

WORKPLAN

a. Project Title:

NWRPC Toxic Waste Collection, Education, and Remedial Action Project

b. Total Project Funding:

\$1,000,000.00

c. Benefit to Organization:

The Northwest Regional Planning Commission exists to provide comprehensive planning tools and services specifically to counties and local units of government that support economic development in a sustainable and environmentally friendly manner.

1. The project supports the NWRPC Environmental Department by eliminating gaps in our service area with respect to the collection of hazardous and toxic wastes specifically related to the tribal nations. This project will establish hazardous waste and electronic collection/storage sites on tribal lands located within the south shore basin of Lake Superior.
2. The project supports the NWRPC Environmental Departments mission by expanding the collection of hazardous and toxic wastes within the south shore basin of Lake Superior in the western Upper Peninsula of Michigan Counties that currently have no hazardous waste and electronic collection/storage sites.
3. The project supports the NWRPC Environmental Departments efforts to continually educate the public regarding how toxic and electronic waste materials affect Lake Superior and the groundwater basin.
4. The project supports the NWRPC Community and Comprehensive Planning Division through development of a toxic chemical and waste stream GIS data layer provided through an IMS mapping server, allowing all communities and local units of government to utilize it in their emergency and disaster preparedness/mitigation planning.

d. Point of contact

Contact Name:	Myron Schuster
Organization Name:	Northwest Regional Planning Commission
Address:	1400 S River Street
City, State, Zip Code:	Spooner, WI 54801
Phone Number:	715-635-2197
Fax Number:	715-635-7262
Email:	mschuster@nwrpc.com

e. Programmatic Capability

1. Department of Energy/EERE – Manufacturing for Energy Efficiency Project #DE-FG3608-08GO-88018 - \$4,920,000 award 8/15/2008 for a 2-year, \$10,227,055 total project cost to implement energy efficiency/renewable energy upgrades to the Flambeau River Papers mill. Project goal was to convert Paper Machine #3 from steam drive to electric drive system, install a low-pressure acid accumulator to prevent pollution, create and implement a river water cooling system to augment electric roof chillers, and design and implement a biomass sludge drier system. All

project activities were completed by 01/31/2010 – 6 months before project completion date. All quarterly financial and narrative reports were submitted before due dates and final technical report is currently in progress for closeout by 07/31/2010. As a result of the project, Flambeau River Papers reported manufacture of its first 100-tons of “carbon-free” paper in May, 2009.

2. Small Business Administration – five-year Cooperative Agreement #SBAHQ-06-1-0020 award of \$500,000 for NWRPC Technical Assistance and Administrative Support project related to fostering economic development activities in the NW region of Wisconsin and create/retain jobs. All financial and quarterly reports are current and were submitted timely. Goals of the project were to provide direct technical assistance to 65 business, create 320 jobs, and directly contribute to financial packaging totaling \$30,000,000 in public/private funding for business startup/expansion, build one new enterprise center (incubator) in NW Wisconsin, and develop a new economic development program in NW Wisconsin. The project is midway through project year four of five and has already exceeded all project goals except one. Direct technical assistance has been provided to 116 businesses – 178% of projected goal; 996 jobs were created – 311% of projected goal; and, \$44,496,040 in public and private funding have been expended in the NW region for business startup and expansion – 148% of projected goal. The development of a new economic development program in NW Wisconsin has been submitted to the EDA Regional Office in Chicago and is pending approval to create a Carbon And Renewable Energy (CARE) program that will be self-sustaining in two years and provide funding from program revenues for economic development independent of federal or state funds.
3. Douglas County Comprehensive Plan (including the City of Superior). Three year project totaling \$481,000 to develop a comprehensive land use management plan for the county. The plan is in its final draft form, and is awaiting action by Douglas County to continue to its final conclusion. The project required extensive GIS mapping layer integration to compile and required working with all civil jurisdictions, special districts and local units of government to complete. NWRPC has completed numerous similar projects for comprehensive planning from all ten counties over the past 10 years.
4. Economic Development Administration – renewable three year District Planning Investment Assistance Grant award #06-83-05267 for \$177,884 for total project cost of \$296,473 including match. NWRPC has been recognized by EDA as an Economic Development District since 1978, and as a result has successfully maintained its eligibility to apply for renewable funding investments each year as a result of meeting all reporting requirements and deliverables since that time.
5. Wisconsin Department of Agriculture, Trade, and Consumer Protection – Household Hazardous Waste (HHW) program, \$253,000 total grants for the past three years. The NWRPC – HHW program is in its 16th year of operation as the Cleansweep hazardous waste collection program operating in all 10-counties of the NW region of Wisconsin. Since its inception in 1995 the program has collected over two-million pounds of household hazardous waste. The program also provides specialized business collection routes that served over 270 businesses in the region. In 2009, NWRPC implemented household prescription medication collections to prevent their flushing down drains and entering community and natural water supplies. As a result,

over 850 pounds of non-controlled prescription medications and 150 pounds of narcotic and/or controlled medications have been collected. The HHW program continues to meet quarterly and annual reporting requirements to remain eligible for renewable funding.

f. Brief Project Description

The NWRPC Toxic Waste Collection, Education and Mapping Project will provide the following deliverables for the entire south shore of Lake Superior in Wisconsin and the Upper Peninsula of Michigan: 1) electronic device, toxic waste material, and petroleum based oil collection; 2) creation of a GIS data layer that identifies the locations of business and industry that contain hazardous materials in their MSDS and/or waste stream for emergency disaster preparedness and direct disaster event mitigation; and, 3) create/disseminate information to the public regarding the effect toxins have on the Lake Superior watershed - particularly the toxins contained in electronic devices. Duration of the project will be two years.

g. Problem Statement

NWRPC applied for funding under the ‘Toxic Substances and Areas of Concern’ focus area; specifically, I.A.9. Pollution Prevention and Toxics Reduction in the Great Lakes.

NWRPC has identified gaps in the toxic and hazardous waste collection system that serve the south shore Lake Superior watershed basin. No tangible hazardous waste and electronics collection or storage sites exist in the four south shore Lake Superior basin tribal communities or the counties of the Western Upper Peninsula of Michigan. Without establishment of appropriate hazardous waste collection and storage sites, and public awareness of the location of those sites, most citizens will continue to inappropriately dispose of their toxic household waste products through the drain, in garbage collections that eventually end up in the landfill, or just dumped illegally on private or public lands.

Although OSHA requires businesses and commercial manufacturers to maintain an accurate MSDS of chemicals onsite, neither Wisconsin nor Michigan has developed a composite database of those MSDS substances that could be classified as hazardous or toxic. Some extreme toxins may require special permitting by the state as an incoming MSDS chemical or an outgoing waste stream byproduct; however, those are not consolidated into a single database with respect to a watershed basin, or specifically to Lake Superior that might detail location as a GPS waypoint, not probable quantity that might exist in a particular location at any given point in time.

Both of these problems can result continual release of pollutants and toxins into the Great Lakes – particularly Lake Superior which is ‘upstream of all other Great Lakes. The creation of such a database available on an Internet map server (IMS) can have many positive beneficial uses as a preparedness/mitigation tool, particularly in response to a multi-state/jurisdictional emergency or natural disaster.

h. Project Location

General Description: Entire south shore of Lake Superior

HUC Code: 04020300
Latitude/Longitude: 47.7 N; 87.5 W
County: Serving all Lake Superior counties in Wisconsin/Michigan
City/State/Zip: Spooner, WI 54801

i. Proposed Work

NWRPC Toxic Waste Collection, Education, and Remedial Action Project

NWRPC is requesting \$1-million to fund a project that will accomplish the following outcomes under the ‘**Pollution Prevention and Toxics Reduction in the Great Lakes**’ category:

- A. Expand hazardous waste, electronics, and waste oil collection sites to include four Lake Superior watershed basin Indian tribes and the counties of the western Upper Peninsula of Michigan that lie within the south shore Lake Superior basin.
- B. Develop health and safety plans related to hazardous waste, electronics, and waste oil collection for the project tribal nations and counties of the project area.
- C. Develop and provide promotional and educational materials that explain the effects pollutants, hazardous waste chemicals, electronic equipment disposal, and waste oil have on Lake Superior.
- D. Categorize, profile, package, transport and dispose of all hazardous waste collected in a safe and documented manner.
- E. Create a South Shore Hazardous Materials, Remedial Action Decision Support Tool that identifies ‘point source’ locations of industry and business that contain hazardous materials in their MSDS and/or waste stream along the entire south shore of Lake Superior.

One of the Primary goals of the Northwest Regional Planning Commission (NWRPC) is to: “Protect, conserve, and encourage efficient management of the region’s forest, Water, land, and other natural resources.” The NWRPC Environmental Department was established in 1990, when it began operating a recycling project under contract for Burnett and Washburn counties in northwest Wisconsin. In 1995, the Environmental Department created the Cleansweep Program which has grown to provide hazardous waste collections to businesses, schools, municipalities, and farms throughout 13 counties in the northwest region of Wisconsin, including the four Wisconsin Lake Superior south shore counties of Ashland, Bayfield, Douglas, and Iron.

The primary objective of the NWRPC Environmental Department is to: “Support and develop regional programs and facilities that allow for the proper disposal of solid, hazardous, and special wastes thereby reducing or eliminating the discharge of toxic pollutants into the environment.” Since 1995, over 500 collection events have resulted in the removal and proper disposal of over 2.2-millionpounds of hazardous waste materials; more than 1,366 pounds of mercury have been collected; and, over 65% of all materials collected have been recycled. In 2009, the Environmental Department began regional pharmaceutical collections that resulted in 763 pounds of waste medications collected.

A. Expand hazardous waste, electronics, and waste oil collection sites to include four Indian tribes located within the Lake Superior south shore watershed basin and the western counties of the Upper Peninsula of Michigan that lie along the south shore of the Lake Superior basin.

While the electronic, toxic and hazardous waste collection efforts of NWRPC's Environmental Department demonstrate huge success with respect to the four Wisconsin counties lying along the south shore of Lake Superior, the Red Cliff and Bad River Bands of Lake Superior Chippewa Indians represent areas where no systematic collection, approved storage areas, and disposal of hazardous wastes are processed.

Further, no identifiable designated electronic, toxic and hazardous waste collection and storage areas exist in the 6 south shore Lake Superior watershed basin counties of the Upper Peninsula of Michigan west of Marquette, and the two Indian tribes of Keweenaw Bay Indian Community, and Lac Vieux Desert Band of Chippewa Indians.

Additionally, electronic waste is generating much concern due to the high amount of toxic and hazardous materials they contain. Wisconsin passed a new E-waste law effective January 1, 2010 that bans landfill and incineration of E-waste beginning September 1, 2010. If household consumers in rural areas along the south shore of Lake Superior have no access to collection sites and are no longer able to dispose of electronic waste in landfills, they are likely to be disposed of in secluded woodlots exposed to environment where those heavy metals and toxins can leach into the watershed. Therefore, the predominant activity related to our proposal will be for actual collection and mitigation of toxins and hazardous wastes before they can become a problem.

During the first year of the project, NWRPC will provide funding and technical assistance from grant proceeds to each of the four tribes and two westernmost Michigan counties of Gogebic and Ontonagon to plan and facilitate implementation of its own storage area for properly collecting and storing hazardous waste. This will include a fenced and curbed area with approved storage containment building inside, the installation of one 350-gallon oil collection tank. Once constructed, NWRPC staff will provide HAZMAT training to each responsible tribal/county person, thus allowing them to properly manage their hazardous waste on a regular ongoing basis. Each of the six sites will cost approximately \$85,000 to develop, totaling \$510,000.

Prior to the end of the second year of the project, NWRPC proposes to provide two collection days per year for each of the five tribes and two Michigan county sites bordering the south shore of Lake Superior. We anticipate one collection day will occur in April, and the second day in October each year. Materials collected on these collection days will include waste from households, businesses, agriculture, schools and tribal operations. Materials to be collected will include pesticides, herbicides, paint, solvents, aerosols, corrosives and oxidizers, cleaners, PCB (ballast), mercury, fluorescent bulbs, electronic devices (E-waste) and waste medications. We would place a priority on collecting as much mercury lead as possible.

In addition, NWRPC will also provide two “milk-run” collections per year. A “milk-run” collection is one that targets high volume sources of electronic, toxic, and hazardous waste products, such as: schools, businesses, hospitals or health care centers, and government or municipal centers. NWRPC will stop at these locations to pick up any wastes that cannot be safely stored until the regular collection. One milk-run would occur each summer, and another in the winter.

Approximate costs of collection events are \$8,000 per event. The 12 scheduled events will cost approximately \$96,000 total. Approximate cost a “milk-run” is \$3,000 each; with an annual cost for 2 at total cost of \$6,000. Each tribe/county will sign a Memorandum of Understanding (MOU) stating that they will sustain the project annually beyond the two-year project period by contracting with NWRPC to maintain the collection events on a per run basis.

B. Develop Health and Safety Plans related to operations of a hazardous waste, electronic E-waste, and waste oil collection site.

With any toxic/hazardous waste, electronic E-waste, and waste oil collection site there is a significant amount of knowledge and experience that must be transitioned to the owner and/or manager of such facilities to meet regulatory compliance for the various agencies involved with disposition and oversight of such materials. NWRPC has 15 years of experience meeting the regulatory requirements of hazardous waste collections sites.

As part of the technical assistance that the NWRPC Environmental Department provides to the five tribes and Michigan counties identified under this project, we will assist each to develop the required Health and Safety plans needed to operate a hazardous waste storage facility. Such a plan, modeled after the Northwest Cleansweep “Procedures and Training Manual,” will detail how each individual hazardous waste storage site will address the following criteria:

- a) Storage site plan of operation
- b) Health and safety plan
- c) Work plan for collection
- d) Packaging procedures
- e) Shipping papers and bill of lading
- f) Handling lamps and bulbs
- g) Handling antifreeze, and
- h) Staff job descriptions

Included in the topic areas will be details regarding facility design, site operational procedures, contingency plans, spill response plans, fire plans, emergency response procedures, emergency and personal protective equipment, and emergency coordination.

The resulting final output will be a unique “Procedures and Training Manual” and a “Health and Safety Plan for Hazardous Waste Collection Events” tailored to each specific site.

C. Develop and provide promotional and educational materials that explain the effects pollutants, hazardous waste chemicals, electronic equipment disposal, and waste oil have on Lake Superior.

Consumer and public education are key components that must be communicated regarding the hazardous materials incorporated in the electronic appliances they use, and how they can impact the environment, specifically the Lake Superior basin. NWRPC will provide promotional and educational materials to each respective tribe or county that they can use to educate residents about the impact to the environment and Lake Superior that toxins, hazardous waste, E-waste, and other pollutants can have. The outputs provided by NWRPC for this activity will be one of “Train-the-Trainer” such that the capacity resides with each respective hazardous waste collection site to educate its local residents, and supply adequate printed material and brochures for distribution and speak at local schools and civic clubs and/or organizations.

NWRPC will produce three public service announcements for broadcast on Duluth – Superior and Upper Peninsula television networks, and make a 15-minute video/DVD on the effects of hazardous and electronic waste to the Lake Superior watershed basin. It will be distributed to schools, municipalities, and the Northern Great Lakes Visitors Center.

Goal: Provide targeted education focused on actual businesses and households presently of what constitutes ‘hazardous waste,’ the effects it has on water supplies and Lake Superior, and where/how to safely dispose of common hazardous waste and electronic products.

Objectives:

- 1) Create and develop three 15-second Public Service Announcement clips to be distributed from local television stations that operate in the counties that border the south shore of Lake Superior.
- 2) Create 250 15-minute DVD’s and VCR’s for distribution that detail the effects of hazardous and electronic waste to drinking water supplies, Lake Superior, and the ecosystems that comprise the Lake Superior watershed basin.
- 3) Design four ¼ page newspaper ads to be published twice through the official newspapers in the project counties.
- 4) Address local community organizations and governmental units, including but not limited to municipal boards and councils, town's association meetings, hunting and sporting groups, church groups and comprehensive planning groups, and tribal organizations.
- 5) Produce novelty handout items such as pens, key chains and magnets that provide contact information and/or location of the local hazardous and electronic waste disposal site.

- 6) Produce site-specific printed handouts and signage publicizing dates and times of local collection events.
- 7) Provide tribal governments and local units of government legal options such as ordinance language if and when such governmental units are ready to take this final step in eliminating hazardous and electronic wastes.

Specific areas of topical focus will include the following:

- 1) Lake Superior Basin ecosystem environmental effects, including bioaccumulation;
- 2) Specific health effects of hazardous and electronic waste, particularly to the young, elderly and pregnant;
- 3) How Lake Superior and local drinking water supplies can become contaminated from hazardous and electronic waste leaching; and,
- 4) How to properly handle and dispose of hazardous and electronic waste, and where disposal sites are located.

The scope of this project addresses load reduction strategies and remedial actions with respect to several of the nine virtual elimination pollutants as proposed by the Lake Superior Lakewide Management Plan - Stage 3 - Reducing Critical Pollutants.

D. Segregate, profile, package, transport and dispose of all hazardous waste collected.

NWRPC will assume responsibility to ensure that all toxic/hazardous waste, electronic E-waste, and waste oil collected from the new collection sites and collection events will be properly segregated, profiled, packaged, transported, and recycled whenever possible or properly disposed of according to existing regulations and procedures. NWRPC's fifteen years of experience in collecting and disposing of hazardous and toxic materials in 13 counties of Wisconsin makes us uniquely qualified to ensure that these substances will be removed and mitigated from the Lake Superior watershed basin.

E. Create a South Shore Hazardous Materials, Remedial Action Decision Support Tool that identifies 'point source' locations of industry and business that contain hazardous materials in their MSDS and/or waste stream along the entire south shore of Lake Superior.

Datasets:

Hazardous Materials Storage Sites

Creation of a GIS data layer that identifies the locations of industry and business that contain hazardous materials in their MSDS and/or waste stream within Wisconsin's Lake Superior Basin and the western Upper Peninsula of Michigan. A GIS-based Contaminant Source Inventory (CSI) will be developed using existing datasets from various state, county, city, and local agencies (including SARA Title III data). These datasets will be selected, joined, and sorted using GIS relational database capabilities into a single "business master file." GPS

coordinate locations and photographs will be obtained for each site. Map files will be projected and transformed into a common coordinate system. Point data attributes will include, but not be limited to facility/site name, chemical data (MSDS information), address, contact information (including emergency contact information), along with spill and remediation activity information. Storage site data will support GIS queries to locate specific materials, quantities, and storage facilities within the Lake Superior Basin, and serve as an invaluable decision support tool in emergency response situations.

MSDS Attributes (Mixed chemicals, which have not been tested as a whole)

- 1) The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that chemicals identified by OSHA regulations as carcinogens (cancer-causing agent) shall be listed if the concentrations are 0.1% or greater; and,
- 2) The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise less than 1% (0.1% for carcinogens) of the mixture, if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit** (OSHA PEL) or ACGIH (American Conference of Governmental Industrial Hygienists) Threshold Limit Value, or could present a health risk to employees; and,
- 3) The chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture;
- 4) The physical and chemical characteristics of the hazardous chemical (such as vapor pressure, flash point);
- 5) The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity;
- 6) The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical;
- 7) The primary route(s) of entry;
- 8) The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the Material Safety Data Sheet, where available;
- 9) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA;
- 10) Any generally applicable precautions for safe handling and use which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks;
- 11) Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the Material Safety Data Sheet, such as appropriate engineering controls, work practices, or personal protective equipment;
- 12) Emergency and first aid procedures;

- 13) The date of preparation of the Material Safety Data Sheet or the last change to it; and,
- 14) The name, address and telephone number of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the Material Safety Data Sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Soil Conditions

Digital soil information for the project area will be obtained using the Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database. Existing county datasets will be merged to create a single coast-wide GIS dataset. SSURGO data linked to the National Soil Information System (NASIS) attribute database will provide immediate access to critical decision support information in the event of an environmental threat such as chemical spill. In the event of a chemical spill, local soil data can be quickly and easily extracted and analyzed in order to provide a basic understanding of how pollutant discharges may disperse, given local soil and geologic conditions. This information also provides a framework on which to base response protocols and remediation/mitigation activities.

Hydrographic Data (including wetlands)

Digital hydrographic data will be compiled for the project area using existing hydrographic datasets from state and local sources. Hydrologic unit data (Watershed and sub-watersheds) will also be compiled for the project area using existing data sources. Data will support GIS queries to locate potential point sources by watershed/sub-watershed and be invaluable in understanding the potential downstream impacts of point source discharges. In the event of a chemical spill, local hydrologic data can be quickly and easily extracted and analyzed in order to provide a basic understanding of how pollutant discharges may disperse through the local environment. This information also provides a framework on which to base response protocols and remediation/mitigation activities.

Transportation Network

A digital representation of the regional transportation network will be created. Existing digital road information (centerlines) will be collected from each county within the project area. The road network will be geo-coded with routing and address information. The addressed roads network will consist of a GIS layer containing segments representing streets with their direction, and a database containing the street name, direction information and a range of address numbers from one intersection to the next for each direction. A geo-coded road network serves many potential uses as a decision-support tool for emergency response, including proximity analysis, location analysis and routing (response).

The regional rail networks and airport facilities will be compiled using data from existing federal, state and local sources. Fish, wildlife and other resources were severely affected by the incident. Port facilities will be mapped using existing land use data from the City of Superior.

Utilities and Infrastructure

The utilities and infrastructure GIS datasets will include mapping of the physical locations of utilities such as electrical transmission lines and pipelines and infrastructure such as bridges, railroad trestles and sanitary sewer lines. Pipelines in particular represent potential point source discharges and there are several existing pipelines within the Basin which transport potentially harmful chemicals, include crude oil and natural gas. Mapping bridge and trestle locations will identify potential entry points for contamination of Lake Superior tributary streams. The susceptibility of south shore waterways to waste discharges and spills became clear when several Burlington-Northern railway cars fell from the Highway 35 Bridge into the Nemadji River (Douglas County, WI) on June 30, 1992.

Map Interface

Internet Map Server

Datasets created for the Hazardous Materials Decision Support Tool will be made available on the Internet using an Internet Map Server (IMS). An IMS system will allow the user to take control over what information is or is not displayed on the map (map options determined by author). Scale dependent themes and symbology will allow the information content and appearance to change as the viewer zooms into or out of a particular area of interest, and the viewer can turn available layers "on" or "off" to suit their preference. The IMS will also facilitate the querying of digital data, allowing the user to explore the tabular data associated with the map (visual) themes. Users would be able to examine the underlying data to identify spatial distributions, examine trends and patterns and to create customized thematic maps.

Scope of Work and Milestones

The following schedule outlines the project 'scope of work' identified by quarter and includes a chart of project milestones by quarter:

First Quarter (August 1 – September 30, 2010)

- Complete Memorandums of Understanding with tribes and counties
- Investigate potential locations for hazardous waste storage buildings
- Investigate potential locations for waste oil storage tanks
- Acquire GPS hardware, software and training
- Initiate data collection in Wisconsin portion of Lake Superior Basin. Field inventory of registered Small Quantity Generator (SQG) and Large Quantity Generator (LQG) sites in the Basin (includes capturing GPS waypoints, site photos, waste stream, MSDS data and contact information)
- Develop and submit a mail-based survey to all operators of facilities classified as a Very Small Quantity Generator of Hazardous Waste (VSQG). Add sites to field inventory list for further data collection. Survey topics to include type(s) and quantities of hazardous materials stored on site, contact and MSDS data sheet information.

- Compile survey results
- Develop a database of SQG, LQG and VSQG (identified through survey) sites in the Wisconsin portion of the Lake Superior Basin.

Second Quarter (October 1 – December 31, 2010)

- Develop RFP's for contractual fabrication of storage buildings, paving, and security fencing
- Determine and initiate permitting requirements
- Determine actual site locations
- Approve hazardous waste site designs
- Continue field inventory of SQG, LQG and VSQG sites in the Wisconsin portion of the Lake Superior Basin.
- Data entry compilation
- Acquire Internet mapping server (IMS), ArcServer software and licenses
- Training in the use of ArcServer, consultation with counties within the 10-county region in the development of a customized graphical user interface (GUI) to support project needs

Third Quarter (January 1 – March 31, 2011)

- Publish RFP's, score and rank eligible proposals applying appropriate criteria, and select contractual entities.
- Develop hazardous waste brochures and promotional materials
- Begin training of hazardous waste site operators
- Initiate data collection in Michigan portion of the Lake Superior Basin. Field inventory of registered Small Quantity Generator (SQG) and Large Quantity Generator (LQG) sites in the Basin (includes capturing GPS waypoints, site photos, waste stream, MSDS data and contact information)
- Submit a mail-based survey to all operators of facilities classified as a Very Small Quantity Generator of Hazardous Waste (VSQG). Add sites to field inventory list for further data collection. Survey topics to include type(s) and quantities of hazardous materials stored on site, contact and MSDS data sheet information
- Compile survey results
- Develop a database of SQG, LQG and VSQG (identified through survey) sites in the Michigan portion of the Lake Superior Basin

Fourth Quarter (April 1 – June 30, 2011)

- Begin building and installation of hazardous waste storage collection sites including security fencing and paving/landscaping as needed
- Begin installation of waste oil storage tanks
- Develop hazardous waste site health and safety plans
- Begin mobile household hazardous waste collection events
- Continue field inventory of SQG, LQG and VSQG sites in the Michigan portion of the Lake Superior Basin
- Data entry compilation
- Set-up ArcServer software and develop a user interface to support the project

Fifth Quarter (July 1 – September 30, 2011)

- Complete building and installation of hazardous waste storage collection sites including security fencing and paving/landscaping as needed
- Complete installation of waste oil storage tanks
- Continue mobile household hazardous waste collection events
- Initiate roadway geo-coding process
- Collect reference data from counties (and communities) within the Wisconsin and Michigan portion of the Lake Superior Basin. Reference data would include road centerline data and/or any existing geo-coded road information that currently exists.
- Collect reference address data from counties (and communities) within the Wisconsin and Michigan portion of the Lake Superior Basin.
- Prepare the address data for the geo-coding process. Format the data so it can be used by the software (ArcGIS). Parse data to ensure consistent naming conventions and abbreviations, consolidate data to a single column which contains the street number and street name; the street's prefix direction, prefix type, street type, or suffix direction, if any.
- Assign address range attributes to the linear street network (centerlines).

Sixth Quarter (October 1 – December 31, 2011)

- Complete household hazardous mobile waste collections for 2011
- Tabulate collection results
- Setup 2012 collection schedule
- Start fall milk run collections
- Continue to assign address range attributes to the linear street network (centerlines) and build the geo-coded road network dataset.
- Verify correctness of the data. Begin quality assurance/quality control activities

Seventh Quarter (January 1 – March 31, 2012)

- Publish 2012 household hazardous waste collection schedule
- Begin 2012 household hazardous waste mobile collections
- Begin hazardous waste collections at permanent hazardous waste storage facilities
- Begin spring milk run hazardous waste collections
- Continue to assign address range attributes to the linear street network (centerlines) and build the geo-coded road network dataset.
- Continue to verify correctness of the data. Continue quality assurance/quality control activities

Eighth Quarter (April 1 – June 31, 2012)

- Assist hazardous waste site managers/operators with hazardous waste reporting process and requirements
- Evaluate hazardous waste project obstacles and accomplishments.
- Continue hazardous waste collections at permanent hazardous waste storage facilities

- Prepare a draft of the final technical report related to south shore Lake Superior hazardous waste collection activities.
- Web-oriented spatial data service goes online
- Prepare a draft of the final technical report related to project south shore Lake Superior hazardous materials, remedial action decision support tool.
- Complete GLRI grant closeout activities by June 30, 2012.
- Final Technical Report submitted not later than 30-days of grant closeout to U.S. EPA Region 5/GLNPO.

j. Environmental Results

The following is a list of expected outcomes of the NWRPC Toxic Waste Collection, Education, and Mapping Project:

1. Fewer toxic contaminants will enter the Lake Superior basin. The following outputs related to toxic/hazardous waste, electronic E-waste, and waste oil collect are expected to be achieved by the end of the two year project:
 - a. Over 100,000 pounds of hazardous waste material will be collected and properly disposed or recycled.
 - b. More than 100 pounds of mercury will be collected and removed from the south shore Lake Superior watershed basin in accordance with the Great lakes Regional Collaboration's Mercury in product Phase-down Strategy.
 - c. A minimum of 250 pounds of lead will be collected and removed from the south shore Lake Superior watershed basin, particularly as a result of collection and removal of E-waste.
 - d. At least 500 pounds of waste medications will be collected and properly disposed of.
2. Six new self sustaining ongoing hazardous waste collection sites and oil collection tanks will be constructed and operational encompassing the entire south shore of Lake Superior.
3. Each new collection site will be manned by staff trained in HAZMAT and safe removal/reduction of toxic substances from the Lake Superior watershed basin.
4. All collection site staff will be trained to educate its local residents regarding the impact toxic substances and hazardous waste has the Lake Superior basin and natural resources of the watershed, and will be supplied with relevant printed material for distribution.
5. A South Shore Hazardous Materials, Remedial Action Decision Support Tool that identifies 'point source' locations of industry and business that contain hazardous materials in their MSDS and/or waste stream for use by emergency management officials and others in response to multi-jurisdictional natural disaster or accidental/intentional toxic spill pollution events. Waypoint source locations will provide a resource for identification and monitoring of potential contaminants to the south shore Lake Superior basin.

The proposed NWRPC Toxic Waste Collection, Education, and Remedial Action Project fulfills the primary objectives of the Great Lakes Restoration Initiative under section I.A.9. Pollution Prevention and Toxics Reduction in the Great Lakes, it also complies with the objectives set forth in the EPA strategic Plan specifically regarding Goals 2 through 5. Further, this project directly aligns with the Great Lakes Regional Collaboration strategy particularly as it relates to the objectives identified for mitigation of Toxic Pollutants.

The NWRPC Toxic Waste Collection, Education, and Remedial Action Project, as proposed, is “shovel ready” and able to be implemented immediately upon notification and acceptance of funding award.

k. Measuring Progress

The environmental results identified under item (j.) above will be incorporated into an approved Quality Assurance Project Plan following the award of grant as terms and conditions.