce <i>E. coli</i> levels from point sources including CSOs and other Urban lands.	High	Urban	Urban subcommittee, Volunteers, Local advocacy subcommittee, Municipalities, SWCDs	Volunteer
	Educate pet owners on the impacts of and appropriate disposal of pet waste.	High	Urban and Education	Urban subcommittee, Education and outreach subcommittee, local pet stores, signage in dog parks, Volunteers, SWCDs	Additional funding sources, Donations, volunteer
Reduce <i>E. coli</i> from rural residential lands.	Offer to assist health departments in educating the populace on the dangers of failed systems or non-existent systems, how to maintain septic systems, what constitutes illicit discharge, and what to do if you find one.	High	Rural Residential Task Force	Rural/residential task force, Volunteers, NGO's, Education subcommittee, local educational facilities, municipalities	Donations, Volunteer
	Connect people with the programs and agencies to address these issues.	High	Rural Residential Task Force	Rural/residential task force, Education and outreach subcommittee, Volunteers, NGO's, Local advocacy subcommittee	Volunteer
Provide education on how to deal with nuisance wildlife.	Connect people with the programs and agencies to address these issues.	Low	Education	Education and outreach subcommittee, Volunteers, NGO's	Volunteer
Provide education to boaters on proper disposal of wastes.	Connect people with the programs and agencies to address these issues.	Low	Education	Education and outreach subcommittee, Volunteers, NGO's, DNR	Volunteer
Reduce <i>E. coli</i> from failing or non-existent septic systems	Educate residents about the impacts of failing or non-existent septic systems and the need for proper maintenance.	High	Education	Education and outreach subcommittee, Volunteers, NGO's, newspapers	Volunteer

Table 44d Priority Ranking of Objectives:

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
Reduce nutrient levels from agricultural lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Agricultural	Consultant, Agricultural subcommittee, Education and outreach subcommittee, NRCS	IDEM, additional funding sources, additional Grants, donations, fundraisers
	Establish and implement a cost-share program for BMP installation.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants
	Identify and install demonstration sites.	High	Agricultural	Agricultural subcommittee, Willing participants with agricultural land, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations
	Host field days at BMP sites.	High	Agricultural	Agricultural subcommittee, Volunteers, NRCS	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time
Reduce nutrient levels from urban lands.	Promote and provide technical assistance to install appropriate BMPs.	High	Urban	Consultant, Urban subcommittee, Education and outreach subcommittee	IDEM, additional funding sources, additional Grants, donations, fundraisers
	Establish and implement a cost-share program for BMP installation.	High	Urban	Urban subcommittee, Willing participants in urban areas	IDEM, SWCD, Additional sources of funding, Additional Grants
	Identify and install demonstration sites.	High	Urban	Urban subcommittee, Willing participants in urban areas	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations
	Host field days at BMP sites.	High	Urban	Urban subcommittee, Volunteers	IDEM, SWCD, Additional sources of funding, Additional Grants, Donations, Volunteered time
	Investigate additional opportunities (funding and educational) to further reduce nutrient levels from point sources including CSOs and other urban lands.	High	Urban	Urban subcommittee, Volunteers, Local advocacy subcommittee	Volunteer
	Educate pet owners on the impacts of and appropriate disposal of pet waste.	High	Urban and Education	Urban subcommittee, Education and outreach subcommittee, local pet stores, signage in dog parks, Volunteers	Additional funding sources, Donations, volunteer
	Educate residents and landscaping companies about the proper application of lawn fertilizers	High	Urban and Education	Urban subcommittee, Education and outreach subcommittee, Volunteers	Donations, Volunteered time
Reduce nutrient levels from rural residential lands.	Offer to assist health departments in educating the populace on the dangers of failed systems or non-existent systems, how to maintain septic systems, what constitutes illicit discharge, and what to do if you find one.	High	Rural Residential Task Force	Rural/Residential task force, Education and outreach subcommittee, Volunteers, Research subcommittee	Volunteer
	Connect people with the programs and agencies to address these issues.	High	Rural Residential Task Force	Rural/Residential task force, Education and outreach subcommittee, Volunteers, Research subcommittee	Volunteer
	Educate residents and landscaping companies about the proper application of lawn fertilizers	High	Rural Residential Task Force	Rural/Residential task force, Education and outreach subcommittee, Volunteers, Research subcommittee	Volunteer
Provide education on how to deal with nuisance wildlife.	Connect people with the programs and agencies to address these issues.	Low	Education	Education subcommittee, Volunteers, NGO's, DNR, USFWS,	Volunteers, Donations, Dues
Provide education to boaters on proper disposal of wastes.	Connect people with the programs and agencies to address these issues.	Low	Education, Lake Associations	Education and outreach subcommittee, Volunteers, NGO's, media, DNR	Volunteers, Lake Associations
Reduce phosphate contribution from detergents.	Provide education on the hazards of using phosphate containing detergents.	Low	Education	Education and outreach subcommittee, Volunteers, NGO's, newspaper articles, workshops	Volunteer
	Advocate local stores to carry phosphate free detergents.	Medium	Advocacy	Local advocacy subcommittee, volunteers,	Volunteer
Reduce nutrient contribution from golf courses.	Promote the use of native vegetation in the rough.	High	Golf Course Task Force	Golf course task-force	Volunteer
	Promote appropriate turf management BMPs.	High	Golf Course Task Force	Golf course task-force	Volunteer
	Connect people with the programs and agencies to address these issues.	High	Golf Course Task Force	Golf course task-force	Volunteer

Table 44e Priority Ranking of Objectives:
Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
Increase amount of open spaces in permanent protection status.	Promote conservation easement opportunities.	High	Media, Marketing, and Website, and Education and Agriculture	ACRES, Trillium Land Conservancy, Wood-Land-Lakes, The Nature Conservancy, etc., NGO's	Additional funding sources, Donations, Grants, Volunteer
	Promote greenway corridors.	High	Advocacy	Local Advocacy subcommittee, NGO's, Parks Departments	Additional funding sources, Donations, Grants, Volunteer
	Promote park expansion and use of public land.	High	Advocacy	Parks Dept. representatives, Local advocacy subcommittee, Volunteers	Additional funding sources, Donations, Grants, Volunteer
	Identify natural resources, ecological areas, unique habitats to be preserved and protected.	High	Research	Consultant, Research subcommittee, Local municipalities	Additional funding sources, Donations, Grants, Volunteered time
	Promote awareness of invasive species and their impact on native ecosystems.	High	Education, Fisheries and Research	Education and research subcommittee's, Consultant, media and marketing subcommittee, Volunteers, DNR, INPAWS, other governmental and NGOs	Additional funding sources, Donations, Grants, Volunteer
	Promote awareness of threatened and endangered species and educate the public on ways to protect these species.	High	Education, Fisheries, and Research	DNR, USFWS, NGO's, Education and research subcommittee's, Consultant, media and marketing subcommittee, Volunteers	Additional funding sources, Donations, Grants, Volunteer
Increase and improve open space through restoration.	Support wetland, prairie, and woodland restoration.	Medium	Agriculture, Urban, and Advocacy	ACRES, Trillium, Wood-Land-Lakes, Nature Conservancy, NGO's, Agricultural subcommittee, Local advocacy subcommittee, Consultant, Volunteers	Additional funding sources, Donations, Grants, Volunteer
	Support reclamation of brownfields.	Medium	Urban and Advocacy	EPA, Municipalities, Urban subcommittee, Local Advocacy subcommittee, Consultant, NGO's, IDEM, Indiana Finance Authority	Additional funding sources, Donations, Grants, Volunteer, DEM, Indiana Finance Authority
	Support floodplain development abandonment.	Medium	Advocacy, and Rural/Res Task Force	FEMA, Consultant, Local Advocacy subcommittee, NGO's	Additional funding sources, Donations, Grants, Volunteer
	Manage current open spaces for invasives.	Medium	Education, Fisheries, and Research	Acres, Trillium, Wood-Land-Lakes, Nature Conservancy, NGO's, Education and Research subcommittees, Consultant, Volunteers, DNR	Additional funding sources, Donations, Grants, Volunteer
Increase appreciation of open space through education.	Sponsor Indiana Master Naturalist courses, Hoosier Riverwatch, and other opportunities.	Low	Education, Volunteer, Monitoring, and Recreation	SWCDs, Full-time watershed coordinator, Consultant, Education and outreach subcommittee, NGO's	Additional funding sources, Donations, Grants, Volunteer
	Promote outdoor recreation.	Low	Recreation and Fisheries	Full-time watershed coordinator, Consultant, Education and outreach subcommittee, Recreation subcommittee, NGO's, Volunteers	Additional funding sources, Donations, Grants, Volunteer

Table 44f Priority Ranking of Objectives:

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

Objective	Action Item	Priority	Responsible Party	Technical Assistance	Financial Assistance
Establish an educational subcommittee that will provide education to the stakeholders.	Research and provide or create educational materials.	High	Education	Education and outreach subcommittee, Volunteers, Goshen College, Local middle schools and High Schools	Additional funding sources, Donations, Grant's, Volunteered time
	Assist with the design of presentations and display materials.	High	Education	Education and outreach subcommittee, Media and Marketing subcommittee, Volunteers, Goshen College, Local middle schools and High Schools	Additional funding sources, Donations, Grant's, Volunteered time
	Coordinate field days and other educational events.	High	Education	Education and outreach subcommittee, Volunteers, NGO's	Additional funding sources, Donations, Grant's, Volunteered time
	Assist the media, marketing, and website subcommittee with the development of promotional materials.	High	Education	Education and outreach subcommittee, Volunteers	Additional funding sources, Donations, Grant's, Volunteered time
	Educate pet owners on the impacts of and appropriate disposal of pet waste.	High	Education and Urban	Urban subcommittee, Education and outreach subcommittee, local pet stores, signage in dog parks, Volunteers, Amish volunteers	Additional funding sources, Donations, volunteer
	Offer to assist health departments in educating the populace on the dangers of failed systems or non-existent systems, how to maintain septic systems, what constitutes illicit discharge, and what to do if you find one.	High	Rural Residential Task Force	Rural/residential task force, Volunteers, NGO's, Education subcommittee, local educational facilities, municipalities	Donations, Volunteer
	Provide education on how to deal with nuisance wildlife.	High	Education	Education and outreach subcommittee, Volunteers, NGO's, DNR, USFWS, Geese Police	Volunteers, Donations, Dues
	Provide education to boaters on proper disposal of wastes.	High	Education	Education and outreach subcommittee, Volunteers, NGO's, newspaper articles, workshops, signage at piers, DNR, Lake Associations	Volunteers, Lake Associations, Lake Associations
	Educate residents and landscaping companies about the proper application of lawn fertilizers.	High	Rural Residential Task Force	Rural/Residential task force, Education and outreach subcommittee, Volunteers, Research subcommittee	Volunteer
	Provide education on the hazards of using phosphate containing detergents.	High	Education	Education and outreach subcommittee, Volunteers, NGO's, newspaper articles, workshops	Volunteer
	Provide education to golf courses on "green" management.	High	Golf Course Task Force	Golf course task-force subcommittee	Volunteer
	Assist agriculture subcommittee in promotion of BMPs.	High	Education	Consultant, Agricultural subcommittee, Education and outreach subcommittee	IDEM, additional funding sources, additional Grants, donations, fundraisers
	Assist urban subcommittee in promotion of BMPs.	High	Education	Consultant, Urban subcommittee, Education and outreach subcommittee	IDEM, additional funding sources, additional Grants, donations, fundraisers
	Work with local school corporations to assist with water quality education.	High	Education	Education and outreach subcommittee, Volunteers, NGO's, Goshen College, Local middle schools and high schools	Volunteer, Students, Fundraisers
Establish a recreation subcommittee to improve and facilitate citizen access to the waterways of the Elkhart River Watershed.	Open the river to small craft access.	High	Recreation	Recreation subcommittee, NGO's, Volunteers, County Surveyors, IDEM, DNR, Army Corps of Engineers	Volunteer, additional funding sources, additional Grants, donations, fundraisers, Volunteer
	Clean the trash out of the river, its tributaries, and riparian corridors.	High	Recreation	Recreation subcommittee, NGO's, Volunteers, Sponsored clean-up days	Volunteer

Table 44f Priority Ranking of Objectives:

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

		Create recreational opportunities for youth on the river.	High	Recreation	Recreation subcommittee, NGO's, Volunteers, Education and outreach subcommittee	Volunteer
Participate in national events that coincide with our goals.		Participate in river clean up events.	Low	Volunteer and Recreation	Recreation subcommittee, NGO's, Volunteers, Sponsored clean-up days, DNR	Volunteer
		Participate in water monitoring events.	Low	Volunteer and Monitoring	SWCDs, DNR, Volunteer subcommittee, Monitoring subcommittee, NGO's, Volunteers, Education and outreach subcommittee	Volunteer
		Participate in other related events.	Low	Volunteer	Volunteer subcommittee, NGO's, Volunteers, Education and outreach subcommittee	Volunteer
Maintain a volunteer coordination committee.		Assist other committees in obtaining volunteers.	High	Volunteer	Volunteer subcommittee, NGO's, Volunteers, Education and outreach subcommittee	Volunteer
Establish a local advocacy subcommittee to work with government and private organizations and to identify current local issues that impact the river/watershed.		Identify and establish collaborative relationships with entities within the Watershed that have potential influence on water quality in order to promote protection and improvement of the Watershed.	Medium	Advocacy	Local advocacy subcommittee, volunteers, local governmental representatives, State governmental representatives, Federal governmental representatives	Volunteer/Donations/Dues, Grant funding
Establish a legislative subcommittee.		Contact legislators and keep them informed of Elkhart River Watershed activities.	Low	Legislative	Local advocacy subcommittee, volunteers, local governmental representatives, State governmental representatives, Federal governmental representatives	Volunteer/Donations/Dues, Grant funding
Establish a research subcommittee to network with local universities and others doing water quality research in the Watershed.		Communicate and participate in ongoing water quality research activities within the Watershed and identify research needs that are not being addressed.	Low	Research	Research subcommittee, Goshen College, Local middle-schools and high-schools, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
Effectively use the print media to share and communicate past, current and future activities of the ERA with the media, public and current and potential ERA and ERRA members		Assist other committees with information strategies including new tri-folds, flyers and brochures. Develop relationships with local media and individual reporters.	High	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding
		Write quarterly newspaper articles about the river, testing results and pollution trends.	High	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding
		Give presentations (Power Point) at clubs, school or other groups.	High	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding
		Develop relationships with local media and individual reporters.	High	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding
Effectively use electronic forms of media (TV and radio) to share and communicate past, current and future activities of the ERA with the media, public and current and potential ERA and ERRA members		Assist other committees with information strategies by developing relationships with local electronic media and individual reporters.	Low	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding

Table 44f Priority Ranking of Objectives:

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

	Create and maintain an ERA website as a clearinghouse for ERA/Elkhart River Watershed information	The website will include: 1) an overview of who the ERA is, 2) an introduction to what a watershed is and the Elkhart River Watershed, 3) space for subcommittees to report on their activities, goals, and visions, 4) calendar of events, 5) an ftp site for efficient file sharing among members and subcommittees, 6) an e-mail link for questions ,7) question and answer section, and 8) speakers bureau	High	Media, Marketing, and Website	Media, marketing, and website subcommittee, volunteers, Local newspapers, Local radio stations, local television commercials, publications associated with NGO's	Volunteer/Donations/Dues, Grant funding
	Assist watershed coordinator in obtaining the sampling of biological, chemical, and physical data as monitoring efforts occur.	Work with local agencies to provide new water quality data as they collect it.	High	Monitoring	Monitoring and Research subcommittee, Goshen College, Local middle-schools and high-schools, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
	Recruit and train volunteers to monitor at a minimum, each of the 37 subwatersheds, obtaining both wet and dry weather data at each site at least twice each year, and provide continuing education opportunities for volunteer monitors.	Provide information to the general public on the Hoosier Riverwatch volunteer monitoring program, and recruit volunteers to monitor various sites throughout the Watershed	High	Monitoring	Monitoring and Research subcommittee, Goshen College, Local middle-schools and high-schools, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
		Host Hoosier Riverwatch trainings in the Watershed at least twice a year.	High	Monitoring	Monitoring and Research subcommittee, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
		Conduct physical site assessment: once per year, macroinvertebrate assessment: twice per year, chemical Assessment: wet and dry weather, at least twice per year.	High	Monitoring	Consultant, Monitoring and Research subcommittee, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
		Host additional training sessions for volunteers: advanced training and review sessions.	High	Monitoring	Monitoring and Research subcommittee, interns, volunteers, Hoosier Riverwatch, NGO's	Volunteer/Donations/Dues, Grant funding
	Promote sustainable drainage practices.	Correspond with Surveyor's offices and Drainage Boards.	Medium	Bank and Drainage Task Force	Bank and drainage task force, Volunteers, NGO's	SWCD, Additional sources of funding, Additional Grants, Donations
		Communicate with individual land owners.	Medium	Bank and Drainage Task Force	Bank and drainage task force, Volunteers, NGO's	SWCD, Additional sources of funding, Additional Grants, Donations

Selecting the Indicators for the Goals

Goal #1: Sustain the financial and institutional capacity of a stakeholder group. Increase the collaboration of both urban and agricultural stakeholders to eliminate program duplication, reduce costs, and identify effective solutions.

The first level of accomplishing indicators for achieving goal #1 would be focused on the ability of the high priority objectives for goal #1 to be met. These include: Maintain Steering Committee; Address Financial Sustainability; Address Agricultural Issues and Concerns; Address Urban Issues and Concerns; Address Rural Residential Issues and Concerns; Educate All Stakeholders; and Involve and Mobilize Citizen Stakeholders. One of the medium priority objectives is hiring a full-time watershed coordinator. This individual's functionality would be a clear means of accomplishing much of this goal, assuming that the financial capacity has been achieved to support such a position demonstrates great sustainability for the Elkhart River Watershed.

Goal #2: Reduce soil erosion and sedimentation so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 80 mg/L total suspended solids.

The selected water quality indicator for accomplishing the indicators for achieving goal #2 is based on the measurable improvements to the pollutant concentrations in the Total Suspended Solids (TSS) load reduction modeling. As the implementation of urban and agricultural BMPs takes place within the Watershed, improvements to the TSS loads can be projected; examples of accepted removal rates are discussed in Chapter 6. Targets have been established for load reduction values, which are discussed in Chapter 7.

Goal #3: Reduce the concentration levels of *E. coli* so the primary and secondary contact waters within the Watershed do not pose an adverse human health impact. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Indiana State water quality standard of 235 colony forming units per 100 mL of *E. coli*.

The reduction of levels of *E. coli* are not based on modeling of water quality so indicators for this goal can be expanded to evaluate the implementation of BMPs to reach goals 2 and 4. Successfully accomplishing outreach and education components of goal #6 will also indicate reductions of *E. coli* levels in agricultural lands, urban lands and from rural residential lands.

Goal #4: Reduce the amount of nutrient loading (phosphorus and nitrogen) so that surface water functions and aesthetics are improved and protected. By the year 2027, surface waters within the Elkhart River Watershed will comply with the Steering Committee's target based on the recommended water quality threshold of 10 mg/L of nitrate/nitrite and 0.3 mg/L of phosphorus.

The selected water quality indicator for accomplishing the indicators for achieving goal #4 is based on the measurable improvements to the pollutant concentrations for total nitrogen and total phosphorus load reduction modeling. As the implementation of urban and agricultural BMPs takes place within the Watershed, improvements to the TSS loads can be projected; examples of

accepted removal rates are discussed in Chapter 6. Targets have been established for load reduction values, which are discussed in Chapter 7.

Goal #5: Increase preservation, restoration, and appreciation of open space, and maintain a proper balance between the many diverse landuses in the Elkhart River Watershed.

An indicator of accomplishing goal #5 can involve the general inventory of lands held within preservation and open space landuses. Indicators of successful restoration of uplands, wetlands, shoreline and stream channels are all positive indicators of reaching this goal. Increases in appreciation of open space is difficult to quantify, so focus should be on areas provided for opportunities by diverse user groups.

Goal # 6: Develop an outreach and education program that keeps stakeholders involved in issues in the Watershed, and coordinate volunteer activities that benefit the health of the Elkhart River Watershed.

Indicators for achieving goal #6 can be identified by the successful accomplishment of the high priority action items for this goal, which include: Establish an educational subcommittee that will provide education to the stakeholders; Establish a recreation subcommittee to improve and facilitate citizen access to the waterways of the Elkhart River Watershed; Maintain a volunteer coordination subcommittee; Effectively use the print media to share and communicate past, current and future activities of the ERA with the media, public and current and potential ERA and ERRA members; Create and maintain an ERA website as a clearinghouse for ERA/Elkhart River Watershed information; Assist watershed coordinator in obtaining the sampling of biological, chemical, and physical data as monitoring efforts occur; and Recruit and train volunteers to monitor at a minimum, each of the 37 subwatersheds, obtaining both wet and dry weather data at each site at least twice each year, and provide continuing education opportunities for volunteer monitors.